

**Marek Kwiek**

# **Knowledge Production in European Universities**

**States, Markets, and  
Academic Entrepreneurialism**

**Higher Education Research and Policy (HERP) · 3**



**PETER LANG  
EDITION**

*To Krystyna and Natalia*



# Contents

<b>Acknowledgments</b> .....	11
<b>Introduction:</b>	
<b>Changing Universities and Their Changing Environments</b> .....	15
<b>PART I</b>	
<b>THE CHANGING STATE/UNIVERSITY RELATIONSHIPS IN EUROPE</b> .....	33
<b>Chapter 1</b>	
<b>A Panoramic View: The Growing Complexity of the Academic Enterprise in Europe</b> .....	35
1.1. Introduction .....	35
1.2. Market mechanisms and new income-generating patterns .....	49
1.3. Conflicting demands, new stakeholders, and the teaching/research divide .....	62
1.4. Transforming institutions, transforming academics .....	82
1.5. Conclusions .....	100
<b>Chapter 2</b>	
<b>The University and the State in a Global Age. Renegotiating the Traditional Social Contract in Europe?</b> .....	107
2.1. Introduction .....	107
2.2. The Modern University and the Welfare State .....	117
2.3. The Modern University and the Modern Nation-State .....	136
2.4. Conclusions .....	147
<b>Chapter 3</b>	
<b>The University and the Welfare State in Transition: Changing Public Services in a Wider Context</b> .....	151
3.1. Introduction .....	151
3.2. The welfare state, globalization, and the public investment in higher education .....	152
3.3. Globalization and the public sector .....	164
3.4. The state's fiscal condition and competitors to higher education .....	171
3.5. Welfare state reforms, higher education reforms, and the privatization of public services in transition countries .....	177
3.6. Conclusions .....	186

## Chapter 4

### **Reforming Higher Education and Expanding the Regional Mission in the Contexts of the Postcommunist Transition, Accession, and Beyond ....** 191

4.1. Introduction .....	191
4.2. Transnational actors and international agendas .....	197
4.3. The institutional change and the stylized visions of the university .....	205
4.4. The demand-absorbing growth and the demography-driven decline? .....	215
4.5. Knowledge production in Central European universities .....	226
4.6. The regional mission of the university. The case of transition economies .....	231
4.7. Conclusions .....	243

## PART II

### **TOWARDS EMPIRICAL EVIDENCE: ACADEMIC ENTREPRENEURIALISM AND KNOWLEDGE EXCHANGE IN EUROPEAN UNIVERSITIES .....** 251

## Chapter 5

### **Academic Entrepreneurialism vs. Changing Governance and Institutional Management Structures in European Universities.....** 253

5.1. Introduction .....	253
5.2. University governance and the European Commission on the role of universities in the knowledge economy.....	256
5.3. Academic entrepreneurialism and risk management .....	267
5.4. A clash of academic and managerial values?.....	274
5.5. Academic entrepreneurialism and collegiality .....	276
5.6. Academic entrepreneurialism, centralization, and decentralization.....	282
5.7. Academic entrepreneurialism spread across institutions .....	290
5.8. Conclusions .....	294

## Chapter 6

### **Academic Entrepreneurialism and Private Higher Education in Europe.....** 297

6.1. Introduction .....	297
6.2. The diversified funding base: possible sources of income.....	304
6.3. The strengthened steering core.....	316
6.4. The extended developmental periphery .....	320

6.5. The stimulated academic heartland .....	324
6.6. The institution-wide, integrated entrepreneurial culture .....	327
6.7. Conclusions .....	331

## **Chapter 7**

### **Diversified Channels of Knowledge Exchange in European Universities: Major Parameters of University-Enterprise**

<b>Partnerships</b> .....	337
7.1. Introduction .....	337
7.2. The analytical framework .....	342
7.3. The leadership and the individual/institutional characteristics .....	346
7.4. Public subsidies and private donations in partnerships .....	355
7.5. The university-enterprise inter-sectoral staff mobility .....	359
7.6. A wider empirical context: partnerships and academic norms and values in 2011 .....	363
7.7. Conclusions .....	372
<b>Bibliography</b> .....	377
<b>Note on the Author</b> .....	485



# Acknowledgments

What is needed to complete successfully a book project in higher education research is the openness of the home institution and the institutions studied, the generosity of research funding organizations, and the kindness of collaborators and partners, academics and administrators, researchers and policymakers. I was lucky to have it all, right in time, just when I needed it. Throughout the process of writing this book, I have accumulated massive intellectual and logistical debts. I am very grateful to people and institutions, in Poland and abroad. I am grateful to the Polish and international sponsors of my research, my home institution (University of Poznań) and academics and administrators from all European universities with which I was collaborating over the last few years. I owe a debt of gratitude to dozens of European and North American academics with whom I was collaborating within international research projects. The research projects led to first versions of papers which subsequently were reworked and found their ways to the present book. I am grateful to editors and reviewers of journals and collected volumes in which parts of this book were published, several dozens of colleagues and partners in common international research projects and their coordinators, the organizers of workshops, seminars, and conferences, several dozens of ministers, rectors and deans from about fifteen countries which were taken into account in this book (or in which I was involved in various policy projects and higher education reform initiatives).

The book draws intellectually, directly and indirectly, from a number of larger and smaller international research projects I was involved in during the last few years. In particular, several large-scale comparative projects provided huge empirical material for the book (used mostly in its second part), and they include EUERЕК: *European Universities for Entrepreneurship – Their Role in the Europe of Knowledge* (2004-2007), funded by the European Commission in the EU 6<sup>th</sup> Framework Programme and coordinated by Michael Shattock, Gareth Williams and Paul Temple of the Institute of Education, London; GOODUEP: *Good Practices in University-Enterprise Partnerships* (2007-2009), funded by the European Commission as an Erasmus/LLL transversal project and coordinated by José-Ginés Mora of the Technical University of Valencia; the global Fulbright New Century Scholars program 2007-2009 – *Higher Education in the 21<sup>st</sup> Century: Access and Equity*, coordinated by D. Bruce Johnstone of State University

of New York, Buffalo; and EUROAC: *The Academic Profession in Europe: Responses to Societal Challenges* (2010-2013), funded by the European Science Foundation within its EUROCORES/EuroHESC program and coordinated by Ulrich Teichler of the University of Kassel. Also several other research projects were extremely useful in working on the various chapters of this book, and they included two projects coordinated by Hans-Uwe Otto of the University of Bielefeld (WORKABLE: *Making Capabilities Work*, 2009-2012, and EDUWEL: *Education and Welfare*, 2009-2013, both funded by the European Commission through its 7<sup>th</sup> Framework Programmes), a project coordinated by the present author together with Peter Maassen of the University of Oslo (NORPOL: *Polish Higher Education and the European Higher Education and Research Areas. Comparative Analysis and the Transfer of Good Practices*, 2009-2011, funded by Norway Grants/CEE grants), a project coordinated by Daniel C. Levy of State University of New York, Albany (PROPHE: *Program for Research on Private Higher Education*, funded by the Ford Foundation), and a Polish research project TSW: *Transformations of Higher Education in the Knowledge-Based Society: Theoretical Contexts of Functioning of Educational Institutions and the Social Change* (2009-2012, funded by the Polish Ministry of Science). Several other smaller-scale international projects were also important for the development of this book.

I am hugely indebted to my colleagues, many of whom are my friends – with whom I was participating in various research projects while working on different chapters of this book: in particular, my gratitude goes to Philip G. Altbach, Maarja Beerkens, Harry de Boer, Stefano Boffo, Pepka Boyadijeva, John Brennan, Roger Dale, Rosemary Deem, Andrea Detmer, Jürgen Enders, D. Bruce Johnstone, Ben Jongbloed, Jane Knight, Petr Mateju, Barbara M. Kehm, Bruce Henry Lambert, Martin Lawn, Daniel S. Levy, Peter Maassen, José-Ginés Mora, Christine Musselin, Hans-Uwe Otto, Romulo Pinheiro, Risto Rinne, Aljona Sandgren, Michael Shattock, Snejana Slantcheva, Görel Strömqvist, Paul Temple, Ulrich Teichler, Voldemar Tomusk, Anthony Welch, Gareth Williams, and Pavel Zgaga; and closer at home, I am grateful to my collaborators from the Center: Dominik Antonowicz, Karolina M. Cern, and Piotr W. Juchacz.

I am very grateful for continuous, strong support I have been receiving from my home university. In particular, I wish to express my special gratitude to its Rector, Professor Bronisław Marciniak (who opened for me and my research team both the Center for Public Policy Studies in 2002 and the

UNESCO Chair in Institutional Research and Higher Education Policy in 2012). I am grateful for the continuous support I have received from two vice-rectors, Professor Jacek Witkoś and Professor Jacek Guliński, the dean of the Faculty of Social Sciences, Professor Zbigniew Drozdowicz, and the director of the Department of Philosophy, Professor Tadeusz Buksiński. Without their patience, understanding and often logistical support, I would not be able to participate in so many fascinating international research projects.

I would not be able to complete the book without huge support I have received from my research assistant and one of my PhD students: Adriana Wilińska in the last four years made every effort to make my functioning at the university technically possible and contributed significantly to the corrections of the book; Krystian Szadkowski contributed substantially to corrections of both Polish and English versions of several chapters from this book. I am enormously grateful to both of them.

Some parts of the book draw from previously published articles and book chapters. They have been substantially expanded and reworked. Chapter 1 is a vastly expanded and substantially reworked version of two p articles which appeared in *European Journal of Higher Education* (2012) and in Marek Kwiek and Andrzej Kurkiewicz (eds.), *The Modernisation of European Universities. Cross-National Academic Perspectives* (Frankfurt and New York: Peter Lang, 2012). It also draws from an article “The Changing Attractiveness of European Higher Education: Current Developments, Future Challenges, and Major Policy Options”, published in Barbara M. Kehm, Bjørn Stensaker, and Jeroen Huisman (eds.), *The European Higher Education Area: Perspectives on a Moving Target* (Rotterdam: Sense Publishers, 2010). Chapter 2 draws from an article “The University and the State in a Global Age: Renegotiating the Traditional Social Contract?” published in *European Educational Research Journal* (Vol. 4. No. 4. December 2005) and from an article “Higher Education and the Nation-State: Global Pressures on Educational Institutions”, published in *International Journal of Contemporary Sociology* (Vol. 45. No. 1. April 2008). Chapter 3 draws from an article “The University and the Welfare State in Transition. Changing Public Services in a Wider Context”, published in Debbie Epstein, Rebecca Boden, Rosemary Deem, Fazal Rizvi, and Susan Wright (eds.), *World Yearbook of Education 2008. Geographies of Knowledge, Geometries of Power: Framing the Futures of Higher Education* (London and New York: Routledge, 2007). Chapter 4 draws from two articles written with Peter Maassen (“Changes in Higher Education in

European Peripheries and Their Contexts: Poland, Norway, and Europe” and “Higher Education in Turbulent Times”), both published in Marek Kwiek and Peter Maassen (eds.), *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway* (Frankfurt and New York: Peter Lang, 2012). Chapter 5 is an expanded and substantially reworked version of an article “Academic Entrepreneurialism and Private Higher Education in Europe” published in Michael Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education* (Maidenhead: Open University Press, 2009). Chapter 6 draws from an article “Academic Entrepreneurship vs. Changing Governance and Institutional Management Structures at European Universities” published in *Policy Futures in Education* (Vol. 3. No. 6, 2008). Parts of this chapter have also been published in Maarten Simons, Mark Olssen and Michael A. Peters (eds.), *Re-Reading Education Policies. A Handbook Studying the Policy Agenda of the 21<sup>st</sup> Century* (Rotterdam: Sense Publishers, 2009). And Chapter 7 draws from “Conclusions” published in José-Ginés Mora, Andrea Detmer, and Maria-José Vieira (eds.), *Good Practices in University-Enterprise Partnerships* (CEGES: Valencia, 2010).

The completion of the book and its publication would not be possible without a substantial research grant (DEC-2011/02/A/HS6/00183) from the Polish National Research Council (NCN) for *The Program for International Comparative Research in Higher Education* (2012-2017).

Finally, I want to express my enormous gratitude to my wife, Krystyna: I know it is not easy to be living with me – but I am trying to do my best, every day. No matter what, we have already spent almost a quarter of a century together!

# Introduction

## Changing Universities and Their Changing Environments

### *External contexts of internal transformations*

There are numerous, often interrelated causes of current transformations of European universities but those studied in the present book include the following. First, globalization processes with their impacts on European nation states and public services that nation states have traditionally been guaranteeing to its citizens. Second, Europeanization processes, most often defined as a regional, European response to globalization and internationalization processes. Third, the large-scale (in theory, practice, or both) questioning of the foundations of the “Golden Age” of the Keynesian welfare state in the form it has been known in postwar Europe and large-scale reforms (in theory, practice, or both) of the public sector in general and its particular public services. Fourth, demographic changes which affect or are expected to affect in the next few decades the majority of aging European societies. Fifth, the massification and (often) universalization of higher education and its increasing diversification across European systems. And, finally, the emergence of knowledge societies and knowledge-driven economies and the acknowledgement of the fundamental role universities play in the new economic and social contexts. The above processes have been culminating about a decade ago and have been accompanied by powerful, both national and supranational, discourses at various interrelated policy-making levels: the most prevalent discourses focused on such constructs of the social sciences and (national and global) policy as “globalization”, “Europeanization” and “European integration”, “knowledge economy”, and “knowledge society”. These general umbrella terms have been organizing much of research in social sciences and have been providing underlying rationales for new higher education (and generally social) policies theoretically considered or actually implemented throughout Europe.<sup>1</sup>

---

1 The book draws a clear distinction between three types of studies in the area of higher education, and puts the emphasis on the last type of them. Research projects such as the present book, according to Roger Dale’s and Jenny Ozga’s distinctions (Dale 1989, Ozga 2000), can be either “administrative” projects conducted for the benefit of clients, for

Universities have been placed in the very center of those social sciences and policy constructs, and consequently they have been increasingly debated, at both theoretical and policy levels, in fundamentally new social, cultural and economic contexts. The contexts in question have been unexpected for both most academics in general and most higher education researchers in particular. The new contexts – with European universities discussed, analyzed, measured and ranked to degrees unheard of before the policy-based ideas stressing their economic relevance came – provided new conceptual frameworks to discuss changes in old institutions. The changing roles of the nation states and welfare states have been in the spotlight for at least two decades, and so have been the changing roles of universities traditionally, in a European context, closely linked to both.

### *Fundamental transformations, or an “academic revolution”*

The underlying logic of this book is that current transformations of European universities are fundamental. The phenomena and processes analyzed in this book indicate that perhaps, in the last two or three decades, European universities are gradually changing the paradigm in which they have been governed, managed, funded, and assessed (by both societies at large and policymakers). The scale of their functioning (and funding) in biggest European economies have been the highest in their history. Presumably, this scale makes holding them increasingly accountable to both governments and its various specialized agencies (as well as the public at large) unavoidable. From a historical perspective, both millions of students, hundreds of thousands of academics, hundreds of institutions and dozens of billions of euros invested in biggest national European systems are providing new contexts in which universities are operating today. New contexts of operation require new contexts of analysis, though. Universities are increasingly a “big, complex,

---

instance, students; or they can be “analytical” projects in the area of educational policy conducted for the sake of decision-makers in education. And, finally, they can be “conceptual” projects within social sciences in which the problem is not framed by either the clients or the policy-makers but which are theoretical in nature. The book attempts to be precisely theoretically-driven and empirically-informed. Between research questions of conceptual projects and their research design, there are close interrelationships (see Trowler 2008: 160). In Ulrich Teichler’s distinctions, the book attempts to belong to what he terms “academically-based higher education research” (Teichler 2000a: 18), substantially different from both educational policy areas and practice-related areas.

demanding, competitive business requiring large-scale ongoing investment” (as Malcolm Skilbeck stated, quoted in OECD 2004b: 3). Never before in eight hundred years of their history – or two hundred years of their modern history – have universities been so central, both at the rhetorical level and in practical terms, to economies of European nations. Never before their successes have brought about so diverse and so tangible and measurable gains to societies and economies – but, at the same time, never before have their failures brought about so diverse and so tangible and measurable losses to societies and economies. Their successes and failures, as successes and failures of central institutions to societies and economies undergoing deep and fundamental changes, are increasingly viewed as contributing to successes and failures of their environments, from the local to regional to national levels. Never in their postwar history have universities been analyzed, compared, and ranked from all possible angles of their functioning (research, teaching and various third mission activities) in so much detail. And also, never before have been universities as individual institutions and national higher education systems, directly and indirectly, assessed by influential international analytical centers (such as e.g. the OECD or the World Bank). Therefore we can refer to current changes in European universities as to an academic “revolution”, following Philip G. Altbach (and his colleagues) in their report for the *UNESCO 2009 World Conference on Higher Education*. And this is the perspective we assume in this book, for reasons other than Altbach’s, though. As they claim penetratingly,

One can, without risk of exaggeration, speak of an academic “revolution” – a series of transformations that have affected most aspects of postsecondary education worldwide. However, comprehending a dynamic process while it is taking place is not an easy task. Arguably, the developments of the recent past are at least as dramatic as those in the 19<sup>th</sup> century when the research university evolved, first in Germany and then elsewhere, and that fundamentally changed the nature of the university worldwide. The academic changes of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries are more extensive in that they are truly global and affect many more institutions and larger populations (Altbach, Reisberg, and Rumbley 2010: 1).

Processes transforming universities today are not different from processes transforming their environments; in particular, transformations of universities are closely linked to transformations of the institution of the state, both globally and in Europe, and transformations of the public sector and public sector services, as we will be stressing throughout the book.

Universities are changing rapidly throughout Europe, and the acceleration of their changes in the last two decades – both in the institutional discourse in which they have been embedded and in institutional practices – is closely related to brand new levels to which both the discourse and institutional practices have been elevated: the European (often identified as the EU-level) and global levels. In the last decade, there has been the ever more powerful institutionalization of the common educational space (synonymous with the integration of higher education within the Bologna Process) and common research space (synonymous with the European Research Area promoted by the European Commission, with its strong diagnosis and equally strong normative vision of how European universities should be functioning and why, referred to as “the modernization agenda of European universities” and developed, over the period of a decade, in its communications and accompanying policy documents, see Kwiek and Kurkiewicz 2012.). Analytical frameworks and major conceptual tools used in current discussions about the future of European universities, in general and at the level relevant to policymakers, are increasingly provided by international and supranational organizations and institutions and wide networks of their academic experts. They also provide policymakers and academics alike with the necessary comparative data, framed in large-scale comparative analyses of changes and trends, that cannot be ignored in any public or academic discussions about universities’ futures. At the same time, both the European Commission, the OECD and the World Bank have been heavily involved in both conceptualizations and comparative analyses of reforming the public sector as a whole.

### *Beyond closed, monodisciplinary research contexts*

The analyses of the future of the institution of the university (as well as traditional, humanistic discussions of the “idea of the university” that could be developed in the tradition known in the social sciences and the humanities in Europe from Wilhelm von Humboldt, John Newman, Ortega y Gasset, Karl Jaspers or Jürgen Habermas) seem to be dispersed and not to be able or willing to use the dominant conceptual tools used in higher education research. Perhaps even more importantly, various books or papers written in a wide range of humanistic traditions seem to refer to relevant empirical data, including European or global comparative data, to a very limited degree. They are often unable to go beyond a narrow, disciplinary approach

of sociology, education or institutional history. This is one of the reasons their social, cultural (and political) impact is minimal. Reforms in higher education considered or actually implemented in various parts of the world have been much more conceptually powered by the OECD, and empirically powered by its comparative statistics accompanied by influential policy analyses published regularly in the last decade, than by strictly academic or intellectual traditions of thinking about the future of universities.

This book takes as one of its premises that the current dynamics of changes of European universities can no longer be discussed mostly within traditional, closed, monodisciplinary intellectual contexts. Consequently, universities are analyzed here from the differentiated angles of educational studies, political economy, political sciences or sociology. This book also relies heavily on original empirical research, in particular on empirical qualitative and quantitative material produced in the course of various international comparative research projects in which we were participating in the last decade. In particular in its Part II (“Towards Empirical Evidence: Academic Entrepreneurialism and Knowledge Exchange in European Universities”), we have been following Burton Clark’s idea about the value of “pursuing things that work” in his discussion about the disconnect between “researchers” and “practitioners”. Clark states that

There is no longer any doubt about it. The disconnect between researchers and practitioners in understanding universities remains acute. Researchers write mainly for one another, armed with disciplinary and interdisciplinary perspectives. ... For their part, practitioners turn to one another to gain insight into how to handle ongoing specific concerns. For them, academic theorizing is imprecise and remote. ... This disconnect in how the university is analyzed is similar to how business firms were studied up to the 1960s. But in the ensuing four decades, faculty in business schools closed the gap between research and practice by means of case-study analysis, concentrating on exemplary institutions and best practices (Clark 2007: 319).

In this book, we are making use of several dozens of institutional case studies prepared (with international partners) in ten European countries in the last eight years in the context of studying from a European comparative perspective what is referred to here as “academic entrepreneurialism” and “university-enterprise partnerships”, or European universities in the contexts of their economic environments. We have followed Clark in his suggestion: “sit not with statisticians but with university management groups. ... Researchers need to catch up with varied practice and then

move on as practice moves on. Fast-moving times require adaptive research” (Clark 2007: 321-322). But, at the same time, we are well aware of a following cautionary conclusion: “while researchers might like to think they lead the discourse on public policy in higher education, it appears that much of policy research remains on the sidelines of policymaking” (St. John 2006: 232).

An important point of departure for the analyses, discussions (and sometimes lengthy digressions) presented in Part I (“The Changing State/University Relationships in Europe”) is that, from a historical perspective, within both the Humboldtian and Napoleonic models of the university in Europe, nation-states for almost two centuries – until higher education became massified – were forging their relationships with universities as institutions involved in the production of national consciousness and national cultures, as well as providing ever more powerful European nation-states with a strong social and national glue. Apart from providing educated workforce for the state machinery, universities were also providing all national elements which contributed to keeping citizens of nation-states together. At the same time, the development of generous welfare states in postwar Western Europe (especially in their “Golden Age” of a quarter of a century, or roughly in the 1950-1975 period) contributed to unprecedented development of publicly-funded national higher education systems, as well as to unprecedented educational and academic achievements of individuals, social groups and nations. The heyday of higher education in most affluent OECD economies was closely linked to the heyday of welfare state systems in these economies. This book in its Part I raises the issue of the concurrency of those processes and transformations today, under the combined pressures of globalization, Europeanization, demographics and new political economies. It discusses, directly and indirectly, the idea, widely popularized by students of welfare state regimes in Europe, that “things will never be the same”, referring it to generously funded European systems of higher education. It discusses the impact of the historical concurrence of higher education growth and welfare state growth in postwar Europe and the traditionally strong historical bonds between universities and nation states in Europe.

### *Global convergence of education policies and the specificity of universities as institutions*

Globally, higher education policies in the developed world seem to be increasingly convergent and the higher education sector seems to be viewed as a substantially less special or unique sector of national economies than at any previous period in its modern history. The sector, with its nationally differentiated institutions, with vastly different national and institutional traditions, by policymakers and the wider public rather than by academics and higher education researchers, is viewed as an ever-more measurable growth and production factor with ever-more powerful impact on the development of national knowledge economies and, in particular, knowledge-intensive industries. Global economic constraints, related to practices of globalization and internationalization of national economies, ideological to an extent and so far closely linked to the global dominance of the neoliberal discourse in politics – discernible to different degrees in different countries – reduce national policy choices made by national governments. The economic and political constraints, in a similar vein, reduce the scope of national policy choices in higher education. The “market perspective” in policy thinking about the future of major areas of the public sector and public sector services, from a global perspective, is becoming stronger than ever before. The public services include, in particular, healthcare, pensions and postcompulsory (higher) education. The market orientation prevails in relatively less affluent economies of Central and Eastern Europe, new EU member states (to different degrees in different public services: in some countries, market regulations and privatization processes have been more advanced in the pensions sector rather than in the higher education sector; also market and privatization policies in various segments of the welfare state in postcommunist countries have been very susceptible to changes in governments and political parties in power). In the regional European context, universities are also viewed as playing a crucial role in processes directly linked to the emergence of common higher education and research areas. As can be seen from both global and regional (European) contexts, the institution of the university is no longer approached by both policymakers and the general public in the traditional way known from the times preceding the advent of globalization, the acceleration of the processes of the European integration and the passage from industrial

societies and economies to postindustrial, global knowledge-driven societies and economies (and knowledge-intensive services).<sup>2</sup>

In short, the specificity of the university as a social institution – especially in a policymaking-level discourse and an expert-level discourse dominating in Europe, in contrast to an academic discourse (see Musselin 2007a, Maassen and Olsen 2007, Välimaa and Hoffman 2008) – has been disappearing. Universities, formerly institutions, are increasingly regarded as organizations, with far-reaching consequences (Gumport 1997, Gumport 2012, Bastedo 2012a, Brunsson 2009, Brunsson and Olsen 1993, Brunsson and Olsen 1998a). The protection period that has lasted since at least the middle of the 20<sup>th</sup> century in most Western European countries seems to be over. The specificity of universities as institutions and the state protection had resulted from several decades of the convergence between the interests of European nation states (and opportunities provided by welfare state systems they had formed and financed) and the interests of educational institutions. The protection period is no longer possible in massified and universalized higher education systems, though. While in the beginning of the last century elite systems enrolled about 1 percent of the age cohort and produced graduates mostly for state institutions and state jobs, current participation rates in most European systems come close to or exceed 50 percent of the age cohort. Higher education, at the same time, is becoming a multi-billion euro enterprise, an important branch of national economies in Europe, with graduates counted in millions every year and with relatively high, and not decreasing over time, wage premium for higher education (although this is not the case in all European economies, as annual OECD data show; at the same time, with ever-growing number of graduates and increasing number of knowledge production sites, what will count is what

---

2 As Anthony Giddens points out, more than 80 percent of the population active in the labor market is involved in work related either to knowledge economy or service economy. There is a price to be paid, though: two-third of new jobs require middle or high qualifications (Giddens 2006: 25) which links the labor market and the education market ever closer. At the same time, two phenomena need to be viewed as concurrent rather than incompatible: a growing demand for highly skilled workforce and growing problems with finding appropriate jobs (Schomburg and Teichler 2006: 6, Teichler 2007). The problem termed “the duality of employability” becomes crucial: access to best jobs depends not only on one’s own qualifications; it increasingly depends on how these qualifications are compared with qualifications of job-seeking competitors: with equal qualifications, only some can win the competition (Brown and Hesketh 2004: 7). The literature attempting to show in empirical detail that, despite promises of the “knowledge economy”, the risk of “high-skilled, low-waged society” has been growing.

Williams (2012: 34) terms “economically valuable codified knowledge”. This knowledge is likely to continue to be accumulated

in a relatively small number of sites by the most able scholars and researchers from all over the globe. But as the emerging economies, particularly in Asia, build up their higher education systems, “knowledge” in itself is unlikely to ensure the earnings premium it enjoyed during the twentieth century (Williams 2012: 34).

The removal of the protective umbrella from above the institution of the university is perhaps most clearly seen in Europe in the way the university has been conceptualized in the past decade in the global (the World Bank, the OECD and, to a smaller degree, the UNESCO) and European/EU-level (the European Commission and its “modernization agenda of European universities”, the Bologna Process) discourses about the future roles of higher education in general, and of universities, or its most elite and costly segment, in particular, in evolving mature Western European societies. The gradual demise of the specificity and uniqueness of the modern institution of the university brings about the gradual demise of its functioning under a state (and so far largely non-market) protective umbrella. Consequently, higher education across Europe seems to be following other public sector services: higher education institutions are viewed as more organizations than institutions and as more market-driven than ever before.

### *New rules, or the competition for resources*

New, gradually emergent rules of the game by which European universities are already functioning (or are expected by policymakers to function soon) are radically different from traditional rules by which they were functioning two decades ago in most European systems. This book studies both the changes as they occur and the trends as they might be expected. Fundamental changes in the rules of the game by which both individual academics, individual institutions and whole national systems function are accompanied by changes in social, political and economic discourses in which European universities are embedded: at the national, European, and global levels.

In general terms, transforming governments have been following in the last two decades the rules of a zero-sum game: higher expenditures in one sector of expensive public services (pensions or higher education) occurred at the expense of expenditures in other sectors of public services (healthcare) or public infrastructure (roads, railroads, law and order, prisons, etc.). The zero-

sum game in public expenditures was nowhere more evident than in European postcommunist transition countries, especially immediately following the collapse of communist regimes in 1989 and throughout the 1990s. The policy choices were hard, priorities in expenditures were hot political issues; higher education and academic research, certainly, have not been on the top of the list of public priorities. As Carlo Salerno formulated it in his discussion of one of the four models of the university suggested by Peter Maassen and Johan P. Olsen (2007) – the model of the university as a “service enterprise”, to which we shall return later:

Society values what the University produces relative to how those resources could be used elsewhere; it helps to explain why resources ought to be allocated to such organizations in the first place. The pursuit of free inquiry or the inculcation of democracy are noble objectives in their own rights but they nonetheless constitute activities that demand resources that can be used just as well for meeting other social objectives. The “marketization” of these objectives (including education) produces a set of relative prices for each that reveals, in monetary terms, just how important these activities are when compared to issues such as healthcare, crime, social security or any other good/service that is funded by the public purse. It does nothing to reduce universities’ roles as bastions of free inquiry or their promotion of democratic ideals; it only recasts the problem in terms of the resources available to achieve them (Salerno 2007: 121).

Current reformulations of social objectives of welfare states are occurring at a time when traditional social obligations of the state are under sustained, fundamental revisions, and some activities and objectives viewed today as basic could be redefined as remaining outside of traditional governmental duties (Hovey 1999: 60). This book assumes that the higher education sector is a good example here: it has to compete (and to be winning) permanently with a whole array of other socially attractive forms of public expenditures. In postcommunist Europe (much more than in the countries of the traditional EU-15), the sector has to successfully compete with social needs whose costs have been permanently growing. The sector, to win the competition for public funding with other segments of social and welfare programs, has to be more competitive in its national offers, compared with other claimants to the public purse.

### *Missions questioned, and knowledge production reconfigured*

The (European) institution of the university is in an uncomfortable position: the traditional underlying assumptions about its functioning, governance,

funding and assessment are being widely questioned by all its external stakeholders. This transformative moment in social and economic lifecycles of institutions – not only universities – has been aptly captured by Johan P. Olsen (2008: 18):

There are also situations where an institution has its *raison d'être*, mission, wisdom, integrity, organization, performance, moral foundation, justice, prestige, and resources questioned and it is asked whether the institution contributes to society what it is supposed to contribute. There are radical intrusions and attempts to achieve ideological hegemony and control over other institutional spheres; as well as stern defense of institutional mandates and traditions against invasion of alien norms. An institution under serious attack is likely to reexamine its ethos, codes of behavior, primary allegiances, and its pact with society.

In this book, we are referring to ongoing reconfigurations of knowledge production in European universities: it is undergoing transformative changes both in governance and authority relationships (Whitley, Gläser and Engwall 2010, Whitley 2010, Whitley and Gläser 2007) and in funding modes (Geuna and Martin 2003, Martin and Etzkowitz 2000). As studied in various chapters, the combination of ever-increasing costs of academic research and the decreasing willingness and/or ability of European governments to finance it from the public purse (Aghion *et al.* 2008, Geuna 1999a, Geuna and Muscio 2009, Etzkowitz, Webster, Gebhardt *et al.* 2000) leads to growing emphasis in both national and European-level policy thinking on seeking new revenue sources for research universities (Mazza *et al.* 2008, Alexander and Ehrenberg 2003, EC 2008, EC 2009, EC 2011a, EC 2011b). We discuss the role of new revenue sources especially in the second part of the book, in its chapters on academic entrepreneurialism. A constant point of reference in the first part of the book is the inter-sectoral national competition for tax-based public funding which has been on the rise in the last two decades, following the rising costs of all major public services, especially health care and pensions (Powell and Hendricks 2009, Salter and Martin 2001, Kwiek 2006a, Kwiek 2007c). The ability and the willingness of national governments to fund growing costs of academic research may be still reduced, for reasons as diverse as a shrinking tax base (Tanzi 2011, Pestieau 2006), escalating costs of maintaining the traditional European welfare state model and economic challenges resulting from global economic integration and the passage to knowledge-based capitalism (Florida and Cohen 1999), as well as the overall social climate in which the

promises of science may not be thought by both the population at large and policy makers to be kept by public universities and research organizations (see Martin and Etzkowitz 2000: 6-8, Guston 2000 and Guston and Keniston 1994b, Ziman 1994, and Kwiek 2005, Kwiek 2006a). In this wider context of the reconfiguration of governance modes and funding modes of university research, knowledge transfer, as shown in Chapter 7, has become “a strategic issue: as a source of funding for university research and (rightly or wrongly) as a policy tool for economic development” (Geuna and Muscio 2009: 93, Etzkowitz *et al.* 1998). Increasing social and political expectations from universities are discussed throughout the book, universities are increasingly expected to show “more direct interaction with society and the economy” (Bonaccorsi *et al.* 2010: 1).

The policy focus at national, European, and global levels on universities functioning in a closer symbiosis with enterprises has never been so dramatic in the last four decades (see early accounts in Stankiewicz 1986, Fairweather 1988, Gibbons 1992, and Ziman 1994). Linking universities to the world of business, as shown in Chapter 7, may take a variety of forms but each of them, over a period of time, is able to influence the core institutional culture of academic institutions (Maassen and Olsen 2007, Olsen 2007b). Certain patterns of university-business relationships may gradually become institutionalized; but the process of recognition of new institutional norms and values, institutional behaviors, routines and procedures (Braunerhjelm 2007: 621) takes time in such institutions as culture-embedded and history-attached European universities (Bruneel, D’Este and Salter 2010: 859, Etzkowitz 2003: 116, Etzkowitz, Webster *et al.* 2000: 326, Ranga *et al.* 2003: 302, David and Metcalfe 2010: 90). Transformative rather than incremental changes are possible but, as aptly remarked, “the university is a very adaptable organism. Throughout its history, it has proved able to evolve in a changing environment” (Martin and Etzkowitz 2000: 17). Universities do evolve, following transformations in their environments, do redefine their norms and values, and in the last two or three decades, depending on a national context, they have been following new, highly economic (rather than culture-related) legitimation for scientific research (Ziman 1994, Etzkowitz and Leydesdorff 2000: 117, Aghion *et al.* 2008) as the link between universities and “the promise of economic growth” becomes ever closer (Geiger and Sá 2008: 186-210).

As we show in chapters on academic entrepreneurialism and university-enterprises partnerships, the emphasis in national and European policy

thinking on the redefinition of academic cultures, norms and values towards accepting ever closer relationships between universities and their economic surrounding has been stronger than ever before in the post-war period. The role of different types of collaboration between European universities and their environments has been increasingly discussed in both scholarly and policy literature throughout the 2000s. In particular, current national and EU-level policies stress the role of universities' collaboration with enterprises (EC 2009, EC 2011a, EC 2011b). As noted, efforts to build business-university collaborations are "gathering momentum throughout the developed world" (Lambert 2006: 161).

### *The chapter's synopses*

The book is divided into two major parts. The first is more contextual and discusses European universities in the context of their changing relationships with the state. The second part is more empirically-driven and draws from several large-scale comparative European research projects in which the present author has participated in the last few years. In particular, it focuses on various forms of university "third mission activities", with analyses of "academic entrepreneurialism" and "university-enterprises partnerships".

In Chapter 1, we focus briefly on the attractiveness of higher education for the academic faculty from the perspective of the growing need for their permanent adaptation to the fast-changing social and economic realities in which European universities function. We show how and why the complexity of the academic enterprise is increasing, how the role of university stakeholders is changing, and how their expectations from higher education institutions are increasingly differentiating. We also focus on market mechanisms in universities and on new revenue-generation patterns, assuming that the financial environment of European universities will become more and more unfriendly in the next decade, and the universities will be seeking various forms of "third stream funding". We show that a potential decline in public funding may change the nature of the relationships between the state (society) and the academy, as the privatization of educational services not only transforms the organizational culture but also the objectives and the primary mission of universities. We also discuss the future of the teaching/research nexus as traditionally viewed by European research universities. In particular, we discuss the three

following major questions with reference to the coming decade: (1) should European higher education systems expect in general more (quasi-) market mechanisms and more new income-generating patterns? (2) what is the role of new university stakeholders and how teaching/research missions may evolve in European universities? And (3), to what extent meeting conflicting demands from different university stakeholders is a major challenge to the European academic profession?

Chapter 2 is of a contextual character: it seeks to show a comprehensive social and economic context to be taken into account when considering the various university futures in Europe. It discusses the relationships between the university and the welfare state and the relationships between the university and the nation-state in Europe. The chapter views the modern university and the modern state closely linked throughout the last two centuries; the institution of the university in Europe is viewed as undergoing a fundamental transformation – along with the traditional institution of the state in general, and the welfare state in particular.

In Chapter 3, we relate current transformations in higher education in European economies to current transformations of the public sector in general, and we link changes in higher education to changes in other public services provided within traditional European welfare states. In particular, the chapter links ongoing discussions about the future of the welfare state under the pressures of globalization and changing demographics towards aging populations to discussions about the future of public investments in higher education and to the wider question of the production and reproduction of the institution of the university. In particular, the chapter discusses the state's changing fiscal conditions and major competitors of higher education among welfare (and other) services. It links the question of the reformulation of the pact between the nation-state and the modern university to the issue of the renegotiation of the postwar welfare contract in general. The chapter also analyzes the privatization processes in higher education, especially in Central and Eastern Europe.

Chapter 4 discusses changes in higher education in Central Europe as one of those social areas that have been exposed to various sustained and ad hoc reform attempts following the collapse of communism in 1989. Reforms in the region throughout the two decades were intended, implicitly or explicitly, to bring Central European academics and students back into what was regarded to be the European higher education community of academics

and students. Reform attempts are discussed as led by specific, regional postcommunist concerns inspired by higher education developments observed in Western Europe. National and regional reference points in reforms were accompanied by European reference points, especially when the Bologna Process started at the turn of the century and when this European intergovernmental initiative was used in national contexts in the region as a useful justification for further reforms. The trajectories of policy changes in Central Europe are viewed as a special case in the second half of the 20<sup>th</sup> century: in no other part of the world a similar successful, massive transformation from command-driven economy to market economy was undertaken by ten countries, all desperately seeking to “catch up with the West” after having been under communist regimes more than forty years. The countries in the region wanted to join as soon as possible (both politically and economically) Western Europe, with its standards of democracy and its levels of material affluence. What later became known as the “transition” was actually a peaceful revolution in all economic and public service sectors, including the higher education sector. While in the transition period, the models of reforming all public services, including higher education, were coming mostly from the World Bank, in the pre-accession period and especially after the entrance into the EU as full members, the role of both intergovernmental European processes and supranational European processes been gradually growing. The chapter is divided into four major parts: transnational actors and international agendas in higher education reforms, the institutional change and the stylized visions of the university, knowledge production in Central European universities, and the regional mission of the university.

In Chapter 5 we discuss academic entrepreneurialism, a historically relatively new phenomenon in European higher education systems and an increasingly important point of reference in both national discussions on reforming higher education systems and in EU-level discussions on how to secure the sustainable development of public universities in an increasingly hostile financial environment, with powerful intersectoral competition for public subsidies of higher education with other state-funded public. An important point of reference is the future role of universities as promoted for more or less a decade by the European Commission, especially in the context of the transformation of university management and university governance. The chapter presents changes suggested by the European Commission and then analyzes academic entrepreneurialism as emergent from recent European

comparative (theoretical and empirical) studies in this area, especially a three-year long international research project EUEREK (“European Universities for Entrepreneurship: Their Role in the Europe of Knowledge”). Academic entrepreneurialism is linked to the risk management at European universities and legal and institutional conditions that favor its formation. Increased risk is associated with an increase in uncertainty currently experienced by the vast majority of European education systems. The chapter also studies a clash of traditional academic values with managerial values in the functioning of academic institutions and addresses the issue of academic entrepreneurialism in the context of traditional academic collegiality and various ways of the minimization of tensions in the management of educational institutions, complex relationships between academic entrepreneurialism and centralization and decentralization of the university power, and the location of academic entrepreneurialism in different parts of educational institutions.

Chapter 6 focuses on key concepts functioning in research on academic entrepreneurialism, and its reference points are public institutions and private institutions (under-researched from this particular analytical perspective). Apart from the discussion of the individual core elements of the “entrepreneurial university”, there is an extended analysis of differences in how academic entrepreneurialism operates in both sectors in practice. It seems difficult to analyze private universities in Europe in the context of entrepreneurialism in the form the concept has emerged in the basic research literature on the subject. The chapter studies those private institutions which meet the OECD definition of “independent private institutions”. This chapter is based, in theoretical terms, on the conceptual work (by various authors) on “entrepreneurial”, “innovative”, “enterprising”, “self-reliant”, “adaptive”, and “proactive” universities, and in empirical terms, it is based on case studies of entrepreneurialism in universities drawn from the EUEREK study on entrepreneurialism in European universities within the context initially suggested for the study of public entrepreneurial universities. This chapter is structured along the five underlying elements of entrepreneurial universities as developed by Burton Clark: the increasing diversification of the financial base and new sources of revenues of entrepreneurial universities, the “strengthened steering core” in entrepreneurial private institutions, and the “expanded developmental periphery”. The section on the “stimulated academic heartland” shows that academic entrepreneurialism can be found across all academic disciplines, and the next section discusses the critical role of institution-wide culture of

entrepreneurialism. Finally, findings on the entrepreneurial nature of private institutions in the comparative context of public institutions to which the category has been traditionally referred are presented: paradoxically, the private sector in Europe turns out to be far less entrepreneurial than could be expected. Conclusions are less paradoxical in the case of Central and Eastern Europe: small islands of academic entrepreneurialism can be found almost exclusively in the public sector. The private sector, focused on teaching rather than research in an overwhelming number of institutions is not a sector where academic entrepreneurialism in a sense adopted so far in the research literature can be found. While traditional (research-based) academic entrepreneurialism is found across Western European systems, private institutions in Central and Eastern Europe tend to exhibit entrepreneurial features only in teaching-oriented activities.

Finally, Chapter 7 focuses on knowledge exchange in European universities as viewed through the lenses of university-enterprise partnerships. It presents research findings of a large-scale comparative European research project (GOODUEP: “Good Practices in University-Enterprises Partnerships”) which was focused on university-enterprise links in six European countries. The chapter presents first its analytical framework and then explores the following three major partnership parameters: the role of individuals (academics/administrators) in establishing and running successful partnerships; the role of public authorities, public subsidies and private donations in operations of successful partnerships; and the staff mobility between public and private sectors as part of established partnerships. The chapter presents its research findings in a wider context of academic norms, values and attitudes towards the commercialization of research and technology transfer analyzed on the basis of a recent (2011) large-scale quantitative comparative European research on the academic profession in eleven countries (ESF-funded EUROAC, “Academic Profession in Europe: Responses to Societal Challenges”). In general, research findings are linked to current discussions in the knowledge transfer and science policy literatures on the growing role of knowledge exchange and university-industry linkages in the knowledge economy, with particular emphasis on the role of individual vs. institutional characteristics in successful university-industry collaborations, the role of the public/private mix in funding and governance modes in partnerships, and the relative separation of university and business cultures in European universities as factors inhibiting the inter-sectoral mobility.



PART I

**THE CHANGING  
STATE/UNIVERSITY  
RELATIONSHIPS IN EUROPE**



# Chapter 1

## A Panoramic View: The Growing Complexity of the Academic Enterprise in Europe

### 1.1. Introduction

The increasingly complicated picture of the academic enterprise in Europe is due to several general factors: they include globalization and Europeanization, educational expansion and massification of higher education, the economic crisis and public sector reforms, transformations of the state (including European welfare states) and the knowledge-driven economic competitiveness of nations and regions. Some factors, like expansion and massification or globalization and Europeanization, have exerted their influence for a few decades; others, like the economic crisis, for a few years. They can be put under four more general categories of external pressures exerted on higher education: economic (financial), political (ideological), social, and demographic. The factors generating change in national higher education policies and in national higher education systems have been multilayered, interrelated and often common throughout the continent.

The growing complexity of the academic enterprise today is also due to the fact that higher education systems in Europe have been under powerful reform pressures.<sup>3</sup> Reforms increasingly, and throughout the European continent, lead to further reforms rather than to reformed higher education systems, which supports arguments put forward by Nils Brunsson about all organizations in modern society: “large contemporary organizations, whether public or private, seem to be under almost perpetual reform-

---

3 It was the case throughout the last few decades. As Maurice Kogan and Stephen Hanney emphasized a decade ago, “perhaps no area of public policy has been subjected to such radical changes over the last 20 years as higher education”; also for Ladislav Cerych and Paul A. Sabatier (in their 1986 study of the implementation of higher education reforms in Europe) the late 1970s and the early 1980s were “a most critical period”; Kogan and Hanney 2000: 11, Cerych and Sabatier 1986: 3). Following Burton Clark (1998a: xiii) in the opening line of his *Creating Entrepreneurial Universities* (1998), we can say: “the universities of the world have entered a time of disquieting turmoil that has no end in sight”.

attempts at changing organizational forms”, Brunsson 2009: 1).<sup>4</sup> Higher education has changed substantially in most European economies in the last two or three decades but it is still expected by national and European-level policymakers to change even more, as the recent European Commission’s modernization agendas for “universities” and for “higher education systems” tend to show (see EC 2006, EC 2011a, EC 2011b and numerous related communications). Universities, throughout their history, change as their environments change, and the early 21<sup>st</sup> century is not exceptional (see Rüegg 2011 for the postwar period; for theoretical perspectives in organizational theory, see a population ecology perspective as in Hannan, Pólos and Carroll 2007, Hannan and Freeman 1989, Morgan 1986, and Aldrich 1979/2008, and a resource-dependence perspective, as in Pfeffer and Salancik 2003).<sup>5</sup> Different directions of current and projected academic restructuring in different national systems add to the complexity of the picture at a European level.

### *Broad features of the complexity*

There is a number of broad features that add to the complexity of the academic enterprise. In general, they include the acceleration of national, European and global discussions, permanent renegotiations of the state/university relationships, universities functioning under permanent conditions of adaptations to changing environmental settings, renegotiations of the general social contract providing the basis for the postwar welfare state and its public services, the huge scale of operations of, and mostly public funding for, universities, the divergence between global,

---

4 Not surprisingly, as observed in organizational research by Johan P. Olsen: “Decisions to change often do not lead to change, or they lead to further unanticipated or unintended change. Institutional reforms breed new demands for reforms rather than making reforms redundant” (Olsen 1998: 322; see also Brunsson and Olsen 1993).

5 Various forms of the population ecology perspectives stress the critical role of environments in transformations of organizations, while the resource-dependence perspective stresses the mutual interdependence of organizations and their environments (organizations being able to modify their environments). For a traditional powerful defense of higher education as a “unique institution”, see John D. Millett (1962), and recently Christine Musselin (2007a) on universities as “specific organizations”. See also Maassen and Olsen’s (2007) distinction between universities as “instruments for shifting national political agendas” and as “institutions” throughout their edited book.

supranational, European and often national reform discourses and academic discourses about the future of the university, and the link between arguments about private goods/private benefits from higher education and arguments about public subsidization of higher education. In more detail, these broad features are the following:

- (1) *The acceleration of national, European and global discussions.* In the last one or two decades, discussions about the future of the institution of the university at national, supranational (e.g. European) and global (e.g. by the World Bank and the OECD, see Martens 2007, Martens and Weymann 2007, Martens and Jakobi 2010b on the internationalization of education policy and the role of the OECD) levels have accelerated to an unprecedented degree.<sup>6</sup> The university is viewed as becoming one of the most important socioeconomic institutions in post-industrial societies in which social and economic well-being is increasingly based on the production, transmission, dissemination and application of knowledge (see Stehr 2002, Foray

---

6 In this book we define “institutions” (following Wolfgang Streeck and Kathleen Thelen 2005: 9) as building-blocks of social order: “they represent socially sanctioned, that is, collectively enforced expectations with respect to the behavior of specific categories of actors or to the performance of certain activities”. We also refer to path-breaking works of James March and Johan P. Olsen from the last three decades which have radically reformulated conceptual premises of institutionalist research and have linked institutional change to changes in norms and values (see Peters 2005: 25-45 on “normative institutionalism” in general; March and Olsen are the “normative pillar” of institutionalism, see Scott 2008: 54-56). According to them institutions are “a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstance” (March and Olsen 2006a: 4). We assume that higher education institutions refer more to the “logic of appropriateness” than to the “logic of consequentiality”. The former shapes their evolution to a greater degree to individuals’ norms and values. As theories of institutional change show, no institution can function without a discourse (or discourses) accompanying and supporting it. Struggles to shape institutions are also struggles to shape a discourse which is legitimizing its social or economic place (see Dryzek 1996: 104 ff.): these struggles have intensified in the last decade and perhaps for the first time became global struggles in which international and supranational institutions and organizations have been involved (such as the OECD, the EU, and the World Bank). To a large extent, the future forms of European universities may thus depend on social and political acceptance to legitimization discourses currently emergent around them.

2006, Kahin and Foray 2006, Bok 2003, Slaughter and Rhoades 2004, Shattock 2009a). The rising importance of the institution is reflected, *inter alia*, in the breadth and scope of public, academic and political discussions about its future. Also at the EU level, universities have been in the policy spotlight throughout the 2000s (a reform strategy is “necessary and urgent”, education and research being viewed as “growth-friendly areas”, EC 2011c, and the potential of European higher education institutions being viewed as “underexploited”, EC 2011a: 2).

- (2) *Permanent renegotiations of the state/university relationships.* In the last two or three decades in Western Europe, there have been permanent renegotiations of the relationships between the state and higher education institutions (see Amaral *et al.* 2009, Amaral *et al.* 2008, Paradeise *et al.* 2009, Enders and Fulton 2002, Neave and van Vught 1994a, Neave and van Vught 1991). As developed economies are becoming ever more knowledge-intensive, the emphasis on university reforms may be stronger in the future than today. At the same time, knowledge, including academically-produced knowledge, is located in the very center of key economic challenges of modern societies (Geiger 2004a, Geiger 2004b, Leydesdorff 2006, Bonaccorsi and Doraio 2007). In most European systems, the relationship between the state authority and higher education institutions is far from being settled (as public institutions, universities can be viewed either as “subsystems of the state or as independent institutions that nevertheless are strongly affected by the nature of the state”, Kogan and Hanney 2000: 22). There are also fee-based private institutions (termed “independent private” by the OECD), especially in Central and Eastern Europe, and publicly-funded “foundation universities” (for instance, in Sweden or Germany) which are at the same time non-public and non-private, which further complicates the picture.
- (3) *Universities functioning under permanent conditions of adaptations to changing environmental settings.* The changing social, economic, cultural and legal settings of European higher education institutions increasingly compel them to function in the state of permanent adaptation; adaptations are required as responses to changes both in their funding and governance modes (see Clark 1998a, Shattock 1999 and Paradeise *et al.* 2009, Krücken *et al.* 2007). Reforming universities does not lead to reformed

universities, as examples from major European higher education systems show. Policymakers, following New Public Management lines, tend to view universities, like other public institutions, as “incomplete”; reforms are intended to make them “complete” institutions (Brunsson 2009). Reforming is thus leading to further waves of reforms (Maassen and Olsen 2007, Clancy and Dill 2009a).<sup>7</sup>

- (4) *Renegotiations of the general social contract providing the basis for the postwar welfare state and its public services.* Europe faces a double renegotiation of the postwar social contract related to the welfare state (which traditionally includes education, as in, for instance, Stiglitz’s *Economics of the Public Sector* 2000, Barr’s *Economics of the Welfare State* 2004: 321-348, Barr’s *Economic Theory and the Welfare State* 2001, Garfinkel *et al.* 2010, Haggard and Kaufman 2008: 5, Esping-Andersen 1990: 56-57, Lindert 2004, Castles 1989a: 146-194, Titmuss 1968: 197 or Wilensky 2002: 209-251)<sup>8</sup> and the renegotiation of the social contract linking, in the last two hundred years, public universities and European nation states (see Jakobi, Martens, and Wolf 2010a, Rothblatt and Wittrock 1993, Kwiek 2005, 2006a). The future of the traditional ideas of the university in settings in which public institutions and public services are increasingly based, or compelled to be based, on the economic logics and (quasi-)market formulas of functioning (LeGrand and Bartlett 1993:

---

7 As organizational research shows, there is no surprise that reforms based on “simple prescriptive models” seldom succeed in achieving their aims: “such reforms often increase rather than decrease the felt need, and probability of, new reforms. ... it is often observed that organizations work well precisely because naïve reforms have *not* been implemented” (Brunsson and Olsen 1998b: 30). Or, in other words, reformers’ “great expectations” often lead to what Cerych and Sabatier called “mixed performance” (Cerych and Sabatier 1986).

8 All welfare state institutions reduce economic insecurity (Garfinkel *et al.* 2010: 23): “by reducing the insecurity of capitalism, welfare state institutions further enrich capitalist nations. ... knowledge and, therefore, education may be the single most important ingredient in reducing uncertainty and risk. ... What better way to equip citizens to cope with the economic insecurity produced by a vibrant capitalist economy than to educate them?”. Historically, as part of the welfare state, education came first; as Castles (1998: 147) reminds in his *Comparative Public Policy*, “in the very broadest terms, the sequence by which modern states became involved in welfare state provision was initially education, then social security and lastly health”. Certainly, the German “idea of the university” (Kwiek 2006a) came almost a century before the German Bismarckian practical ideas of the welfare state.

13-35) is still unclear (see Dill and van Vught 2010a, Geiger 2004b, Bok 2003, Weber and Duderstadt 2004, Clancy and Dill 2009a). Current pension reforms throughout Europe are a widely publicly debated aspect of the same social contract, as we show in Chapter 2 and Chapter 3.

- (5) *The huge scale of operations and funding.* The scale of operations (and funding) of universities, both university teaching and university-based research in European economies, remains historically unprecedented. Never before the functioning of universities was bringing so many diverse, both explicitly public and explicitly private, benefits. But also never in postwar history all aspects of their functioning were analyzed in such a detailed manner from international comparative perspectives, and, indirectly, carefully assessed by international organizations (see Martens *et al.* 2010, Martens *et al.* 2007, Dill and van Vught 2010a, Weber and Duderstadt 2004). Measuring the economic competitiveness of nations increasingly means, *inter alia*, measuring both the potential and the output of their higher education and research and development systems (as e.g. the annual Global Competitive Index shows, see Kwiek 2011a on knowledge production in Central Europe). Therefore, higher education can expect to be under ever more (both national and international) public scrutiny. The traditional post-Second World War rationale for resource allocation to universities has been shifting to a “competitive approach” to university behavior and funding (Geuna 1999a), with possible negative unintended consequences (Geuna 2001).
- (6) *The competing discourses about the future of the university and its missions.* There has been a growing divergence between two major sets of discourses about university missions in the last decade. The first is a set of global, supranational and EU discourses (reflected often in national public policy debates about systemic reforms of higher education, and reflected also most recently in the 2011 Communication from the European Commission, EC 2011a). And the second is a set of nationally differentiated traditional discourses of the academic community, deeply rooted in traditional, both national and global, academic values, norms, and behaviors (see Nóvoa and Lawn 2002, Dale 2007, Ramirez 2006, Välimaa and Hoffman 2008). The two sets of discourses seem as distant today as never before. Struggles between them (the former set supported by the power of the changing modes of the redistribution of resources and legal changes relevant to

universities' operations, and the latter set supported by the power of academic traditions, and, in general, of the undifferentiated academic community as a whole) lead in many systems to conflicts between alternative institutional rules (see March and Olsen 1989, and especially Maassen and Olsen 2007) and conflicts between policymakers and national academic communities about the substance and underlying directions of higher education reforms. The political economy of reforms suggests (OECD 2010b, OECD 2009b, and OECD 2003a), though, that no reforms can be successful without the support of at least some groups of academics, so reforms include often selective "sticks and carrots" at both institutional and individual academic levels.

- (7) Finally, the link between arguments about private goods/private benefits from higher education and arguments about its public subsidization. Private goods (and private benefits) from higher education have been increasingly high on the reform agendas and in public discussions that accompany them. Together with the increased emphasis in public policy in general on private goods (and private benefits), the threat to the traditionally high levels of public subsidization of traditional public institutions may be growing (Marginson 2011, Marginson 2007b, McMahon 2009).<sup>9</sup> Viewing higher education more consistently from the perspective of private investment (and private returns) is more probable than ever before since the 1960s when the human capital approach was formed. This may have an impact on long-term public perceptions of social roles of universities and their services, and on long-term views about public funding of universities in the future.

A panoramic view presented in this chapter draws from both current research and policy debates to show possible directions of changes of the academic enterprise in Europe. There are many options possible and forecasting in the area of higher education does not have a good track

---

9 What counts more than ever before as a rationale for public funding for academic research is "economic relevance", or the impact on economic development. As Etzkowitz and Leydesdorff (2000: 117) expect, "the classic legitimation for scientific research as a contribution to *culture* still holds and military and health objectives also remain a strong stimulus to research funding. Nevertheless, the future legitimation for scientific research, which will keep funding at a high level, is that it is increasingly the source of new lines of economic development".

record. There are many variables, and most of them are explicitly related to changing social and economic environments in which universities function.<sup>10</sup> We will be referring to a relative and elusive term of the attractiveness of European higher education. This attractiveness has different senses in different contexts (local, national, European, and global), at different (micro-, meso-, and macro-) levels of analysis, and for different constituencies (or internal and external university stakeholders). On top of that, we are discussing here multiple future social and economic developments and their possible, relatively uncoordinated, if not chaotic, impacts on higher education systems. The chapter focuses on the different – and often conflicting – senses of the attractiveness of European systems and institutions to students, academics, the state, the labor market, and the economy in general. Universities need to be attractive to increasingly differentiated student populations (and to cater for their increasingly different needs) – but they also need to be attractive workplaces and provide attractive career opportunities for academics (the oft-forgotten dimension in ongoing higher education reforms across Europe). Amidst ongoing restructuring of the public sector in general in many parts of Europe, and especially in the new EU member states (see e.g. Häusermann 2010, Palier 2010, Esping-Andersen 2009, Esping-Andersen 2010, Ferrera 2005, Iversen 2005, Cerami 2006, Kwiek 2007b, Kwiek 2007c), and amidst reforming higher education systems in particular (Amaral, Bleiklie, and Musselin 2008, Pusser, Kempner, Marginson, and Ordorika 2012, Maassen and Olsen 2007, Paradeise, Reale, Bleiklie, and Ferlie 2009, and Amaral, Neave, Musselin, and Maassen 2009), universities need to keep their respect for traditional academic values. And, as Clark points out,

innovation, reform and change are not topics that can be divorced from the study of structure and tradition. The heavy hand of history is felt in contemporary structures and beliefs, and what is now in place conditions what will be. Desired changes attenuate and fail unless they become a steady part of the structure of work, the web of beliefs, and the division of control (Clark 1983a: 237).

---

10 Good examples of the low ability of higher education researchers to analyze the future of higher education come from the late 1980s: see, for instance, the role of demographics in shaping higher education's futures and the future roles of private higher education in the American context (see Levine *et al.* 1989, Breneman and Finn 1978, and Carnegie Foundation 1975).

This is not an easy task since any imposition of adaptations of academic institutions may be recognized by the academic community as an attempt to violate its fundamental, historically-rooted norms and values. And institutions are sets of structures, rules, norms and standard codes of conduct where the “logic of appropriateness” plays a key role. In cases of fundamental undermining of the *raison d'être* of an institution – the traditional logic of appropriateness is longer understood outside of the institution being undermined; the (internal) discourse of appropriateness and the (external) discourse of reforms do not fit each other, and the latter raises understandable, strong resistance of the reformed institutions.<sup>11</sup> At the same time, as Bleiklie, Høstaker and Vabø conclude in their study of reforming Norwegian universities, the relationships between reforms and changes is not straightforward: reforms have been both the driving forces and the responses to change:

The changes that have taken place were not the outcome of political reforms alone. They should be considered part of more comprehensive demographic, socio-structural and political-institutional processes of change. Within this context the reforms have been both the driving forces and the responses to change, and their effects have depended on how they have interacted with their environment (Bleiklie *et al.* 2000: 307).

### *The structure of the chapter*

The structure of this chapter is as follows: following this introductory part, in the second part of the chapter we will focus briefly on the attractiveness of higher education for the academic faculty from the perspective of the growing need for their permanent adaptation to the fast-changing social and (perhaps especially) economic realities in which European universities function. We will show that the academic profession in the next decade will be in the eye of the storm because the complexity of the academic enterprise

---

11 In the definition of institutions as “collections of rules and organized practices”, according to James G. March and Johan P. Olsen, normative institutionalists in organization studies, “there are constitutive rules and practices prescribing appropriate behavior for specific actors in specific situations. There are structures of meaning, embedded in identities and belongings: common purposes and accounts that give direction and meaning to behavior, and explain, justify and legitimate behavioral codes. There are structures of resources that create capabilities for acting. Institutions empower and constrain actors differently and make them more or less capable of acting according to prescriptive rules of appropriateness” (March and Olsen 2006a: 3).

is increasing, the role of current university stakeholders is changing, and their expectations from higher education institutions are increasingly differentiating. In the third part, we will focus on market mechanisms (or rather quasi-market mechanisms, see Newman, Couturier and Scurry, 2004: 81-103, Massy 2003: 13-36, or the market as a rhetorical instrument in Teixeira *et al.* 2004: 291-310) in universities and on new revenue-generation patterns in universities, assuming that the financial environment of European universities will become more and more unfriendly in the next decade, and the universities will be more often than ever in their modern history seeking new, relatively non-traditional sources of income – seeking mainly various forms of “third stream funding”, analyzed so far mainly with respect to the tiny minority of universities which Burton Clark termed “entrepreneurial” (Clark 1998a, Clark 2004a). We will show that a potential (and relative, in the structure of university revenues) decline in public funding may change the nature of the relationships between the state (society) and the academy, as the privatization of educational services not only transforms the organizational culture but also the objectives and the primary mission of universities. In the fourth part, in the context of the changing expectations of increasingly powerful university stakeholders (the state, students, and the labor market), we will discuss the future of the teaching/research nexus as traditionally viewed by European research universities. The academic profession, as well as the key question about the attractiveness of the academic workplace in conditions of the potentially evolving missions of academic institutions, will be located in the center of these changes. In part five the recapitulation from the perspective of educational policy will be presented.

### *The point of departure*

The point of departure in this chapter is that both public and private institutions are under multi-faceted pressures to change today, with various intensity in various parts of Europe. These institutions include governmental agencies, institutions of the corporate world, institutions of civil society and the core institutions of the public sector. We are experiencing the shattering of a stable world governed by modern institutional traditions, and in this context universities are increasingly expected to adapt to the changing social and economic realities (the adaptation is conventionally termed the transition to the knowledge society, and, perhaps more importantly, the

transition to the knowledge economy<sup>12</sup>, see Scott 2005b, EC 2003b, OECD 2007a).<sup>13</sup> Therefore, “universities cannot stand still or retreat into the past. Change is inevitable”, as Burton Clark put it (2004a: 7). In a European context, in light of a sustainable future of higher education systems, the following issues are highly relevant for its attractiveness: the introduction or increasing of tuition fees and student loans (cost-sharing as an access, equity, social stratification, mobility and status issue, see Johnstone 2006, Teixeira, Johnstone, Rosa, and Vossensteyn 2006); academic entrepreneurialism and “academic capitalism” as different possible ways to diversify institutions’ funding basis (see Shattock 2005, Shattock and Temple 2006, Shattock 2009a, Clark 1998a, Williams 2003, Kwiek 2008b); the ongoing public sector reforms and, wider, possible reformulations of European welfare states and the European social model(s) (for instance, via the privatization of some public services, especially in new EU member countries, see Kwiek 2007c); and the revised EU social agenda and new supranational visions of higher education (see EC 2005a on the “Social Agenda” or a report on “The Future of Social Policy”, and numerous recent World Bank and OECD publications on tertiary education). Each of these

- 
- 12 In the knowledge economy, knowledge has become the crucial source of added value (Stehr 2002: 17). Definitions of the knowledge economy abound: as Foray puts it: “by knowledge-based economies I mean, essentially, economies in which the proportion of knowledge-intensive jobs is high, the economic weight of information sectors is a determining factor, and the share of intangible capital is greater than that of tangible capital in the overall stock of real capital” (Foray 2006: ix; see also Leydesdorff 2006 and Stehr 1994). There seem to be no fundamental differences between understandings of the concept of the knowledge economy in social sciences and in international organizations. As the World Bank defined it recently, “a knowledge economy is one in which knowledge assets are deliberately accorded more importance than capital and labor assets, and where the quantity and sophistication of the knowledge pervading economic and societal activities reaches very high levels” (World Bank 2007: 14; see also OECD 1996).
- 13 With one reservation, though: knowledge economies differ substantially, across Europe and across the OECD area (Kwiek 2011a, Kwiek 2012c). As Metcalfe (2010: 8) stresses, “it is commonplace to say that the modern economy is knowledge based but a moment’s reflection points to the vacuity of this notion; all economies are knowledge based and could not be otherwise. The pertinent question is rather the manner in which one kind of knowledge based economy is to be distinguished from any another. ... the rise of the modern university as a custodian of knowledge in Western economy and society has been of central importance. But universities are not alone in this role”.

issues is of critical importance to the attractiveness of higher education in Europe to (some or all) its stakeholders. We discuss most of them in the following chapters. Different answers to the questions emerging around these issues represent different answers to the question of the attractiveness of higher education to its various stakeholders. Put simply, its attractiveness in the public sector can be imagined differently by students and their families (especially if they would have to bear greater costs of education through various cost-sharing mechanisms, still very much unknown in major European systems) – and differently by the state as an increasingly supervising agency, potentially less and less sponsoring public higher education sector, and differently by regional, domestic and international labor markets. And still much more differently by the academic profession, the core of the university. The changes in attractiveness are related to the changes in expectations from external university stakeholders. Different university settings produce different academic profession(s) and, consequently, after a generation, different institutions.

What is extremely important for this chapter is the teaching/research nexus as part of the attractiveness of the academic profession as viewed by the academic faculty (Deem 2006a). And it is the academic community that the whole system of teaching and research ultimately rests on (and the academic community in Europe includes little more than two million people, or less than 0.4 percent of its total population). This is where potential conflicts arise, from the perspective of the institutional evolution of the modern university; this is where academics working in institutions under the massive pressures from other stakeholders have to adapt to a new situation most radically. Let us refer briefly to institutionalism in organization studies again: an institution (March and Olsen 1989) can be viewed as a combination of three systems – individuals, institutions, and the environment (that is, a set of institutions), and each system may have different needs. Moreover, personal desires of individuals associated with the need for stability does not necessarily lead to the survival of the institution:

In particular, it seems very likely that both the individuals involved in institutions and systems of institutions have different requirements for change than do the institutions themselves. There is no a priori reason for assuming that individual desires for change and stability will be mutually consistent or will match requirements for institutional survival. Moreover, the survival of an institution is a more compelling requirement for the institution than it is for a

system of institutions (March and Olsen 1989: 57-58; see also March 2008, March and Olsen 2006b).

Educational strategies for the next decade need to take into account the powerful role of traditions of the modern European university which may be acting both as inhibitors to changes and as their activators. Educational strategies need also to take into account the irreconcilable differences in the senses of attractiveness of higher education in Europe shared by its major stakeholders, and growing tensions between them expected in the next decade. Simply speaking, it is clear that expectations from higher education on the part of the state (still the major funder in most European countries), students, the labor market, and academics cannot be easily reconciled. The irreducible tensions in the university sector are growing and these are not merely the tensions between academics and the state. The academic profession in the next decade will be in the eye of the storm and the present chapter is intended to show why (the literature on transformations of the academic profession has been growing dramatically in the last decade, and its ever bigger part contains an extensive empirical component, see the earliest, e.g. Altbach 2000, Altbach 2002, Enders 2000, Enders 2001, and more recent: Schuster and Finkelstein 2006, Kogan and Teichler 2007a, Enders and de Weert 2009a, Rumbley, Pacheco and Altbach 2008, as well as the most recent, emerging out of the global Changing Academic Profession (CAP) project and its European twin project, The Academic Profession in Europe: Responses to Societal Changes (EUROAC), in particular in a new Springer series: “The Changing Academy – The Changing Academic Profession”: Locke, Cummings and Fisher 2011, Cummings and Finkelstein 2012, and Teichler and Höhle 2012; as well as subsequent volumes from RIHE-Hiroshima: RIHE 2008, RIHE 2009, and RIHE 2010).

### *Selected contentious areas*

There are several contentious areas we would like to draw attention to in the present chapter, and all of them contribute to the possible growing systemic complexity of the academic enterprise. We shall discuss six of them briefly here. The contentious areas, and the questions related to them, have different priorities across different European systems; but in most of them, they are, or at least are expected to become, crucial. They include the following (area descriptions will be followed by related questions).

- (1) *University funding in mass higher education systems and the role of cost-sharing.* Who pays and who benefits? Who should pay and who should benefit? What is the future of tax-based higher education systems in economies increasingly characterized by the growing competition for scarce public resources and financial austerity in all public services generally?
- (2) *The role of third-stream funding.* What is the role in university budgets of non-core, non-state income, mostly research-related? What is the future of academic entrepreneurialism and differentiated third mission activities in ever-more competitive higher education systems?
- (3) *Changing university governance modes.* What are the many faces of new managerialism in universities, and what is its impact on norms, behaviors, and routines of the academic community?
- (4) *The delinking of teaching/research activities.* How strong is the traditional teaching/research link in university and non-university sectors today? What is the long-term impact of national systems getting internally differentiated by various levels of research intensity and increasingly competitive access to research funding? How does research-intensity of institutions determine their funding levels and national status and prestige hierarchies?
- (5) *The changing academic profession(s).* How far can differentiation processes within the academic profession go, following differentiation processes in higher education systems themselves? What are the many futures of the differentiated academic profession(s) in national systems and in Europe?
- (6) *Further expansion of higher education systems.* What may universal higher education mean for millions of graduates, for their job prospects and future income differentials in postindustrial economies? Are middle-class lifestyles and incomes attainable for millions, based on almost universal access to higher education?

The present chapter shall refer to the above contentious areas in higher education research and policy and will discuss the three following major questions with reference to the coming decade: (1) In the second part: should European higher education systems expect in general more (quasi-) market mechanisms and more new income-generating patterns? (2) In the

third part: what is the role of new university stakeholders and how teaching/research missions may evolve in European universities? And (3), in the fourth part: to what extent meeting conflicting demands from different university stakeholders is a major challenge to the European academic profession?

## **1.2. Market mechanisms and new income-generating patterns**

The first question is whether European higher education systems should expect more market (and quasi-market) mechanisms and more new income-generating patterns? The answer is moderately positive, and the reasons are given below.

### *The market perspective and the increasing financial austerity*

Firstly, there may be growing relevance of the market perspective in, and increasing financial austerity for, all public services (accompanied by growing competition in all public expenditures, both services and infrastructure, including both civil and public infrastructure, or related to such infrastructure as roads, airports, railroads or power, and schools, hospitals, civic buildings etc.<sup>14</sup>), strengthened by several factors. The factors include globalization and internationalization processes, the financial crisis, as well as changing demographics and its implications for national social and public expenditures. European higher education institutions in the next decade may be responding to increasingly unfriendly financial settings by either cost-side solutions or revenue-side solutions (see Johnstone 2006).

---

14 From a more comprehensive perspective, the competition for public funding is not only between various public services (traditionally including welfare state services) but also between services and large, public infrastructural needs (which is perhaps most clear today in new EU member states, often developing its transportation infrastructure, see Kwiek 2012c). In developed countries, civil and social infrastructure built in the last century initially served those countries well but today it has been systematically under-maintained and it needs “substantial expansion and refurbishment at a time when governments worldwide are severely fiscally strained” (Scott, Levitt and Orr 2011: xv). I have developed the theme of growing competition for public funding between different segments of the traditional welfare state in Europe in Kwiek 2006a and Kwiek 2007a.

A more probable institutional response to possibly worsening financial environments in which institutions operate is basically by revenue-side solutions: seeking new sources of income, largely non-state, non-core, and non-traditional to most European systems, the seeking termed “external income generation” and the results termed “earned income” by Gareth Williams in *Changing Patterns of Finance in Higher Education* with reference to British universities already two decades ago (see Williams 1992: 39-50; examples of academic entrepreneurialism so understood can already be found in most European systems, to different degrees, as empirical research, e.g. the EUERЕК project, *European Universities for Entrepreneurship*, demonstrates, see Shattock 2009a, Kwiek 2009a, 2008a, and as we show in Chapter 5 and Chapter 6).<sup>15</sup>

New sources of income may thus include various forms of academic entrepreneurialism in research (consulting, contracts with the industry, research-based short-term courses etc.) and various forms and levels of cost-sharing in teaching (tuition fees, at any or all study levels, from undergraduate to graduate to postgraduate studies), depending on academic traditions in which systems are embedded, as well as incentives for institutions and for entrepreneurial-minded academics and their research groups within institutions. In general, non-core income of academic institutions includes six items: gifts, investments, research grants, research contracts, consultancy and student fees (Williams 1992: 39). What also counts (and determines the level of cross-country variations in Europe) is the relative scale of current underfunding in higher education – most underfunded systems, such as, for instance, some systems in Central and Eastern Europe, may be more willing to accept new funding patterns than Western European (Continental) systems with traditionally more lavish state funding.<sup>16</sup> “Academic entrepreneurialism” and various forms of “third

---

15 The EC communication explicitly mentions the need of both the diversification of funding sources in higher education and of access to “alternative sources of funding”, with a clear reservation, though: “public investment must remain the basis for sustainable higher education. But the scale of funding required to sustain and expand high-quality higher education systems is likely to necessitate additional sources of funding” (EC 2011a: 8, 7). These conclusions are clearly supported by empirical research as shown in Chapter 5.

16 As Williams defined academic entrepreneurialism based on research: “entrepreneurialism is fundamentally about innovation and risk taking in the anticipation of subsequent benefits. Neither the innovations and risks nor the expected

mission activities” seem to attract ever more policy attention at both national and EU levels in the last few years (see, for instance, European University-Business Forums 2008-2011 and the stream of activities termed “university-business dialogue and cooperation” in the European Commission; as a recent communication stressed, the contribution of higher education to growth and jobs can be enhanced through “close, effective links between education, research and business – the three sides of the same ‘knowledge triangle’”, and, furthermore, partnership and cooperation with business should be viewed as a “core activity” of higher education institutions, EC 2011a: 7-8).<sup>17</sup>

### *Welfare state reforms in Europe*

Secondly, in the times of the possible reformulation of most generous types of welfare state regimes in Europe (see Powell and Hendricks 2009, Palier 2010a, Häusermann 2010), higher education institutions and systems in the next decade should be able to balance the negative financial impact of the possible gradual restructuring of the public sector on the levels of public funding for higher education. And overall trends in welfare state restructuring have seemed relatively similar worldwide, as Paul Pierson stressed already a decade ago, long before the recent financial crisis came,

---

benefits need necessarily be financial, but it is rare for them to have no economic dimension. Finance is a key indicator and an important driver of entrepreneurial activity... Financial stringency and financial opportunities have been the main drivers of entrepreneurial activity in the case study institutions” (Williams 2009: 9).

- 17 As the European Commission formulates its policy position encompassed in the idea of the “knowledge triangle”, with implications for the EU member states explicitly formulated in the same document, “the recent shift towards open innovation has resulted in increased flows of knowledge and new types of co-operation between education institutions, research organisations and business. But the capacity of higher education institutions to integrate research results and innovative practice into the educational offer, and to exploit the potential for marketable products and services, remains weak. Working across the boundaries of research, business and education requires in-depth scientific knowledge, entrepreneurial skills, creative and innovative attitudes and intensive interaction between stakeholders to disseminate and exploit knowledge generated to best effect. Public policies which encourage partnership between professional institutions, research universities, business and high-tech centres can anchor education in the knowledge triangle, improve the continuum between basic and applied research, and transfer knowledge to the market more effectively” (EC 2011a: 10).

while reform agendas vary quite substantially across regime types, all of them place a priority on cost containment. This shared emphasis reflects the onset of permanent austerity. Welfare states are not being dismantled. Efforts to achieve recalibration can generate interesting innovations and even extensions of social provision. Yet everywhere, such adjustments occur in a context where the control of public expenditure is a central, if not dominant consideration (Pierson 2001b: 456).

Or as Castles *et al.* (2010b) highlight in their “Introduction” to a recent handbook on the welfare state in a similar vein, the two decades of neoliberal intellectual attack “increasingly challenged the optimistic faith in the beneficial effects of big government on which the post-war welfare state consensus had rested”. In the context of mature welfare states in the European Union, the deepening of European integration “not only imposed constraints on fiscal and monetary policy, which precluded the practice of traditional Keynesian macroeconomic policies at the national level, it also created ‘semi-sovereign’ welfare states which became imbedded in an emerging multilevel social policy regime” Castles *et al.* (2010b: 11). We shall discuss the issue in detail in Chapter 3, though.

In the case of higher education, the economic outlook of the sector, “vis-à-vis the intensification of competing social needs, is ever more problematic” (Schuster 2011: 3).<sup>18</sup> The competition for tax funding between various social needs and different public services is bound to grow, regardless of the fact when the current financial crisis will be overcome. The reason is simple, as both students of welfare and students of demography show: European welfare state regimes were created mostly for the “Golden age” period of the European welfare state model, or a quarter of a century between the 1950s and the oil shock of the early 1970s: “taking a long-term view, we can say that this was a most unusual period” (Lutz and Wilson 2006: 13). As Powell and Hendricks pointed out in the context of welfare states in post-industrial societies (2009: 10),

---

18 The increasing financial austerity, one of several global megatrends in higher education financing, is also brought on by what D. Bruce Johnstone termed “the diverging trajectories of sharply rising costs and slowly rising (or even declining) revenues” (Johnstone 2009: 58). Other megatrends include the massification of higher education, cost-sharing (or shifting of higher education costs to parents and/or students), other-than governmental revenues, private colleges and universities, the privatization of the public sector, and management and budget reforms (Johnstone 2009: 46-63).

nation-states must balance the demands of competing claimants – leaving them with fewer options, but to make hard choices. ... Societal-level redefinitions of what is fair and just are a common means to solutions that do not always do well for citizens in need of assistance, undermining personal sense of security and identity as well as social solidarity.

While the cost containment may be the general state response to financial austerity across European countries, seeking new external revenues may increasingly be an institutional response to the financial crisis on the part of higher education institutions. It was already a response of impoverished universities in most Central and Eastern European economies in the 1990s, following the collapse of communism. Certainly, the introduction of fees or their higher levels will be in the spotlight in most systems in which universities will be seeking additional non-state funding. The postwar (Continental) European tradition was tax-based higher education, and (high-level) fees still look non-traditional in most systems.<sup>19</sup>

Trends in European demographics (especially the aging of European societies, Esping-Andersen 2009: 145-166, see a decade-long OECD series of books: *Public Pensions Series*) will be affecting directly the functioning of the welfare state (and public sector institutions) in general, with strong country-specific variations. In most European countries, demographics will be affecting universities only indirectly, through the growing pressures on all public expenditures in general, and growing competition for all public funding. In some countries, such as several countries in Central Europe (especially Bulgaria, Romania, Poland, Hungary and Slovakia; Poland with powerfully declining demographics, facing projections of the number of students dwindling between 2008 and 2025 by one million, Kwiek 2012b, Kwiek, forthcoming. Antonowicz 2012c), the indirect impact on all public services will be combined with the direct impact on educational institutions. Strong higher education institutions under the combination of unfavorable

---

19 For a powerful rationale for the universal introduction of fees, see Johnstone's works throughout the last two decades, in particular recently in Johnstone 2006 and Johnstone and Marcucci 2010. For a changing rationale for the introduction of fees under severely declining demographics, as in Poland, see Kwiek's article forthcoming in *Comparative Education Review* (2013). In the context of the changing public/private dynamics in higher education, the role of fees may have a fundamental importance: in Poland, the future of the private ("independent-private" by OECD standards) sector in the next 15 years, under declining demographics, depends entirely on the political decision to introduce universal fees in the (tax-based so far) public sector, see Kwiek 2012b.

circumstances will be able to steer the future changes in funding patterns for higher education in their countries – rather than to merely drift with them. But steering the future changes is becoming an increasingly arduous task, especially that the academic faculty is usually a heavily divided interest group (see Tandberg 2010).

### *Public goods, private goods*

Thirdly, the possible redefinition of higher education from a public (and collective) good to a private (and individual) good is a tendency which may further undermine the idea of heavy public subsidization of higher education in Europe in the future (as it is in the US, see Massy 2003; a powerful defense of higher education as a public good see especially in Calhoun 2006, Marginson 2006a, Rhoten and Calhoun 2011, Calhoun 2011: 1-33, and Marginson 2011; for a theoretical distinction between public goods and private goods, see especially Batina and Ihuri 2005 and Geuss 2001).<sup>20</sup> As Cowan *et al.* argue,

A standard justification for the public support of the university, or any other institution, is that it provides some public good. If the products of a university could be privately owned and were easily appropriable, it would be difficult to justify public funding. ... one way to seek the superordinate goal of universities

---

20 There are pure and impure public goods. As Batina and Ihuri (2005: 2) point out, “the classic case is of a pure public good, where the marginal cost of providing another agent with the good is zero, and where no one can be excluded from enjoying its benefits. Examples include national defense, clean air and water, pristine natural habitats, the existence of an endangered species, the ozone layer, scientific research and knowledge in general, air travel safety, homeland security, peacekeeping operations, vaccinations that improve the general health of the population, and mosquito spraying to eradicate the West Nile Virus. The private sector has difficulty providing such goods since it is difficult to charge those who benefit from the good and to exclude non-payers from enjoying the good once it has been provided”. Scientific knowledge as a “pure public good” has been powerfully questioned under newly established knowledge transfer and knowledge exchange mechanisms in Western academia in the last three to four decades, with implications for renewed “social contracts” between science and the state. The major impact of “knowledge” becoming a “sellable commodity” is through changing conditions of state subsidization of research. See McMahon (2009) on “the private and social benefits of higher education” and his postulate to measure and value adequately the contribution of fields where patenting is not possible to growth and development.

is to ask what public goods they can provide, which cannot be provided in other ways (Cowan *et al.* 2009: 278).

In a “stakeholder society”, the fundamental relationship between higher education institutions and their stakeholders has always been “conditional” – which introduces, from a financial perspective, an element of “inherent instability”, as Guy Neave put it (2002: 22). The economic rationale for higher education is changing: as Philip Altbach stresses in a global context, “the private-good argument largely dominates the current debate” and it results from a combination of economics, ideology, and philosophy (Altbach 2007a: 25).<sup>21</sup>

### *Higher education and the market*

Fourthly, in the last half century, despite immense growth in enrollments, public higher education in Europe remained relatively stable from a qualitative point of view. Its fundamental structure remained unchanged. As Malcolm Skilbeck put it, things got substantially changed: “the University is no longer a quiet place to teach and do scholarly work at a measured pace and contemplate the universe as in centuries past. It is a big, complex, demanding, competitive business requiring large-scale ongoing investment” (Skilbeck, quoted in OECD 2004a: 3). The forces of change worldwide are similar (see Johnstone 2008) and they are pushing higher education systems into more market-oriented and more competitive arenas or quasi-market, or like Zemsky, Wegner, and Massy want – universities are becoming *market-sensitive*, and should become *market-smart*, 2005; and pushing higher education systems towards more state regulation combined with less state funding)<sup>22</sup> – which is another expected development. As Fazal Rizvi

---

21 William F. Massy (2003: 4) concluded almost a decade ago about American college that “it may be a ticket to the good life, but its benefits for democracy and culture no longer command a top priority for the public purse. Higher education increasingly is viewed as a private rather than a public good: very important for those who get it, but something most government officials can safely take for granted”. The diagnosis is “the erosion of trust” (Massy 2003: 3-28) and “the diminishing of public purpose” (Zemsky, Wegner and Massy 2005: 1-14).

22 Public universities increasingly use (have to use, but also want to use) income patterns that until recently were known only in the private sector. The belief that states are no longer able to finance the expansion of higher education and that greater reliance on private sources of income is necessary is becoming “nearly universal” (Rizvi 2006: 66).

observed from a global perspective, privatization has become globally pervasive, “increasingly assumed to be the only way to ensure that public services, including education, are delivered efficiently and effectively”; furthermore, “public institutions in most parts of the world have been encouraged, if not compelled, to adopt the principles of market dynamics in the management of their key functions” (Rizvi 2006: 65). This is also the case in Europe, and perhaps especially in Central Europe, Poland included.

For centuries, “the market” had no major influence on higher education: the majority of modern universities in Europe were created by the state and subsidized by the state (although, as Kogan and Hanney (2000: 240) rightly note, “market behaviour is not far different from the competitiveness which has always informed academics”).<sup>23</sup> Over the last 200 years, most students in Europe attended public institutions and most faculty members worked in public institutions (within all major models of the university in Europe which served as “templates” for other parts of the world, be it the Napoleonic, the Humboldtian, or the British models). Today, market forces in higher education are on the rise worldwide: while the form and pace of this transformation are different across the world, this change is of a global nature and is expected to have a powerful impact on higher education systems in Europe. Market forces formulate the behavior of new providers and, more importantly, increasingly reformulate missions of existing traditional public higher education institutions (towards more business-like organizations, which emulate business organizations’ behaviors). Roger L. Geiger described the impact of market forces on American research universities as “the paradox of the marketplace”:

the marketplace has, on balance, brought universities greater resources, better students, a far larger capacity for advancing knowledge, and a more productive role in the US economy. At the same time, it has diminished the sovereignty of universities over their own activities, weakened their mission of serving the

---

23 Remembering about the public/private funding dynamics from a more historical perspective, though. As Gareth Williams points out (1992: 135), “during the great expansion of higher education that followed the end of the Second World War, and continued up to the early 1970s, it was widely accepted – on grounds of both equity and efficiency – that only public funds could provide the resources needed. There was a general shift away from private funding and more and more institutions and students came to a greater and greater extent under the umbrella of state funding. By the mid-1970s the idea of higher education as a publicly provided service was overwhelmingly the dominant model”.

public, and created through growing commercial entanglements at least the potential for undermining their privileged role as disinterested arbiters of knowledge. The gains have been for the most part material, quantified, and valuable; the losses intangible, unmeasured, and at some level invaluable (Geiger 2004a: 265-266).

Also changes in the legal status of universities in Europe have become more frequent – such as, for example, public universities becoming non-profit foundations. Public universities running like foundations are already neither the public nor the private sector (non-profit or for-profit); they form, for instance in Germany, a new, privatized non-public and non-private sector. It is still unclear how the competition between public and private institutions in various parts of Europe (especially in Central and Eastern Europe, though) will influence the core mission of public higher education generally (see Bleak 2005: 19-136 on “when for-profit meets nonprofit”).

### *Increasing competition*

Attractive European higher education systems will be able to find a fair balance between the impacts of general trends of globalization and internationalization and the impacts of regional (European and national) responses to them to make sure that academia still retains at least major characteristics of postwar higher education systems and retains its traditional attractiveness as a workplace and an opportunity for a professional academic career. (So far, as Enders and de Weert confirm in their comparative study of the academic profession in Europe, European systems in general offer “low financial rewards” and “uncertain future prospects for university employment”, Enders and de Weert 2004: 22). Globalization brings about the direct competition between business and non-business models of organizations, and in the case of public institutions, the competition between more traditional collegial types of university management and governance and new business types of management and governance – known so far in Europe mostly from private higher education institutions – can be expected (Kwiek 2008a, Kwiek 2008b). In the times of the reformulation of current welfare state systems in Europe<sup>24</sup>, attractive institutions and systems will be

---

24 Put simply, the post-war welfare state in Europe was based on several basic assumptions that largely worked, and which today – again in a large part – no longer work. Nicolas Barr of London School of Economics defined six assumptions: the world was made up of independent nation-states; employment was a binary

able to balance the negative financial impact of the gradual restructuring of the most generous types of welfare state regimes in Europe on public funding for higher education.

Higher education in general, and top research-intensive universities in particular, as opposed to healthcare and pensions sectors, are perceived by European societies as being able to generate their own additional income through e.g. various forms of entrepreneurialism and third-mission activities or cost-sharing mechanisms (where fees are legally possible). Ironically, the more financially successful public entrepreneurial universities are today, the bigger the chances are that the financial self-reliance is becoming an expectation in the future: universities can actually be “punished” for their current ability to cope in hard times.<sup>25</sup> Along with the efforts to introduce market mechanisms in pension systems (multi-pillar schemes instead of pay-as-you-go ones) and healthcare systems (privatized systems based on additional, private, individual insurance policies), especially but not exclusively in European transition economies, the most far-reaching consequences of this marketization/privatization trend can be expected for public funding for higher education and research.<sup>26</sup> As William Zumeta stressed in a US context,

---

phenomenon (being employed or unemployed); there was low international labor mobility; there was the nuclear family with male breadwinner and female caregiver as a typical arrangement; skills were lasting throughout a working career; and there was the broadly constant age structure of the population (Barr 2005: 22-23, see Bonoli 2010: 35-44, Powell and Hendricks 2009: 3-18, Ferrera 2005: 77-110, Taylor-Gooby 2004a, Bonoli 2000: 7-28, and Iversen 2005: 30-76).

- 25 Not surprisingly, “higher education’s seeming ability somehow to withstand the loss of public revenues make it all the more likely for these losses to continue” (Johnstone 1998: 5). These losses in public funding, though, change the very nature of the state (society)/academe relationships. Privatization – in the form of bringing more private teaching (through fees) and private research funds (through contracts with the industry) to the university – inevitably transforms its organizational culture and the purpose and nature of its core missions. The ongoing processes of the redefinition of higher education from the public (and collective) good towards the private (and individual) good, in Europe (and well already well advanced in the U.S.), is an important factor that weakens at least part of the yet unquestioned legitimacy of public subsidization of universities today (see the discussion on universities and higher education as a public good in Calhoun 2006, Marginson 2006a and Ichilov 2009).
- 26 The OECD (as well as the World Bank) for many years has been involved in the process of conceptualization of aging of societies in the context of reforms of the pension systems. Two works about population aging are worth mentioning here

unlike most of the other state budget components, higher education has other substantial sources of funds that policy-makers feel can be tapped if institutions need to cope with deep budget cuts (Zumeta 2004: 85).

The privatization and market-oriented processes are crucial for the attractiveness of higher education because they can change the very nature of educational institutions and can have a direct impact on their financial situation (as Gareth Williams asked in the context of the institution, which he called *enterprising university*): “But when does a new stimulant become so powerful, or so addictive, that the organism itself changes its nature? If it does is the change evolution or decay?”, and to what extent “an enterprising ‘operational mode’ is beginning to dictate the value driver ‘normative mode’ of universities” – these are crucial issues, Williams 2004: 6).<sup>27</sup>

### *Private funding and new contracts between universities and societies*

Another expected development in the next decade is the promotion across Europe – as a mostly new and reasonable policy solution to the current problem of underfunding of, or financial austerity in, European universities (both underfunding and austerity being relative concepts) – of a more

---

(*Reforms for an Aging Society* from 2000 and *Live Longer, Work Longer* from 2006), as well as almost ten-years long series of volumes about pension schemes (*Private Pensions Series*). While, as it seems, for the academic world dealing with issues of the pension systems in the welfare state studies, the ten years of work of the OECD and the World Bank as a reference point appears to be relatively insignificant, in the world of politics those concepts and works are of key significance. The observed gap between research and policymaking, however, would require separate analysis, which we leave for another occasion. It is worth noting that the relationships between research and policymaking look similar in higher education studies where the contribution of the OECD (going far beyond the provision of standardized comparative educational statistics) is substantial in the last decade.

- 27 The countries of Central and Eastern Europe have undergone (and they are still undergoing) structural transformations and political and economic reforms on an unprecedented scale in post-war history – a good example of these unprecedented transformations is the privatization of the economy: OECD estimates that during fifteen years prior to the fall of Communism in the region in the early 1990s, on a world scale, approximately one thousand companies (of which more than half in Chile) were privatized. During the first few years of transformation in Poland, Hungary and the Czech Republic, by comparison, several thousands large companies and tens of thousands of small companies were privatized.

substantial inflow of both private research funds from the business sector and of more private teaching funds from student fees.

In policy terms, the European Commission is becoming much more positive towards student fees (it stressed recently that “it has been shown that free higher education does not by itself suffice to guarantee equal access and maximum enrolments” and invited member states to consider whether “their current funding model ... effectively guarantees fair access for all qualified students to the maximum of their capacities”, EC 2005c: 8, 10; see conclusions in Aghion 2008: 226, Aghion *et al.* 2008). Trends in European demographics (especially the aging of European societies) – whose social consequences from a larger comparative perspective are shown periodically by such popular datasets as *Pensions at a Glance* (OECD 2007a) or *Health at a Glance* (OECD 2007c) – will be affecting directly the functioning of the welfare state in general, but only indirectly, through the growing pressures on all public expenditures in general will it be affecting universities. The impact of public sector reforms on the attractiveness of academia to new generations of academics is another expected development (and it seems especially negative in Anglo-Saxon countries and in transition countries, see Deem 2006b: 292 and Deem and Brehony 2005, see also a report on the UK academic staff by Oliver Fulton in Enders 2000). The overall policy call of the EC that Europe needs to “respond to new social realities” – caused by globalization and demographics – through “a new approach to the social agenda with implication for both national and European levels” (EC 2007e: 4) may have indirect impacts, translated into different national contexts, on public higher education as well. The new EU social agenda covers with its impact the entire public sector; in addition, each shift in priorities towards social assistance can automatically raise the negative financial consequences for public universities, due to a limited pool of general public funds allocated from taxes on public services as a whole (see Teixeira, 2009: 47 and Salerno, 2007: 121; as Joseph E. Stiglitz (2000: 3) put it in his *Economics of the Public Sector*: “from birth to death, our lives are affected in countless ways by the activities of government” – that is, in our context: public universities are changing in such a manner and to such an extent as their public funding is changing (see also especially two Nicholas Barr’s books, linking the financing of education with funding of public sector services – Barr 2001a, 2004, and his co-authored book about higher education funding, Barr and Crawford 2005).

The possible gradual redefinition of higher education as a private good is parallel to two other processes visible in Europe: the reconsideration of

the role of tuition fees as a smaller-scale process (e.g. in transition countries) and, more generally, the reconsideration of funding of public services in general as a way to tackle the financial austerity of European welfare state regimes, as a large-scale process.<sup>28</sup> The relationships between both welfare state in general, and higher education in particular, can take a variety of forms in the future. Historically, as Castles *et al.* show (2010b: 6),

governments may finance social provision, directly provide welfare services as well as cash benefits, and/or regulate provision made by the third or private sectors. Different countries have committed to different roles for the state at different periods in time.

There is a clear paradox: higher education is seen as more important than ever before in terms of the competitiveness between nations, but though the importance of “knowledge” in our societies is greater than ever, at the same time, along with the pressures to reform current welfare state systems, the capacity of national governments to finance higher education and academic sector research and development is weaker than in previous decades (and much weaker than before science reached its “limits to growth”, Ziman 1994). Knowledge is increasingly produced by other sectors than higher education, and increasingly funded by the business sector. In the OECD area, the share of research and development performed by the business sector in the total research and development performed has been increasing steadily over the past two decades. The tension between the general attitude of governments and populations (education perceived as perhaps the primary asset of the individual) on the one hand and the inability or unwillingness of the very same governments to increase current levels of public funding for higher education and research in public universities – is stronger than ever before. As the EC put it firmly,

to attract more funding, universities first need to convince stakeholders – governments, companies, households – that existing resources are efficiently used and fresh ones would produce added value for them. Higher funding cannot

---

28 As Häuserman shows in her recent study (2010: 2), there are new needs to which modern welfare states are poorly prepared to meet: “such post-industrial social needs and demands typically include claims for the welfare coverage of the atypically employed, for gender equality in social insurance schemes, for external child-care facilities, for poverty relief for single parents and – more generally – for minimum income security for people with discontinuous employment biographies. Hence, there is both a strong pressure for retrenchment *and* a pressure for welfare state expansion. These are the two sides of post-industrial modernization”.

be justified without profound change: providing for such change is the main justification and prime purpose for fresh investment (EC 2005b: 8).

Consequently, incentives for transformations in functioning of higher education may be coming through new funding arrangements (referred to by the EC as new “contracts” between universities and societies).

### **1.3. Conflicting demands, new stakeholders, and the teaching/research divide**

The second question of the present panoramic view is about new (or rather: substantially more powerful than before) stakeholders in higher education and the changing teaching/research nexus in university missions.<sup>29</sup>

#### *Universities and academics meeting diversified needs*

Universities under conditions of massification are increasingly expected to be meeting not only changing needs of the state but also changing needs of students, employers, labor market and the industry, as well as regions in which they are located (Pinheiro, Benneworth, and Jones 2012a, Jongbloed 2010, Benneworth and Jongbloed 2010, Jones, McCarney, and Skolnik 2005, Arbo and Benneworth 2006, Zomer and Benneworth 2011, OECD 1999, OECD 2007d). Demands put on academics are increasingly conflicting, universities are caught in what was termed “mission overload” (Jongbloed, Enders, and Salerno 2008). Globally, for the vast majority of academics, the traditional combination of teaching, research, and service is beyond reach anyway: as a whole, globally, the academic profession is becoming a predominantly teaching profession; gravitating toward more emphasis on teaching is also the case, to varying degrees, in both Europe

---

29 As R. Edward Freeman defined a “stakeholder” in his landmark study *Strategic Management. A Stakeholder Approach*, it is “any group or individual who can affect or is affected by the achievement of the firm’s objectives”. In his “stakeholder view of firm”, stakeholders may include governments, local community organizations, owners, consumer advocates, customers, competitors, media, employees, environmentalists, special interest groups, and suppliers (Freeman 2010: 25, for a recent state of the art in stakeholder theory and its applications, see Freeman, Harrison, Wicks, Parmar and de Colle 2010: 3-82; in higher education studies, see Amaral and Magalhães 2003, Benneworth and Jongbloed 2010, and Neave 2002).

and in the US (Schuster 2011). The expected developments in the next decade may fundamentally alter relationship between various stakeholders, with the decreasing role of the state (for instance, and perhaps especially, in terms of funding), the increasing role of students and the labor market (for the more teaching-oriented sector of higher education), and the increasing role of the industry and the regions (for the more research-oriented sector of higher education). These processes are already advanced to different degrees in different European countries.<sup>30</sup>

On a more general plane, the massification of higher education is tied up with the growing significance of those new (or only re-emergent as powerful, as is the case of students under the Bologna Process transformations) stakeholders (Palfreyman and Tapper 2009a, Palfreyman and Tapper 2009b). At the same time, let us stress it here, in the midst of reforms, in order to flourish, universities, and especially research universities, need also to continue to be meeting (either traditional or redefined) needs of academics, the core of the university (Clark 1987, Clark 1983a). As pointed out throughout the last two decades by Philip G. Altbach:

The academic profession is central to the success of the university everywhere. A research university requires a special type of professor – highly trained, committed to research and scholarship, and motivated by intellectual curiosity. Full-time commitment and adequate remuneration constitute other necessities. A career path that stresses excellence and at the same time offers both academic freedom and job security are required. Academics at research universities need both the time to engage in creative research and the facilities and infrastructures to make scholarly research possible (Altbach 2007: 106-107).

Increasingly differentiated student needs – resulting from differentiated student populations in massified systems – already lead to largely differentiated systems of institutions (and, in a parallel manner, a largely

---

30 As Kogan and Becher (1980: 143-144) noted three decades ago about universities and their changing environments, “times change rather faster than institutions, and, outside the world of higher education, political fashions and economic climates come and go with little regard for the well-being of academia. ... the present-day system is called upon to defend its legitimacies and demonstrate its responsiveness to market pressures in a way which would have seemed unimaginable in the immediate postwar years. But whether or not externally derived innovation is thought to be a good thing, it is arguable that it has always been an endemic feature of the relationship between higher education and its wider environment”.

differentiated academic profession). The expected differentiation-related developments in the next decade may fundamentally alter the academic profession in general, further increase its heterogeneity, and have a strong impact on the traditional relationships between teaching and research at European universities, especially in second-tier institutions. And the relationship between teaching and research is, as Peter Scott put it, “among the most intellectually tangled, managerially complex, and politically contentious issues in mass higher education systems” (Scott 2005a: 53).

### *The redefinition of university missions*

Such questions as: how to combine teaching and research as university missions, in which types of institutions they should be combined, and based on which funding streams (mostly public or mostly private) – will become crucial in the next decade. For the time being, most non-elite and demand-absorbing institutions in Europe (and especially private institutions in Central and Eastern Europe) are already teaching-oriented while traditional elite research universities are still able to combine teaching and research.<sup>31</sup>

---

31 The traditional, dominant typology of private higher education in research literature has been elite/religious and demand-absorbing (Levy 1986b and Geiger 1986). Recent two decades of phenomenal global growth of the sector may require what Levy calls a “reconfiguration”. Thus the emergent categories summarized recently (Levy 2008: 26ff., Levy 2009: 15ff.) include elite/semi-elite, religious/cultural (or identity) and non-elite/demand-absorbing. Effectively, the Polish case includes predominantly institutions of the third type (non-elite/demand-absorbing), with a potential for the development of a very limited number of semi-elite institutions. Elite private institutions are a fully US phenomenon, semi-elite institutions in several can compete with second-tier public institutions. “By definition, semi-elite institutions stand between elite and non-elite and thus have more than average selectivity and status” (Levy 2009: 15, see a recent PhD dissertation by Joanna Musial, defended at SUNY/Albany: “Typical and top-ranked Polish private higher education: Intersectoral and intrasectoral distinctiveness”, 2012). The semi-elite type is also “markedly private: income is almost strictly non-public, led by tuition, and much is made of tight businesslike management, with strong business plans. ... It appears that every region of the world – developed and developing – is seeing a semi-elite emergence. Given the typical lack of academically elite private higher education, this semi-elite surge is particularly noteworthy” (Levy 2009: 16). There are two subcategories of non-elite private institutions which Levy merely describes as “highly problematic in academic quality, seriousness and effort” and as “serious” (Levy 2009: 19); we term them “high aspirations” and “low aspirations” non-elite institutions.

Research funding seems to be increasingly competitive in most systems, with competitive calls for proposals for research teams, rather than with mostly undifferentiated lump sums for institutions, to be internally distributed. The funding for research in European universities has been undergoing a transformation from being allocated on a “predominantly recurrent, block grant, basis” to being dependent on “success in competitive bidding for project grants”. This has led to the changing authority relationships in the sciences, including “the changed authority relationships governing the selection of scientific goals and evaluation of results in many OECD countries” (Whitley 2010: 5). At the same time, institutions are expected to be far more student-centered. Students as university stakeholders are becoming increasingly powerful, also as they are reconceptualized as “clients” by institutions and as future well-trained graduate labor force by governments. Following Williams (2010: 247), the point for discussion could be the following:

In brief it appears that universities as high level teaching institutions have needed research to ensure that their teaching remains at the highest level but it is not nearly so evident that research at the highest level needs to be linked to teaching, except perhaps at the higher postgraduate levels. This remains a challenge for higher education researchers.

University missions are already being strongly redefined, and their redefinition may require a fundamental reconstruction of roles of educational institutions (as well as a reconstruction of tasks of academics). The main characteristics of current European university systems – the combination of teaching and research as the core institutional mission – may be under ever greater pressures. Consequently, implications of the Bologna process at both European, national, institutional and individual (academics’) levels seem still not to be fully realized.<sup>32</sup> Bruce Johnstone and Pamela Marcucci discuss the issue from a global perspective and come to fairly pessimistic conclusions regarding the future of research at universities: “research may fall to only a few universities, or fall mainly to the universities and research institutes in the

---

32 In the Polish case, in more analytical terms, the international impact on the domestic policy decisions leading to the new law was through “diffusion” rather than “translation” (as Gornitzka 2006: 21 summarized the difference between the two mechanisms, “in the case of diffusion, what is imported remains unchanged”). The Bologna Process, and further steps towards the European integration of higher education (e.g. the European Qualifications Framework), were imported without changes in definitions of problems or solutions.

advanced countries ... or may fall mainly to business and private investment” (Johnstone and Marcucci 2007: 3). Or, as Johan P. Olsen (2007: 50) pessimistically notes from an institutional perspective,

Future generous support is certainly not guaranteed. The University’s days of almost unquestioned pre-eminence as an instrument for coping with society’s problems have gone. Excellence has been developed in other institutional settings and the University is not necessarily the preferred site even for basic research. The distrust of public sector professionals has to some degree also spread to university employees and generated demands for external quality assurance, accreditation and cost efficiency controls and massive expansion in the number of students has made it impossible for the University to guarantee upward social mobility for all students.<sup>33</sup>

- 
- 33 Traditionally, higher education is the main channel of upward social intergenerational mobility (that is, it enables individuals to cross class boundaries between generations, see DeShano da Silva *et al.* 2007, Grace and Gravestock 2009, Holsinger and Jacob 2008, Saunders 2010, OECD 2010, see also Morgan *et al.* 2006, Mullen 2010, and Svallfors 2005). Intergenerational social mobility reflects equality of opportunities. Class origins in more mobile societies determine labor market trajectories to a higher degree than in less mobile societies (Archer *et al.* 2003, Bowles *et al.* 2005, Furlong and Cartmel 2009, Fuller *et al.* 2011). Younger generations “inherit” education and “inherit” occupations from their parents to a higher degree in less mobile societies. Young European’s educational futures and occupational futures look different in more and in less mobile European societies. As a conclusion from Bowles *et al.* book on “unequal chances”, “family background” and “economic success” in the US stressed, “there are quite strong tendencies for children of those at the bottom of the income distribution to find their children at the bottom, with a parallel tendency for those at the top of the income distribution to find their children also at the top” (Bowles *et al.* 2005: 1). As we have shown elsewhere in detail, based on the analyses of the EU-SILC (European Union Survey on Income and Living Conditions) dataset (Kwiek, forthcoming), both the highest educational attainment levels and the most socially rewarded occupations (“highly-skilled white-collar”) are inherited in Poland to a stronger degree than in most European countries, except for most postcommunist countries. Poland seems to differ more from more mobile Western European systems and less from most immobile postcommunist systems in its educational social mobility than traditionally assumed in research literature (see Mach 2004). Polish society in general is less mobile compared with most Western European systems because the links between parents’ and children’s social status as adults (in both educational and occupational terms) are tighter. “In a relatively immobile society an individual’s wage, education or occupation tends to be strongly related to those of his/her parents” (OECD 2011a: 184, see also Morgan *et al.* 2006, Mullen 2010, and Svallfors 2005). While the expansion period substantially increased equitable access to higher education in Poland, upward social mobility viewed from a long-term perspective of

### *Social, political, and economic contexts*

The concentration of research funding in ever smaller number of top institutions is observed throughout European higher education and research systems: there are gainers and losers of these processes of the allocation of financial resources, in accordance with what Robert K. Merton described in the 1960s as the “Mathew effect” in science (“the richer get richer at a rate that makes the poor relatively poorer”, Merton 1973: 457). At the same time, there seem to be “limits to growth” in science after a long period of continuous expansion, discussed for the first time by John Ziman (1994: vi) in the context of a “dynamic steady state” and the “collectivization of knowledge creation. As he put it, “science is reaching its ‘limits to growth’. It is expected to contribute increasingly to national prosperity, yet national budgets can no longer support further expansion to explore tempting new research opportunities, by larger research teams, equipped with increasingly sophisticated apparatus. As a result, science is going through a radical structural transition to a much more tightly organized, rationalized and managed social institution. Knowledge-creation, the acme of individual enterprise, is being collectivized”. This transition is “pervasive, interlocking, ubiquitous and permanent”:

Despite variations from country to country in their official status, researchers in basic science worked everywhere under very similar conditions. They followed reputational careers in characteristically “academic” organizations, held together by largely informal collegial relationships between autonomous individuals. ... But these [academic institutional] arrangements evolved by custom over a long period, *under conditions of continuous expansion*. They work on the tacit assumption that this expansion will never cease. The intellectual dynamism of the whole scientific enterprise ... has always been accommodated by institutional growth. ... The long-established social structures and customary practices that channeled this dynamism worked very well for the best part of a century. The trouble is that they cannot bear the strains imposed by “steady state” conditions (Ziman 1994: 13).

The social, political, and economic contexts in which universities function are changing, and so are changing student populations and educational institutions (increasingly compelled to meet their changing demands). Higher education is subject to powerful influences from all sides and all –

---

changes between generations is still limited. Consequently, from a European comparative perspective, there is much greater need for fair access to higher education in Poland than commonly assumed in educational research.

new and old alike – stakeholders: the state, the students, the faculty, employers, and the industry, and on top of that, it is becoming a very costly business.<sup>34</sup> Changes to higher education systems as a whole are expected to make universities meet the new needs of society and the economy. In Kogan and Becher’s terms, European governments today increasingly view the “normative” and the “operational” modes of universities as being “out of phase”, and react accordingly:

The central authorities in any higher education system have an unenviable task. It is their extrinsic function to ensure that the system as a whole appears adequately to meet the needs of society and the economy, and their intrinsic obligations to ensure that proper institutional standards are maintained. ... There is no easy way for central authorities to attempt to correct an imbalance between their normative and operational modes – that is to say, when resource commitments and the pattern of course provision move out of line with national policy, however defined. One common strategy is some measure of structural reform, so designed as to affect the pattern of institutional power and to promote activities seen as more educationally desirable or more economically worthwhile than those which already exist (Kogan and Becher 2000: 122).

The complexity of the academic enterprise in the next decade is that different stakeholders may increasingly have different needs from those they traditionally had, and their voice is already increasingly taken into account (as in the case of students, especially under Bologna-inspired reforms in Europe).<sup>35</sup> Institutions are thus expected to transform themselves to maintain

---

34 Research universities are especially expensive: already almost a decade ago (2004), ten American public and private universities had total annual revenues of 2 billion USD or more, with three private universities in the lead. The top three were Harvard University (6.3 billion USD), Stanford University (3.5 billion USD) and Yale University (3.4 billion USD). The valid question for European universities is: “how to compete” (Brint 2007: 94)? And at the same time, three and a half decades ago, in the 1970s, the future of elite private universities in the USA was uncertain, and the policy questions were under which conditions the sector should be assisted to survive the pressures of declining demographics (see e.g. Carnegie report on *The States and Private Higher Education*, 1977, and Breneman and Finn 1978).

35 Bachelor degrees are a good point here. Recent national data tend to suggest that while the social prestige of the bachelor degree is still low in Poland (and Polish students report in comparative European surveys a very high level of willingness to continue their studies to get the master degree), its market value, viewed through the proxy of earning premiums on higher education, is quite high (OECD 2011a: 138-175; for the origins of the human capital approach used today by OECD in its changing methodologies for measuring returns to education, see in particular Schultz 1963: 38-64, Hansen 1970:

public trust (and to have good rationale to use public subsidies<sup>36</sup>). The “demand-response imbalance” diagnosed by Clark (1998a: 129ff.) comes from four sources: more (and more different types of) students seek and obtain access to higher education; more segments of the labor force demand university graduates; old and new patrons expect more from higher education; and knowledge outruns resources (1998: 129-131). As Guy Neave described it, the passage to the “Stakeholder Society” involves a redefinition of the “community in terms of those interests to which the university should be answerable” (Neave 2002: 12). There are differing views about what the core of academic activities is, what problems and solutions are most pressing. As Maassen and Olsen (2007: 19) point out,

actors’ institutional belonging, positions and roles are significant factors explaining the modes of thought and behavior. For example, faculty, students, university leaders and administrators are likely to hold different views. Presidents, prime ministers and economic ministers and Commissioners are expected to be carriers of different definitions of problems and solutions than are

---

157-195, Becker 1993: 59-160, Keleey 2007: 94-112, Psacharopoulos 1987, Carnoy 1995: 113-190. As Theodore W. Schultz pointed out in *The Economic Value of Education*: “schooling is the largest investment in human capital. ... most of the economic capabilities of people are not given at birth or at the time when children enter upon their schooling”, Schultz 1963: x). Consequently, especially if universal fees are introduced in the Polish system in the coming years (on the critical role of fees for the future of the public/private intersectoral relations, and the survival of the private sector under declining demographics, see Kwiek 2012b), the bachelor degree may have much higher acceptance among students and graduates than previously expected in higher education literature – which would be in turn an undeniable success of the Bologna Process in practical terms (see a recent comparative assessment of the employability of bachelor graduates in Europe in Schomburg, Teichler 2011b, and results of scholarly-initiated graduate surveys in Schomburg, Teichler 2006 and Teichler 2007a, Allen, van der Velden 2007, coming from two large-scale European research projects: CHEERS and REFLEX, or “Careers after Education – a European Research Study” and “Research into Employment and Professional Flexibility”).

- 36 Even though, as recently shown in analyses based on a large-scale European dataset (the European Social Survey) with reference to welfare performance and welfare support, “it is tempting to assume that the relationship between outcomes and support is positive indeed. In other words, welfare states with better social outcomes are ‘rewarded’ with high levels of popular support, while less-performing institutional setups are ‘punished’ with lacking legitimacy. In our view, however, this is not so self-evident” (Oorschot and Meuleman 2012: 25). This is an interesting insight with reference to the social legitimacy of higher education institutions across European economies.

ministers and Commissioners responsible for education and research. Acting and thinking about universities, university reforms, and the role of higher education is further more likely to take color of at which level of governance and in what institutional context it is taking place. Supranational, intergovernmental and transnational processes are expected to provide different settings and to prioritize different definitions of problems and solutions, and so are higher education and research as policy sectors compared to other policy sectors.

Therefore the question which directions higher education systems will be taking while adapting to new social and economic realities in which the role of the market is growing and educational credentials received by graduates are increasingly linked to their professional and economic futures – seems to be open. As Arbo and Benneworth (2006: 30) argued, as institutions are becoming more “socially embedded”, they respond to ever growing expectations with new layers of diversified academic tasks:

The consequence is that both the higher education institutions and national governments are facing a growing multitude of expectations. As knowledge is sought for as the solution to everything, demands of the environment are penetrating higher education. Typically, the institutions respond by additive solutions. They are appending new layers of academic specialties, study programmes, services, and administrative units to the organization in order to meet the challenges.

Following transformations of other public sector institutions, universities in Europe – traditionally publicly-funded and traditionally specializing in both teaching and research – may soon be under powerful pressures to review their missions in view of permanently coping with financial austerity in all public sector services (see Pierson, 2001). Universities may soon be under pressures to compete more fiercely for financial resources with other public services, also heavily reliant on the public purse. Public priorities are changing throughout the world (and education policy depends on the “allocation of values”, Rizvi and Lingard 2010: 71ff.), and new funding patterns and funding mechanisms can be experimented with (Central Europe, Poland included, has long been experimenting with various forms of privatization of public services). Also the rationale for European university research funding has been changing throughout the last two decades (Geuna 2001).

### *Teaching, research, and the competition for resources*

The consequences for the teaching/research agenda in universities of the growing competition for public resources are far-reaching. The trend of the concentration of research in selected institutions is powerful in several countries (Poland included: in 2009, 80 percent of research funds were concentrated in 20 institutions, in a system of 132 public and 328 private institutions in 2010, GUS 2011: 27). The trend of disconnecting teaching and research in higher education has already started: as Stephan Vincent-Lancrin from OECD (2006: 12) summarizes his analyses of OECD datasets, “academic research might just become concentrated in a relatively small share of the system while the largest number of institutions will carry out little research, if any” (which is challenging the traditional Humboldtian principle of the unity of research and teaching, see the German idea of the university in Kwiek 2006a: 81-138). The perspective of further future delinking of teaching and research, especially in first-tier institutions, runs counter traditional expectations of the academic profession as studied over the decades, both globally, in Europe, and in the USA.

Only research has been traditionally related to prestige, and prestige-seeking is the core of the academic enterprise.<sup>37</sup> Reputation is “the main currency for the academic” (Becher and Kogan 1980: 103; “much, then, of the driving force behind what academics do is concerned with building up, or maintaining, a professional reputation”. . . . “the pursuit of a good name in one’s own particular trade”) and it derives from research rather than from teaching (Clark 1983a, 1987, Altbach 2007).<sup>38</sup> In the developing countries,

---

37 There are inherent tensions between individual academic prestige and institutional prestige, though. At the institutional, rather than individual academic level, as Brewer, Gates, and Goldman (2002: 147) point out (while analyzing their typology of institutions: “prestigious”, “prestige-seeking”, and “reputation-based”), the apparent paradox is that “prestige seeking promotes excellence on the one hand but can lead to excessive expenditures and unresponsive schools that neglect the needs of some undergraduate students and other customers who don’t contribute to institutional prestige. . . . the excellence toward which institutions are striving may have little to do with the satisfaction of basic customer demands. For schools trying to build prestige, there can be a negative impact on students either because this strategy induces resources to be diverted from their basic instructional function or because the costs lead to tuition increases that exceed inflation”.

38 The rules of the game today are not different than ever before and individual research output makes a difference between high performers and low performers in science. As

research and teaching have always been separated except for national flagship institutions. Further differentiated academic profession(s) can be expected to emerge, of which only small segments will be involved in (usually, in the higher education sector, state-funded) academic research.<sup>39</sup>

Thus in European higher education in the next decade, the role of new (and previously significantly less important) stakeholders will be growing. The expected developments may fundamentally alter relationships between various stakeholders, with the decreasing role of the state, the increasing role of students and the labor market for the more teaching-oriented sector of higher education, and the increasing role of the industry and the regions for the more research-oriented sector of higher education (that is, among traditionally elite universities). And finally – which is crucial in the context of the attractiveness of academic careers – the role of academic faculty as a university stakeholder, from a comparative perspective, is bound to decrease: academic faculty will be increasingly treated as the academic labor force, representing either an advanced “knowledge-based industry” (knowledge industry in the case of research universities, that is knowledge-intensive universities) or the “teaching and training” sector, less and less academically sophisticated and research-related and increasingly differentiated according to the level and quality of teaching, to remain within the original parlance which shows the direction of ongoing changes. On a more general plane, the massification of higher education is tied with the growing significance of those new stakeholders.

At the same time, in the midst of transformations and adaptations, in order to flourish, which means to be both attractive and competitive, universities also need to continue to be meeting (either traditional or redefined) needs of academics. Especially since the income gap between professionals employed in the private sector and academics employed in European universities has been growing: the best performing segments of the middle classes (Richard Florida’s creative class or Richard B. Reich’s

---

John Ziman (1994: 259) points out, “scientific ability is very unevenly distributed” and “research is not an egalitarian profession. It is a rigorous pursuit, where incompetent performance, as signaled by persistently low achievement, eventually clogs up the system”.

39 The importance to academic communities in Europe of the university research mission has been recently confirmed empirically by a set of national surveys conducted in the framework of both CAP (Changing Academic Profession) and EUROAC (The Academic Profession in Europe) research projects.

symbolic analysts) have less and less in common with university professors, which today in many fields of science creates a huge problem of the generational replacement, see Florida 2002, Florida 2008, Reich 1992, and Frank 2007 on challenges to the middle classes; for detailed studies of academic salaries in Europe, see a recent comparative volume by the EC, EC 2007c). At the very center of university teaching and research, there are academics who directly work with students (and who do research and service). Increasingly differentiated student needs already lead to largely differentiated systems of institutions and a largely differentiated academic profession. The expected differentiation-related (or stratification-related) developments in the next decade may fundamentally alter the academic profession in general, increase its heterogeneity, and have a strong impact on the traditional relationships between teaching and research at European universities.<sup>40</sup> These processes across the Atlantic, in the Anglo-Saxon model, are already well advanced and widely studied in both research and policy literature.

### *The Humboldtian model in Europe and its current reformulations*

The traditional Humboldtian model of the university was combining research and teaching, and was basically faculty-centered (see Fallon 1980, Röhrs 1995, Readings 1996, Kwiek 2006a: 81-138, Kwiek 2008cd). An Anglo-Saxon model deriving from, among others, John Henry Newman, was largely teaching-oriented and student-centered (see Pelikan 1992, Rüegg 2004). The struggle between these two competing 19<sup>th</sup> century ideas on what universities should be doing continue well into the 21<sup>st</sup> century. The questions of how to combine teaching and research as university missions, in which types of institutions they should be combined, and based on which funding streams (public or private) for which priority research areas will become crucial in the next decade. Are attractive universities in 2020 going to be closer to the American (Anglo-Saxon) university model which has

---

40 See for example the results of a global research project CAP (*Changing Academic Profession*) in RIHE 2009 and RIHE 2008. Poland joined the CAP in 2010 together with the project EUROAC (*The Academic Profession in Europe: Responses to Societal Challenges*) of the European Science Foundation which. We have been directing its Polish national project.

traditionally been much more student-oriented than continental university models in Europe (traditionally more academic-centered, or “oligarchic” in the sense of “academic oligarchy” used by Burton Clark with reference to Italian universities)? Most probably, the answer is in the positive; but it also requires further clarifications. A much bigger share of higher education institutions in Europe than today (except for their most elite research segments), will be focusing more on students and their more and more clearly formulated (also by the state and Europe-level accreditation commissions) needs. A strong support for this trend comes from the Bologna Process which is almost entirely focused on teaching and the needs of students – with an accompanying almost complete neglect of the research mission of universities. Most non-elite higher education institutions in Europe (including almost all private institutions which are entirely dependent on tuition fees) are already teaching-oriented, while public research-intensive universities are still able to combine teaching and research. As a European University Association report remarks on the impact of the Bologna Process on the mission of the university,

there is an increasing awareness that the most significant legacy of the [Bologna] process will be *a change of educational paradigm across the continent*. Institutions are slowly moving away from a system of teacher-driven provision, and towards a student-centered concept of higher education. Thus the reforms are laying the foundations for a system adapted to respond to a growing variety of student needs. Institutions and their staff are still at the early stages of realizing the potential of reforms for these purposes (*Trends V*: 8, emphasis mine).<sup>41</sup>

---

41 Not surprisingly, while in such paradigmatic accounts of the higher education system as in Clark (1983) and Becher and Kogan (1983), change emanates from activities at the base of the system, a recent major study on policy implementation of higher education reforms in Europe shows that “the main structural reforms concerning institutional diversity, access, modes of government and financing, together with a host of other reforming intentions, must be attributed to governments and particularly to the emergence of non-consensus seeking and heroic ministers. To put it more negatively, if it had been left to academics, few of the major structural changes would have occurred” (Gornitzka, Kogan, and Amaral 2007: 9-10). Which reminds conclusions from analyses of postcommunist transformations towards market economy principles in the early 1990s by Leszek Balcerowicz with his conception of “extraordinary politics” (a circle of devoted officials around “technopol”, often kamikaze-type, ministers, see Williamson 1994, Balcerowicz 1995: 311-312).

Formulations about the need for systemic changes regarding teaching in universities figured also prominently in the 2007 London Communiqué (which assumes “a move towards student-centered higher education and away from teacher driven provision”, 2007: 2). Transformations of European higher education until 2020 may look like a paradigm shift to traditional universities, both those embedded in the German Humboldtian tradition and those embedded in French Napoleonic tradition, and perhaps especially to institutions in new EU member countries in Central Europe which are still mostly elitist and faculty-oriented.<sup>42</sup> University missions are already being strongly redefined, and their redefinition, for instance along the lines suggested above, may require a fundamental reconstruction of roles of educational institutions (as well as a reconstruction of tasks of academics). The main characteristics of current European university systems – the combination of teaching and research as the core institutional mission – may be strongly redefined. Consequently, implications of the Bologna process at both European, national, institutional and individual (academics’) levels seem still not fully realized. Indirectly, by pushing students and the university teaching mission to the forefront of priorities, the Bologna Process is perhaps the most serious practical challenge to traditional roles of the university coming from the Humboldtian tradition – especially in its most elite versions represented by prestigious universities (categorized generally as research universities). Teaching – yes, research – perhaps; this is the way we can summarize the current trends within the Bologna Process (research is at the basis of transformation of European universities in a parallel European process of creating the European Research Area and promoting the “modernization agenda for European universities” by the

---

42 Especially in several Central European countries, Poland included, which are expecting huge demographic declines in the next two decades (see Kwiek 2012a, Kwiek 2012b, Antonowicz and de Boer 2012). The Final report of the Carnegie Council chaired by Clark Kerr proclaimed the coming of the “Golden Age” for students as one of the major implications of the demographic depression in the 1990s for students: “we expect that students will be more nearly the center of attention on campus during the next 20 years than in the past 10. They will be recruited more actively, admitted more readily, retained more assiduously, counselled more attentively, graded more considerately, financed more adequately, taught more conscientiously, placed in jobs more insistently, and the curriculum will be more tailored to their tastes” (Carnegie Foundation 1980: 53).

European Commission, though;<sup>43</sup> thus, the distinction between the vast majority of European universities whose job is primarily to teach and train millions of European students and perhaps about 10 percent of the most prestigious research universities which focus on research, is becoming more and more clear).<sup>44</sup> D. Bruce Johnstone and Pamela Marcucci (2007: 3) discuss the issue and come to fairly pessimistic conclusions regarding the future of research in universities:

The public and governments alike tend to think of universities and colleges as places for *instruction*. The important *research* missions of those institutions that are properly labeled universities may thus drop to an even lower priority or become otherwise distorted by the rising student-faculty ratios and the need to spend more time teaching or searching for entrepreneurial revenue or both ... . Research may fall to only a few universities, or fall mainly to the universities and research institutes in the advanced countries ... or may fall mainly to business and private investment.

### *Universities reviewing their missions*

The social, political, cultural, and economic world is changing, and so are changing student populations and educational institutions (increasingly

---

43 Reforms and change as options should be compared with resistance to reforms and change, and understanding the change process “can be used to resist change as well as to encourage it” (Kezar 2001: 8). Although we are living in a “highly reformistic” society (Brunsson 2009: 1), resistance to change can also be a “healthy response”. As Kezar (2001: 8-9) argues, “change is not always good, and it is certainly not a panacea for all the issues facing higher education. ... failure to change can be a positive response. ... Higher education institutions are tradition-bound, and continuity is an important feature. One of the reasons for higher education’s success as an institution has been its ability to stay focused on its mission. ... Change should be engaged in only if the environment legitimately challenges the organization’s key mission or expertise. Furthermore, proactive change, rather than change led by the environment (as is the case with the health care industry), is usually in the best interest of higher education”.

44 For instance, until June 2012, 50 percent of all research funding from the European Research Council (ERC) has been allocated to 50 best research performing institutions. No university from any new EU member state is on the list which opens with University of Cambridge (76 grants), University of Oxford (68), Swiss Federal Institute of Technology Lausanne (53), Swiss Federal Institute of Technology Zurich (ETH Zurich, 46), and the Hebrew University of Jerusalem (45), in the first five ranks. Among research organizations, the CNRS has received 125 grants and the Max Planck Society 64 grants.

compelled to meet their changing demands). Higher education is subject to powerful influences from all sides and all – new and old alike – stakeholders: the state, the students, the faculty, employers, and industry, and on top of that, it is becoming a very costly business (as Burton Clark put it, “more income is always needed: universities are expensive and good universities are very expensive”, Clark 1998a: 26). In 2008, thirty American universities had an annual budget exceeding \$1.5 billion at their disposal – and in Europe only very few institutions can compete with this level of funding (David P. Baker calls them “super research universities”). In this context, the question of “world class universities” resides to enormous extent in – though it is obviously not limited to – the financial question. The expected development for the next decade is that stakeholders may increasingly have different needs from those they traditionally had, and their voice is already increasingly taken into account (as in the case of students who are living in the highly competitive, postnational and postmodern world and who, in general, are expecting a more vocational orientation in their education, as opposed to e.g. the orientation towards traditional *Bildung*, or the cultivation of the life of the mind, see Kwiek 2006a: 139-228, Kwiek 2008c, Neave 2000, Readings 1996, Delanty 2001). Institutions are expected to transform themselves to maintain public trust (and use public subsidies). The role of the market in higher education (or of government-regulated “quasi-markets”, see Le Grand 2000, Le Grand and Bartlett 1993, Teixeira, Jongbloed, Dill, and Amaral 2004) is growing as the market is reshaping our lives as humans, citizens, and finally as students and faculty (on the failure of Bologna in conceptualizing the role of the market in European – especially Central European – higher education, see Kwiek 2006b).

Never before has the institution of the university for so long been under the changing pressures of different stakeholders; never before has it been perceived by so many, all over the world, as a failure in meeting the needs of the students and the labor market (the literature on the supply/demand mismatch is substantial, see Brown and Hesketh 2004, Teichler 2009, Santiago *et al.* 2008b, and especially two volumes that are the effect of the CHEERS research project conducted in Europe: *Careers of University Graduates. Views and Experiences in Comparative Perspectives* and *Higher Education and Graduate Employment in Europe. Results from Graduate Surveys from Twelve Countries*, Teichler 2007c and Schomburg and

Teichler 2006).<sup>45</sup> Therefore the question in which directions higher education systems will be taking while adapting to new social and economic realities (see the Bologna Process and the Lisbon Strategy, now turned into the Europe 2020 strategy) in which the role of the market is growing and the education received by graduates is increasingly linked to their professional and economic future seems to be open. As a recent communication from the European Commission, the link between the Europe 2020 strategy and higher education through two types of returns (“individual” and “societal”) is clear; universities contribute both to human capital development and to innovation in the economy:

Although the interaction between higher education systems and the wider society and economy is complex, it is clear that higher education institutions contribute to socio-economic development in two principal ways. First, they contribute to human capital development by allowing individuals to acquire and develop a wide range of knowledge and skills, which they can subsequently draw upon as individuals (creating “individual returns” in terms of personal fulfillment and income) and for the good of society and economy more generally (so-called “societal returns”). Second, as centres of knowledge creation, higher education institutions are able to contribute to innovation in the wider economy, notably through exchanging expertise, knowledge and research findings with other economic actors. These two main processes are closely inter-linked. For example, human capital development is a pre-requisite for excellent basic and applied research and effective knowledge transfer activities. At the same time, the quality and relevance of higher education institutions’ human capital development activities – essentially their study programmes – is influenced by inputs from the world of research and from actors in the wider economy (EC 2011b: 11)

Public priorities are changing throughout the world: what counts for universities are the processes of aging of Europe under which in the next few decades the will of the electorate will become the will of people in advanced working age and in the retirement age in general. Priorities of the older generation in emergent new, increasingly commercialized pension systems and increasingly privatized health care systems may look radically different from the priorities adopted in contemporary societies based on the

---

45 From the theoretical perspective of the changing labor market-education relationships, see Ulrich Teichler’s work collected recently in his *Higher Education and the World of Work. Conceptual Frameworks, Comparative Perspectives, Empirical Findings* (Teichler 2009). To put it simply, the mismatch has become “endemic” (Schomburg and Teichler 2006: 4).

idea of intergenerational solidarity (it is more often assumed nowadays that moving public funds from away from higher education systems (and filling the gap in income through cost-sharing) to health care systems and pension schemes is probable: the financial status of the elderly is improving, while the financial status of their children's generation is declining, see discussions in Powell and Hendricks 2009, and details in relation to the U.S. in Mishel, Bernstein and Allegretto 2007). Older generations do not have to continue putting higher education institutions high on their list of (publicly funded) priorities. Bruce Johnstone (1999: 1) reminded almost a decade ago, from an American perspective, that

While there is no reason that higher education should necessarily, over time, lose in the competition for governmental resources, it would appear that expenditures for elementary and secondary education, economic infrastructure, health and welfare, and perhaps even for environmental restoration are emerging as higher priority objects for governmental spending in most countries.

The consequences of the growing competition for public resources between all claimants for the teaching/research agenda in universities are far-reaching. As Rosemary Deem alarmingly put it recently, “scarce public funding may be also a crucial factor in the unfolding saga about the future role and purposes of universities in respect of teaching and research. Teaching-only universities *per se* (as opposed to higher education institutions in general) do exist in both public- and privately-funded forms in many countries, but at the present time this is not the norm in most of Europe. However, this may not continue to be the case in the future” (Deem 2006a: 285),<sup>46</sup> which is challenging the traditional Humboldtian principle of the unity of research and teaching, see the German idea of the university in Kwiek 2006a: 81-138 and 2008c).<sup>47</sup>

---

46 Although in Central and Eastern Europe the vast majority of private higher education institutions are fully teaching institutions (with no capacities or ambitions to do research), in more financial terms, even public universities in Central and Eastern Europe are teaching institutions.

47 There are three main principles of the modern university to be found in German thinkers, the founding fathers of the University of Berlin. The first principle is the unity of research and teaching; the second is the protection of academic freedom: the freedom to teach and the freedom to learn; and the third is the central importance of the faculty of philosophy (the faculty of Arts and Sciences in more recent terminology) (see Fallon 1980: 28ff; Röhrs 1995: 24ff). The three principles are developed, to varying degrees, in Schelling, Fichte, Schleiermacher and Humboldt. Together, the

## *The teaching/research nexus and the attractiveness of academic careers*

European higher education systems will be attractive in the next decade if, amidst the changes, there is still enough space for traditional universities following the above multiple missions: teaching, research, and service to society. The supranational trend (as shown in the EC, OECD and World Bank publications) to get institutionally engaged in the substantial reformulation of their missions is strong, both globally and in European transition countries (e.g. the idea of research to be done only by “flagship” universities in Poland). The European Commission at the moment seems convinced that teaching and research are mutually dependent and reinforce each other. There are signs of hesitations, though, and one of the differences between the Bologna process goals and the Lisbon strategy goals could be that the former is interested in reforming all higher education institutions while the latter is interested in reforming universities which are research-intensive and which can contribute directly (rather than indirectly via the increased qualifications of the European labor force) to European economy’s competitiveness via innovations, patents, and technology transfer (see e.g. EC 2004a on “Science and Technology, the Key to Europe’s Future”).<sup>48</sup> From the perspective of the traditional, elite research university, the Bologna Process may lead to the concentration on teaching students at

---

three principles have guided the modern institution of the university through the 19th century to the 20th century, and possibly beyond. To what extent these principles are being questioned today, by whom and in what segments of the diversified systems of higher education is a different issue.

- 48 Almost everywhere in Western countries, the most important distinction (formal or practical) is that between (research) universities and all other institutions. Universities are research-intensive, and the received level of (national and external) funding for research and its share in total budget of a university decides on belonging to this category. Doctoral-granting rights and the number of full-time professors also count. The number of students in research-intensive universities is usually between ten and twenty thousand (examples: Harvard, Columbia, Stanford, MIT, Yale, as well as Oxford and Cambridge in Europe), although there are also examples of institutions with higher enrolments. The best American research universities (currently over 30) have budgets of more than one and a half billion dollars annually. Funding at this level is currently needed to become a world-class university (at least 0.5 billion more for the university combined with medical university). It is estimated (Jan Sadlak and David Ward) that in Europe, in the near future there can be about 50 world-class universities in total but, generally, with lower budgets.

the expense of doing research – and the EU's Lisbon Strategy leads to a redefinition of the directory of scientific disciplines engaged in research, through changing funding priorities. Both processes, conventionally called the Bologna and the Lisbon strategies, simultaneously undermine the foundations of traditional models of the functioning of universities in Europe, although from different angles and with different arguments. The question about the attractiveness of the academic enterprise to the academic profession in the future must take the consequences of both processes seriously into account.

The distinctiveness (and attractiveness) of European higher education has traditionally been in its ability to combine the two core missions (teaching and research). The Humboldtian tradition in this respect has been surprisingly strong across Europe – but generally not in other regions, especially not in Latin America or India and China and, generally, not in the developing countries which have been expanding their higher education systems rapidly in the last few decades and which have been largely teaching-oriented, with research carried out in selected elite institutions. The tendency of research being located outside of universities – especially in the business sector – which additionally influences the research/teaching separation, has been particularly strong in Europe and in Anglo-Saxon countries in the last two decades. Both public and private funding for research increasingly goes to the business research and development sector. New products and innovative technologies are most closely related to business research and development. Consequently, the possibility of teaching/research separation in universities (and not only at higher education institutions in general) – as a development threatening the traditional attractiveness of the academic profession to new generations of scholars – is also reinforced by new flows of public and private research funds. These flows increasingly favor the corporate sector. The EC's idea of the goal of “3 per cent of GDP” to be spent on research and development expressed a few years ago does not assume that increased research funds would go from public sources to public universities; instead, increasingly, private business research funds would go to private corporate research institutions. This does not have to be a problem for research (although radically alters its character, introducing a short time horizon between research and its application) but can be a problem for the nature of universities, the scale and forms of academic research and forms of future activities of the academic profession. New flows of research funding can heavily influence core missions of public universities, and directly affect the nature and purpose of the academic work.

By 2020, the role of competition in higher education will grow substantially, and in several dimensions. The world, including the graduate labor market, is becoming extremely competitive. Academic institutions will most probably focus more on the competitive advantages of their graduates as a substantial part of their missions (and will be ranked accordingly, especially nationally, apart from the research-based global rankings, see Hazelkorn 2011a, Hazelkorn 2011b). Strong European higher education will be based on competition: excellence in research is driven primarily by competition – between individuals, institutions, and countries. As a recent EC report on “frontier research” pointed out,

the desire to be first to make a major new discovery or a significant advance in theoretical understanding drives researchers to devote themselves single-mindedly and for long hours. Researchers compete with one another all the time – for funds, for new equipment, for the best technicians, to get their publications accepted in the leading journals, and for prizes ... and other recognition-based measures of esteem (EC 2005b: 35).

## **1.4. Transforming institutions, transforming academics**

The third question of the present panorama is to what extent meeting conflicting demands of new and evolving stakeholders is a major challenge to the academic profession. Massified educational systems (and an increasingly massified academic profession) lead towards various new forms of system differentiation and stratification. Universities in most European countries seem still quite faculty-centered and their responsiveness to student and labor market needs is reported to be low (this line of criticism has been presented by the European Commission, including in the recent communication and its accompanying documents, for instance: “the capacity of higher education institutions to integrate research results and innovative practice into the educational offer, and to exploit the potential for marketable products and services, remains weak”, or as a memo accompanying its release explained explicitly: “higher education must be more closely aligned to the needs of the labour market, and more open to cooperation with business, including the design of curricula, improving governance and injecting additional funding”, EC 2011a, EC 2011c). Therefore, as the OECD notes, most current reforms “aim to improve the responsiveness of universities and government research institutions to social and economic

needs”, OECD 2006: 11). But students are increasingly being reconceptualized as “clients” or “customers” of higher education institutions (which is consistent with New Public Management ideology, and which is especially evident in the private sector booming in the countries of central and Eastern Europe, see Slantcheva and Levy, 2007, Kwiek 2011b, Kwiek, forthcoming). Public institutions in Europe are still in most cases either “Humboldtian” or “pre-Humboldtian”; and only in a few cases called “post-Humboldtian” such as e.g. the UK, Sweden, Norway or the Netherlands, universities are less faculty-centered and there is no universal link between teaching and research (see this taxonomy in Schimank and Winnes 2000, Deem 2006a: 291). The broadening of the debate about social and economic roles of universities (and especially about graduates’ employability) with employers, students, parents and other stakeholders can be expected in the next decade.<sup>49</sup> A report from the European University Association (EUA) suggests that employability has grown in importance as a driver of change in European universities – in 2007, 67 percent of institutions considered the concern for employability as “very important” (as opposed to 56 percent in 2003) (*Trends V*: 35). And employability (despite its inherent vagueness as a concept) is expected to be a key notion in rethinking the attractiveness of European institutions in the future (as it is already the case, for instance, in the European Employment Strategy and its documents: “New Skills for New Jobs. Anticipating and matching labour market and skills needs”, EC 2008c, or “New Skills for New Jobs: Action Now”, EC 2010). Employability is bound to be a key notion in rethinking the attractiveness of European institutions to both European and international students in the future, especially if viewing higher education as a private good becomes prevalent.

---

49 Which brings universities closer to employers and their needs. As the European Commission criticizes European higher education institutions (EC 2011a: 6), “higher education enhances individual potential and should equip graduates with the knowledge and core transferable competences they need to succeed in high skill occupations. Yet curricula are often slow to respond to changing needs in the wider economy, and fail to anticipate or help shape the careers of tomorrow; graduates struggle to find quality employment in line with their studies. Involving employers and labour market institutions in the design and delivery of programmes, supporting staff exchanges and including practical experience in courses can help attune curricula to current and emerging labour market needs and foster employability and entrepreneurship. Better monitoring by education institutions of the career paths of their former students can further inform programme design and increase relevance”. Which at the national policy levels leads to far-reaching transformations.

### *Overburdened, overworked, underpaid academics?*

European universities will be attractive if they are able to meet the above (sometimes conflicting) differentiated needs (see Jongbloed, Enders, and Salerno 2008 about “interconnections and interdependencies” of higher education communities). These needs sometimes seem to run counter the traditional twentieth-century social expectations from the academic profession in continental Europe, though. New expectations from universities impose on universities “unlooked for, and perhaps unrealizable, roles and responsibilities”, as Shattock (2009b: 1) notes:

Universities – endowed as they are with a long history and as important as they have been in the production of scholarship and new ideas, and for the training of elites – have not until recently been seen as such positive vehicles for economic progress. Like many other institutions they are facing pressures for change and, unlike most other institutions that have historically depended on the state for resources, their history suggests that they operate most effectively if they have a high degree of academic and managerial autonomy.

Being the engine of economic growth is a fairly new expectation from the state, the major external university stakeholder, and the major, unbeatable across European systems, sponsor of university activities. In order to respond to all stakeholders and their expectations, one cannot forget about those who are the core of educational institutions, namely academic faculty. Close relationships with the industry, the responsiveness to the labor market needs and meeting students’ vocational needs have not been traditionally associated with the core values of the academic profession in continental Europe, perhaps despite verbal declarations of the academic community and despite universities’ mission statements (see large international comparative studies by Boyer *et al.* 1994, Altbach 2002, Enders 2004, remembering that “methodological and conceptual problems are compounded once research crosses national borders”, as Jochen Clasen (1999: 1) reminds in his *Comparative Social Policy. Concepts, Theories and Methods*; see also Castles 1989, as well as Bray, Adamson and Mason 2007). It is unclear to what extent these core values will need to be renegotiated, or are already under renegotiation, in massified higher education systems. The academic profession may find transformations of higher education systems – and of their own institutions – surprising at best, appalling at worst.<sup>50</sup>

---

50 Martin and Etzkowitz (2000: 17) discuss the changing perceptions of the role of the university and link it to the changing “social contract” between science and society

Therefore universities in the next decade will be attractive to the academic profession only if the changes will be fair and balanced. Overburdened, overworked, (relatively) underpaid and frustrated academics will not be able to make European universities in general strong and attractive. And they will not be useful in the realization of the “more growth/more jobs” Lisbon strategy of making Europe a “knowledge-based economy” (and society). Unfortunately, current trends, both globally and Europe-wide, show the diminishing attractiveness of the academic career, academic workplace and academic remuneration and, consequently, may indicate growing future problems in the retention of best talents in academia in 2010-2020. Attractive higher education systems should be able to offer academics competitive career opportunities. One of the possible options in times of financial austerity (reported for OECD economies in relation to universities already in the 1990s by Gareth Williams, OECD, 1990) might be further differentiation of the sector by 2020, with subsequent targeted research funding and further concentration of research (with the eligibility of selected top institutions only) and possibly flexible salary brackets, depending on national classifications or rankings of higher education institutions, with increased opportunities of academic mobility between them. This is basically the overall philosophy of the Lisbon strategy with reference to universities: for this goal, it would be especially useful if there were various rankings and different – for different quality levels – European accreditation agencies. The widening of the gap in economic status of academics and other professionals needs to be stopped, at least in top national institutions, to avoid further “graying” of the academic profession in 2010-2020 and to make universities a career option for the best talents. It would consequently stop what Alberto Amaral recently called “the gradual

---

which reminds of the 19th century arrangements: “universities are now expected to contribute much more to the development of the critical technologies that nations feel they need to be at the forefront of – the technologies that are often identified in national foresight or other priority setting exercises. What we are witnessing here is a significant shift in the social contract; there are now much more explicit and direct expectations that, in return for public funding, universities and researchers should endeavor to deliver greater and more direct benefits to the society than they did in the period from 1945 through to the late 1980s. ... the historical analysis ... paper would suggest that what is involved here is actually more a shift back to the social contract embodied in the nineteenth century in the institutes of technology and technical universities, and in the land-grant universities in the United States”.

proletarianisation of the academic professions – an erosion of their relative class and status advantages” (Amaral 2007: 8).<sup>51</sup>

### *A fair balance in expected transformations*

Differentiated student populations in Europe require also increasingly differentiated institutions, and (possibly, consequently) different types of academics. This may mean the decline of the high social prestige of higher education graduates (counted today in millions) and of the high social prestige of most academics (counted today in hundreds of thousands in major European economies). The universalization of higher education is already having profound impact on the social stratification of academics, especially in those countries where the expansion in enrolments was especially significant.<sup>52</sup>

Consequently, attractive European higher education systems will have to find a fair balance in expected transformations so that the academic profession is not deprived of its traditional voice in university management and governance; professoriate still unmistakably belongs to the middle classes; and universities are still substantially different in their operations from the business sector, being somehow, although not necessarily traditionally, “unique” or “specific” organizations (see Musselin 2007a

---

51 Academics face the same economic challenges as the middle classes throughout the Western economies. See Robert H. Frank's *Falling Behind. How Rising Inequality Harms the Middle Class*, Berkeley: University of California Press, 2007; increasingly the middle class has to “earn more to keep in the same place”, or, as Brown and Lauder put it (2001: 2): “There are no doubt a small proportion of wealthy Americans and Europeans who can insulate themselves from the risks confronting the rest of society. But this is clearly not the case for the vast majority of middle-class wage earners. They are having to earn more to stand still”.

52 As the first sentence of a synopsis report in a book on the attractiveness of the academic workplace in Europe puts it, “in many countries the career patterns and employment conditions of academic staff as well as the attractiveness of the academic workplace for the coming generation are of major concern. The concern about the attractiveness points both to the career perspectives of those working in higher education compared to other societal sectors where highly qualified work is demanded and to the recruitment of younger graduates for an academic career” (Enders and de Weert 2004: 11). Which echoes Philip Altbach's general conclusion from a global project on the academic profession that “the conditions of academic work have deteriorated everywhere” (Altbach 2002: 3).

Perkin 1969, Maassen and Olsen 2007; rather, all public sector organizations can be viewed, following Brunsson and Sahlin-Andersson 2000 as becoming more similar to the organizations as traditionally described in organizational theory). It must be taken for granted, no matter what transformations are in place, that academics are in the very center of the academic enterprise. As Jack H. Schuster gloomily summarized his recent book chapter on “The Professoriate’s Perilous Path”:

The immediate outlook, given the economic woes pressing upon higher education, is replete with formidable challenges. In the longer term, sweeping changes from within and without will inevitably lead to substantial academic restructuring. Higher education is nothing if not resilient. But, in all, the effectiveness of higher education and the contributions that will accrue to the nation are inextricably linked to the future attractiveness of academic careers (Schuster 2011: 15).

### *Social trust in public institutions and universities as “incomplete” organizations*

A new general context for universities is that the social trust in public institutions can no longer be (automatically) guaranteed, which is a substantial change of social mood prevailing in postwar Europe, with relatively lavish public funding guaranteed and high social prestige of public universities and of the academic profession taken for granted. The questions to consider would be how to maintain in Europe common academic values – such as critical inquiry, disinterested science, intellectual freedom, a commitment to objective knowledge etc. – which are universal values (Scott 2003: 296). Traditional academic values, closely associated with the public service responsibilities of universities and science, Scott argues, “have to come to terms with a new moral context in which the superiority of the public over the private can no longer be taken for granted” (Scott 2003: 299).<sup>53</sup> This new “moral context” has been widely supported by emergent EU social policies, especially social policies advocated in CEE countries, experimenting widely with various forms of privatization of social services (Ferge 2001a, 2001b, Kwiek 2007c). European institutions need to continue its reliance on traditional academic values (especially academic freedom and

---

53 As Kezar (2001: 9) rightly argues from the perspective of organizational studies, “what needs to be preserved may be just as important to understand as what needs to be changed” and “balance between calls for change and tradition may be desirable”.

institutional autonomy) to be strong and attractive. As Bleiklie, Høstaker and Vabø conclude,

[s]ome sort of contribution to society has always been demanded from the universities in return for a certain degree of autonomy and public funding. What is arguably at stake today is that a less clearly delimited definition of the nature of the universities' contribution to society pose a potential threat to their autonomy. ... One reason for the resilience of the university institution is that universities have at one and the same time been able to sustain sweeping change and protect their core functions. However, past resilience is no guarantee against future decay (Bleiklie *et al.* 2000: 307).

The status quo – or the current social and economic *modi operandi* of universities in Western societies – is very fragile: the multi-faceted impacts, trends, and challenges are far-reaching, long-term and structural in nature. The durability and stability of institutions, even in periods of major reforms is, however, that “institutions are not simple reflections of current exogenous forces or micro-level behavior and motives. They embed historical experience into rules, routines, and forms that persist beyond the historical moment and condition” (March and Olsen 1989: 167-168).

Organization studies show that no matter how strong external discourses surrounding the institution are (here: global, transnational and EU-level discourses), the potential for changes and a range of possible reforms is always relatively limited, and the period for institutional adaptation – relatively long. It is therefore difficult to assume that the intentional direction of changes in the academic sector as a whole will coincide with their actual direction of changes. Often in the history of the university (see Rüegg 2004), significant scope of changes remains determined on the one hand, by redefined tradition, and, on the other hand, by sheer contingency. “Great expectations”, as shown a quarter of a century ago by Cerych and Sabatier (1986), often lead to “mixed performance”. At the same time, policymakers tend to view institutions, higher education institutions included, as “incomplete”. Reforms are renewed attempts to make universities “complete” organizations.

In all ongoing reform initiatives throughout Europe, there is a hidden dynamics of changes in relationships between the state, or the major sponsor of teaching and research, and academics, or the major beneficiary of state sponsorship of the academic enterprise. The academic profession has a fiduciary role to play: constitutive rules and practices are not easily changeable, they take time to root and take time to change. The

modernization agenda of European universities (including a recent EU “agenda for the modernization of Europe’s higher education systems”, see EC 2011a and EC 2011b) means the change in rules constituting its identity.<sup>54</sup> Institutions are defended by insiders and validated by outsiders and because their histories are encoded into “rules and routines”, their internal structures cannot be changed or replaced arbitrarily (March and Olsen 1989). Reforming higher education is closely linked to reforming states in which it operates. As remarked by Clark Kerr who spent several decades in reforming higher education in California,

If the question is, does the reform meet the “great expectations” of its original proponents, then “success” is never likely. – original expectations are almost always excessive. I should like to propose two more modern tests: did the reform serve a good purpose at the time? ... is the continuing situation better than it otherwise would have been? However, I have come to doubt the use of the word “reform”. Reform means “new and improved”. ... Thus I have come to prefer the word change, leaving to later the question of whether or not the change turned out to be an improvement as its proponents, of course, expect (Kerr, in his foreword to Cerych and Sabatier 1980: xvi)

### *The academic profession at the core of the academic enterprise*

The academic profession is at the core of the academic enterprise, as relentlessly reminded over the decades by Burton Clark and Philip G. Altbach (it is, as Harold Perkin (1969: 227) put it, “the key profession in modern society”, “the profession which educates the other professions”).<sup>55</sup>

---

54 The modernization of European universities can be viewed in parallel to what Silja Häuserman (2010: 1) termed the “modernization in hard times” with reference to the transformations of the Continental welfare state in her recent path-breaking book: “*modernization* refers to the adaptation of existing institutional arrangements to the economic and social structures of post-industrialism. ... The *hard times* result from the gap between declining resources and the growing (financial) needs that these modernization processes entail”.

55 The academic profession has traditionally been viewed, as in Perkin, as “the sole profession which has the time, the means and the skill not merely to make new discoveries, as distinct from applications of old ones, in learning, science and technology, but to do society’s fundamental thinking for it, not least about the nature and purposes of society itself”. Traditionally, it has been clear that “both the State and the profession know that at the bottom the service is indispensable and must be paid for” (Perkin 1969: 227-228, 231). See also what Altbach called a “benchmark” in

The institutional capital of universities is in academics rather than in buildings, laboratories, libraries and student halls. Academics are not “replaceable” in the way industrial workers are replaceable in the industry sector under the conditions of globalization, with industry or service jobs going often to cheaper labor force destinations.<sup>56</sup> The very idea of the university rests with the academic profession; it is inherently present in its rules, norms and values, habits, procedures, and routines. Universities are linking the world of learning and the world of work (Teichler 2008), as well as research and innovation (Dill and van Vught 2010a). But universities may become much less significant in the knowledge-driven economy if the academic profession is not fully committed to academic missions (and fully optimistic about its own career opportunities in the future). This is what the logics of the political economy of higher education reforms suggests in our “highly reformistic” modern society (Brunsson 2009: 1). We will discuss the theme of academic optimism under increasingly diversified pressures and ever-more conflicting demands in more empirical detail further in this chapter (Bloom 2005).

The changes in the academic profession in Europe occur in a specific context defined by common realities faced by European higher education systems: they include processes related to financial constraints, differentiation, accountability, societal relevance, market and competitive forces. As Enders and Musselin pointed out,

we live in times of uncertainty about the future development of higher education and its place in society and it is therefore not surprising to note that the future of the academic profession seems uncertain, too (Enders and Musselin 2008: 145).

---

social science-based studies of the profession for similar views: *The Academic Man. A Study in the Sociology of a Profession* by Logan Wilson (1942/1995). Traditional rationales seem to be increasingly questioned by policy makers, though.

- 56 The delinking of universities and public good may lead to increasing vulnerability of universities as publicly-subsidized institutions. As Simon Marginson pointed out, higher education needs a “foundational public purpose”, devoid of the public good it may become replaceable: “if higher education is emptied out of common public purpose its long-term survival is uncertain” (Marginson 2011: 3; see a recent defense of the public mission of the research university in Rhoten and Calhoun 2011, especially Calhoun 2011: 1-33, Calhoun 2006). Also Ulrich Teichler, noting that the European research university is more endangered than ever before, states that “research can emigrate just as well advanced academic training. Even the credentialing power of the university could vanish” (Teichler 2006a: 169).

## *The academic profession in Europe – an empirical note on job satisfaction*

Assuming, following Clark and Altbach, that academics are the core of the academic enterprise, we shall refer to an empirical account of their current self-reported social and economic position (remembering Schuster's intuition that the future of universities is inextricably linked to the future attractiveness of academic careers).

Thus, a note on the changing academic profession in Europe is needed, based on recent large-scale empirical studies. The empirical data is drawn from the EUROAC project dataset (an "Academic Profession in Europe" which follows a global format of a CAP "Changing Academic Profession" project, based on country data from 12 European countries, with over 20.000 returned surveys and 600 semi-structured in-depth interviews (the present author has been coordinating the Polish EUROAC project which included more than 3.500 returned surveys and 60 semi-structured interviews)<sup>57</sup>. We shall focus now briefly on the "academic optimism" theme, viewed through the proxy of "job satisfaction" and related parameters empirically studied throughout Europe, with the general idea that optimism among academics regarding their current and future careers will be one of the most important dimensions of successful ongoing and future reforms in higher education.<sup>58</sup>

---

57 The research team included also Dr. Dominik Antonowicz. Research conducted in Poland in 2009-2012 was coordinated by Ulrich Teichler of Kassel University and funded by the European Science Foundation.

58 An environment for the academic profession worldwide is reported to be generally "discouraging". As a recent report for the UNESCO World Conference on Higher Education in 2009 by Philip Altbach et. al put it, "no university can achieve success without well-qualified, committed academic staff. Neither an impressive campus nor an innovative curriculum will produce good results without great professors. Higher education worldwide focuses on the 'hardware' – buildings, laboratories, and the like – at the expense of 'software' – the people who make any academic institutions successful" (Altbach, Reisberg and Rumbley 2010: 85). The academic profession is crucial in a global race for "world-class" universities: what matters, as summarized by Jamil Salmi of the World Bank, is three factors: the concentration of talent, abundant resources, and favorable governance. "The first and perhaps foremost determinant of excellence is the presence of a critical mass of top students and outstanding faculty. World-class universities are able to select the best students and attract the most qualified professors and researchers" (Salmi 2011: 228; see also Altbach and Balán 2007).

Overall, academic profession in Europe in the countries studied seems to derive relatively high satisfaction from their work in universities. On the scale from 1 = “very high” to 5 = “very low”, senior academics in Switzerland, the Netherlands, and Italy rate their job satisfaction in the 1.9-2.1 range, in Austria, Finland, Poland and Norway they rate it as 2.2 and in Germany rated 2.3. As Table 1 below shows, the ratings are 2.4 each in Portugal and Ireland, while the mean of 2.6 in the UK expressed the highest level of dissatisfaction in Europe. The ratings by junior staff are slightly less positive (2.4 as compared to 2.2) across countries. Junior staff differs from senior staff most visibly in a lower degree of satisfaction in Portugal (2.8 vs. 2.4), in Switzerland (2.2 vs. 1.9) and in Germany (2.6 vs. 2.3). Again, the most dissatisfied junior academics work in Portugal and in the UK (the satisfaction rate of 2.8 each).

**Table 1.** *Job Satisfaction: How would you rate your overall satisfaction with your current job? (arithmetic mean), all higher education institutions.*

	2010					2007/08					
	AT	CH	IE	PL	NL	DE	FI	IT	NO	PT	UK
Arithmetic mean											
Senior	2.2	1.9	2.4	2.2	2.1	2.3	2.2	2.1	2.2	2.4	2.6
Junior	2.4	2.2	2.5	2.4	2.2	2.6	2.3	2.4	2.3	2.8	2.8

Question B6: How would you rate your overall satisfaction with your current job? (Scale of answer 1 = Very High to 5 = Very Low, universities and other higher education institutions combined).<sup>59</sup>

The respondents have also been asked to react to the following statement: “This is a poor time for any young person to begin an academic career in my field”. As Table 2 below shows, this view is shared most frequently both by senior and junior academics in universities in Austria and Italy (1.8-2.0).

<sup>59</sup> The following three tables and their brief analysis are taken from a forthcoming paper by Marek Kwiek and Dominik Antonowicz, “Changing academic work and working conditions in Europe from a comparative quantitative perspective”, in: Ulrich Teichler and Ester Ava Höhle (eds.), *The Work Situation, the Views and the Activities of the Academic Profession: Findings of a Questionnaire Survey in Twelve European Countries*. Dordrecht: Springer (2012).

The most optimistic views of the academic career opportunities for young people come from Norway, Switzerland and the Netherlands (Norwegian junior and senior academics showing the highest optimism in Europe, rated as 3.7 and 3.4, respectively). It is interesting to note that the career opportunities are not viewed most pessimistically in those countries where academics express a low degree of job satisfaction. Academics in the United Kingdom and Portugal – i.e. the countries with a low average job satisfaction – do not view the future of young academics especially bleak.

**Table 2.** *Junior and senior academics' assessment of young persons' academic career prospects (arithmetic mean, universities)*

	2010					2007/08					
	AT	CH	IE	PL	NL	DE	FI	IT	NO	PT	UK
Senior academics	1.8	3.2	2.6	2.9	3.1	2.9	2.5	2.0	3.4	2.9	2.6
Junior academics	1.8	3.2	2.7	2.8	2.9	2.9	2.7	1.8	3.7	2.9	2.6

Question B5: Please indicate your views on the following: “This is a poor time for any young person to begin an academic career in my field”. Responses 1 and 2 on a scale from 1 = Strongly agree to 5 = Strongly disagree

Job satisfaction has been also addressed in an additional statement posed in the questionnaire: “If I had it to do over again, I would not become an academic”. Actually, on average across countries, 15 percent of the senior academics and 17 percent of the junior academics state that they would not do again. As Table 3 below shows, the most negative views are expressed in this respect by academics in universities in the United Kingdom (22 percent among seniors and 30 percent among juniors). It is worth noting the responses by academics in Finland: While senior academics respond very positively to this statement with only 9 percent negative responses, juniors are among those reacting quite negatively (20 percent).

**Table 3.** *Junior and senior academics stating that they would not become academics again (percent, universities).*

	2010					2007/08					
	AT	CH	IE	PL	NL	DE	FI	IT	NO	PT	UK
Senior academics	16	13	14	17	18	17	9	9	15	15	22
Junior academics	17	14	13	18	15	19	20	15	17	15	30

Question B5: Please indicate your views on the following: “If I had it to do over again, I would not become an academic”. Responses 1 and 2 on a scale from 1 = Strongly agree to 5 = Strongly disagree.

Overall, the European picture of the academic profession differs considerably from the American picture where the share of contingent faculty has been substantially increasing, first (as reported by Finkelstein 2010: 214) as part-time appointments (in the 1970s and the 1980s) and then (in the 1990s and the 2000s) as full-time non-tenure track appointments. The phenomenon of increasing numbers of contingent staff is much less prominent in European systems where full-time employment dominates and therefore higher job stability is reported. Viewed from a global perspective, already in the 1990s, European academic employment patterns were substantially different from American ones: as Philip Altbach reported about global developments a decade ago, “a growing portion of the profession is part time, and many full-time academics are employed in positions that do not lead to long-term appointments. The traditional full-time permanent academic professor, ‘the gold standard’ of academe, is increasingly rare” (Altbach 2000: ix). Europe, by comparative standards, still provides globally unique academic workplaces (as it provides a unique, although under renegotiations, European welfare state model).<sup>60</sup>

60 And, as a recent European-level policy document stresses, Europe needs one more million researchers in the private sector – who certainly have to be trained first in public universities, possibly up to the doctoral level: “Europe also needs more researchers, to prepare the ground for the industries of tomorrow. To make our economies more research-intensive, reaching the 3% of GDP research investment target, the Union will need an estimated one million new research jobs, mainly in the private sector. In addition to improving the conditions for industry to invest in research and innovation, this calls for more doctoral candidates and equipping the existing workforce with research skills, and for better information on opportunities so that career paths outside academia become a genuine career prospect for early stage researchers. Tackling stereotyping and dismantling the barriers still faced by women in

### *Academic incomes and competitive career opportunities*

There are two crucial dimensions in the context of the attractiveness of academic careers in European systems. Firstly, it is linked to the academic income. Secondly, it is linked to the combination of, or balance between, teaching and research (as the EU communication rightly stresses, “the reform and modernization of Europe’s higher education depends on the competence and motivation of teachers and researchers”, EC 2011a: 5, the motivation clearly referring to both dimensions). The academic income is an important factor determining the overall shape of the academic profession: it is connected to the ability of academic institutions to attract and to retain able individuals (Schuster and Finkelstein 2006: 234). Competitive salaries can also be expected to draw brightest graduates and doctoral students to the academic profession, especially that universities, following the New Public Management rationales, are increasingly treated like other organizations from both public and private sectors. The prestige of the academic profession in Europe is still relatively high but, globally, it is diminishing (Altbach *et al.* 2010). Young academics are being compared to young professionals, and university professors are being compared to advanced professionals. High job security and a relatively friendly, non-competitive work place is increasingly less common globally, but it is also so throughout Europe, as reported by such EUROAC/CAP indicators as “personal stress”, “individual affiliations”, “academic freedom” and “pressures to publish” or “pressures to obtain competitive, outside funding”.

Academic salaries are crucial parameters of working conditions; they are crucial for maintaining optimism among academics and among those recruited to the academic profession in the future. And they are crucial for those nations which realistically consider having “world-class” institutions (Rumbley *et al.* 2008; see Schuster and Finkelstein 2006: 234-286). University professors in Europe and in the North America have traditionally been members of the middle classes and their financial status in the postwar period was relatively stable. In most European countries, though, in the last two decades, academic incomes seem not to have caught up with incomes of

---

reaching the highest levels in post-graduate education and research – especially in certain disciplines and in leadership positions – can liberate untapped talent” (EC 2011a: 5).

other professionals.<sup>61</sup> References to the “proletarianisation” of the academic profession have been heard ever more strongly in higher education research in the last decade (see, for instance, Amaral 2007, Fulton and Holland 2001, Fulton 2000, Enders and de Weert 2009a) and the financial instability of the professoriate may grow even higher under the conditions of the global financial crisis.

The growing complexity of the academic enterprise discussed throughout this chapter may change the professional optimism among academics and the resulting academic commitment to university missions, still prevailing in most European systems. And optimism and commitment is needed in the midst of ongoing and envisaged reforms. So far, the general rules regarding the academic status and remuneration were clear: “along with full-time commitment, salaries must be sufficient to support a middle-class lifestyle. ... professors must be solid members of the middle class in their country”, as Altbach (2007: 105) put it. In all European countries studied, the above condition still seems to be met for senior academics. But in the ever more complicated settings, overburdened, overworked, and frustrated academics would not be able to make European universities attractive. With a new, more pessimistic academic mindset, the complexity of the academic enterprise would be even more complex than assumed here.

---

61 Rising inequality in general “harms the middle class” (Frank 2007), university professors included, along the lines of the “positional goods” argument: frames of reference get changed. As he argues (2007: 118), “the increased spending by top earners has changed the frame of reference that shapes the spending decisions of those just below them. So the near-rich are spending more, too, and their spending in turn has altered the relevant frame of reference for others just below them, and so on, all the way down the income ladder. Has rising inequality harmed the middle class? I believe that the evidence is clear that it has. To send its children to a school of average quality, the median household must spend considerably more than in the decades past, even though its real purchasing power has scarcely grown”. Increased spending at the top “has raised the cost of achieving goals most middle-class families regard as basic” (2007: 43; see Frank and Cook on “the winner-take-all-society” in which small differences in performance, including in higher education – credentials from most prestigious universities vs. all other institutions) lead to huge differences in awards, and Frank 1999 on “luxury fever” and the “positional race” in the middle classes). See also Hacker (2012) on “the middle class at risk” and Porter (2012) on middle-class debts in the post-2008 period.

### *Research, academic prestige, and academic promotions*

Traditionally, the role of research in academia was clearly defined: as Burton Clark formulated it, “it is research, as a task and as a basis for status, that makes the difference. ... The minority of academics who are actively engaged in research lead the profession in all important respects. Their work mystifies the profession, generates its modern myths, and throws up its heroes” (Clark 1987: 102).<sup>62</sup> And the attractiveness of European higher education, and especially of European research universities, has traditionally been in its ability to combine the two core missions (teaching and research). The academic prestige and institutional promotions in research universities are still related exclusively to research achievements. There is no difference between a few decades ago and today: as Clark put it in his study of the academic profession:

the prestige hierarchy dictates that the research imperative propels the system. ... Individual professors and their institutions ascend in the hierarchy to any substantial degree by investing in research and offering some new results. If the lower reaches of the hierarchy exhibit an unparalleled massive commitment to open-access teaching, the commanding heights insist on an intense commitment to research (Clark 1987: 101).

Research is done “in time freed from teaching”, professors are “saving hours for research” and time spent on teaching is “time diverted”: “it may be mandated, but it steals away from something more basic and is seen as more of a burden; more time for research is not. Time spent on administration, we may note, is widely viewed as wasted, often not even regarded as a legitimate demand” (Clark 1987: 72-73).<sup>63</sup> These perceptions seem to be

---

62 And research means, above all, in all academic cultures, publications. As Bruneel, D’Este and Salter (2010: 859) argue, “The priority of establishing reputation through publication is critical to academic success and/or career sustainability. Academics often have to engage in ‘status competitions’ with their peers, based on publication records, institutional affiliations and prizes. Many of these competitions take the form of winner-takes-all, in which publishing first or winning the largest research grants precludes others from these same achievements or resources. Given this environment, much of the science system is driven by internal dynamics that are separate from market transactions. Peer esteem cannot be bought and must be created by winning favour and reputation among colleagues”.

63 Time is critical: there appears here an issue of possible “cross-subsidization of research by teaching” not in terms of financial resources but of faculty time. Faculty members, particularly in research universities, value research over teaching because,

valid in the European university sector, and especially in European research-intensive universities. Therefore more differentiation and stronger segmentation of the academic profession is needed, as is needed more intra-institutional and inter-institutional differentiation and stronger segmentation in national higher education systems (e.g. flagship universities or flagship faculties, with additional public funding).<sup>64</sup> These perceptions seem to be still cherished by those academics who view their primary interest in research: time spent on research competes directly with time spent on teaching, considering that time spent on administration cannot be easily reduced, and there are powerful tensions between both university missions, with resulting personal stress revealed through the EUROAC survey (on the trade-offs between teaching and research times as central to European universities, see Enders and Teichler 1997, and Bonaccorsi *et al.* 2007: 166.

### *Diversified academic activities and the concentration of research funding*

The complexity of the academic enterprise increases also because academic activities become increasingly diversified: the ability to raise money and to manage research projects based on external funding, as Musselin points out with reference to Germany and the US, “is no longer something academics can do: it is something they must do” (Musselin 2007b: 177). Not surprisingly: “the traditional job of the professor is expanding to include entirely new kinds of responsibilities” (Altbach 2007: 153). This seems to be increasingly the case throughout most competitive European higher education systems. Consequently, “blurring boundaries between traditional

---

as Dill argues, among other things, “in competitive research and labor markets, which are becoming more common around the world, time spent on research can lead to increased grant revenue and future earnings for the individual faculty member” (Dill 2005: 181). In Europe, in the EUROAC/CAP survey, academics were asked to show their preferences in the two areas of their academic work: research and teaching activity. The majority of academics in most countries in the university sector declared that they prefer “both teaching and research” but with a strong emphasis on research.

64 The concerns in the 2000s have not been different from those of the past: as Gareth Williams referred to the 1980s, the concerns were with (1) the amount of public expenditure, (2) changing priorities within higher education, (3) sources of funds, and (4) mechanisms of resource allocation (Williams 1992: 1). Also Polish reforms of 2008-2011 can be summarized along these four financial lines.

roles and quasi-entrepreneurial roles” are observed (Enders and Musselin 2008: 145).

The concentration of research funding in selected research areas and in selected institutions or their parts, supported strongly by the ideas of world-class universities and different national research schemes directed to existing or emergent flagship universities, leading to further differentiation, stratification, and segmentation of higher education – may put the academic profession in the eye of the storm. While further systematic concentration of talent and resources in most competitive academic places is unavoidable, it also means the deprivation of other, less competitive places, of academic talents and resources (see Geuna 2001 on unintended consequences of the competitive rationale in research funding).<sup>65</sup>

### *Change and continuity, adaptation and resistance*

To sum up this final section: almost all emergent complexities of the academic enterprise expected for the coming decade, directly or indirectly, refer to the academic profession. Both academics and academic institutions are highly adaptable to external circumstances and change has always been the defining feature of national higher education systems. Academics are clever creatures and operate within clever academic institutional cultures, with the necessary balance of change and stability always at play. But the sweeping changes potentially expected now are far-reaching indeed, and go to the very heart of academia. The university as an institution will survive by adaptation:

The university will, over coming decades, inhabit a fast-moving and complex environment. Political and economic circumstances will be constantly changing. ... In this environment, the rate of evolutionary change on the part of universities will almost certainly be more rapid than in earlier centuries. Existing university species will continue to adapt. New hybrids (such as the “clicks and bricks” university) and new species of universities (for example, the networked

---

65 Jack H. Schuster referred to the increasingly stratified academic status as one of the features of an emergent new paradigm in higher education (which he terms the “stratified university”). It represents “a kind of reversion to a more highly layered, even more castelike university of long ago”, and is characterized by off-track full-time academic appointments, a serious threat to tenure, and more sharply differentiated compensation packages for faculty (within institutions, by institutional types, and across institutions by disciplines, Schuster 2011: 8).

university) will emerge. At the institutional level, there will be mergers and acquisitions, and perhaps even the occasional “death”. But the university will survive (Martin and Etzkowitz 2000: 23).

Traditionally, universities demonstrated what Ulrich Teichler called a “successful mix of effective adaptation and resistance to the adaptations it was called to make” but today the research university in Europe is more endangered than ever before (Teichler 2006a: 169).<sup>66</sup> It might even become a “historical parenthesis”, as a subtitle of a book on *The European Research University* runs (Neave, Blücker and Nybom 2006). From the perspective of the academic profession, the interplay of change and stability, or change and continuity, and its perceptions by the academic community, is one of the most important parameters of ongoing higher education reforms (see especially Clark 1983a, Becher and Kogan 1983, Gornitzka, Kogan, and Amaral 2007).

## 1.5. Conclusions

The scope of changes expected for all major aspects of higher education operations (management, governance, funding, missions, and faculty) is much bigger than commonly thought in the academic community. The changes envisaged by policymakers, at both national and especially supranational levels, are structural, fundamental and go to the very heart of the academic enterprise.

The university business is becoming more complex than ever in history due to a variety of interrelated factors. The current complexity of the academic enterprise is related to the biggest public investments in this sector in history; the highest numbers of those involved, students and academics alike, in history; and its high and increasing relevance to the economic growth and job creation in knowledge-driven economies.<sup>67</sup> As Wolfe (2005:

---

66 At the same time, a theory of change (or nonchange) is needed to assess the success of the institution of the modern university. “How can it be that the university, and indeed the higher education system at large, is sluggish, even heavily resistant to change, but somehow also produces virtually revolutionary change? ... There is so much observable inertia that we need a theory of nonchange. But there is also so much change in higher education itself, and change generated by it for the rest of society, that we need a systematic approach to change” (Clark 1983a: 182).

67 The link between economic growth and educational expansion might not be as straightforward as the knowledge economy discourse tends to present it. As (Williams

169) hits the point, describing policymakers' (at both national and EU-levels) newly emergent attitude to European universities:

Despite the growing consensus that the individual economies are becoming more “knowledge-based”, there remains considerable controversy over the role that universities should be expected to play. Consistent with the view of universities as “knowledge factories” for the new economy, many policy-makers view universities as largely untapped reservoirs of potentially commercializable knowledge waiting to be taken up by firms an applied. Policy-makers hope that once this knowledge is harnessed, it will fuel innovation within the firm, thereby increasing the firm’s productivity, stimulate the emergence of regional industrial clusters, and, indirectly, contribute to national economic growth. Yet the task of transferring knowledge from universities to industries has proven far more complex than this perspective assumes.

The complexity is also related to increasing expectations from society and policymakers. There are no one-size fits all type of answers across European systems to the dilemmas indicated in the beginning of this chapter. But at the same time – due to globalization, Europeanization and internationalization – idiosyncratic, specifically national answers to them are ever more problematic in the increasingly interconnected world.<sup>68</sup> Europe, and its emergent common higher education and research areas, provide

---

2012: 32-33) notes penetratingly, “most of what has been written about the knowledge economy has been based on the experiences of the long period of economic growth during the 60 years following the Second World War and especially the unprecedented global expansion of the 1990s and the early years of the twenty-first century. Economies grew, education expanded and scientific knowledge increased as never before in history. It was quite easy to find correlations between many of the variables. But directions of causation were often not so clear. ... The basic question of whether education expansion promotes economic growth or whether becoming richer enables populations to have more education has never been entirely satisfactorily answered. Partly this is because ‘the economy’ and ‘education’, as well s ‘knowledge’ and ‘capability’, are heterogeneous aggregates, and partly because universities and colleges may perform many other important social functions besides providing people with economically useful skills”.

68 The world has become interconnected and globalization, as Hale and Held (2011: xxiii) note, “has altered the social, economic and ecological relations between people around the world, creating a host of new policy challenges. Overambitious mortgages in the United States can take the livelihoods from people in Iceland. The health infrastructure in Indonesia can affect how many people will die of flue in Mexico. Rates of car ownership in China can affect national survival for the people of Tuvalu”.

perfect example of seeking common answers to the questions posed by the increasing complexity of the academic enterprise.

The major policy issues related to the attractiveness of European higher education systems in the next decade include the following:

- (1) how to combine the attractiveness of European universities to different stakeholders whose interests in, and expectations from, increasingly differentiated higher education get substantially changed in new social and economic realities;
- (2) how to meet the needs of students, the labor market and the economy without fundamentally transforming traditional values and modes of operation common to best public European universities today;
- (3) how to combine the (probably necessary) restructuring of higher education systems towards meeting new needs epitomized in “more growth/more jobs” strategy with the traditional values associated with academic teaching and research;
- (4) how to attract the best talent to academia amidst the deteriorating job satisfaction and changing working conditions of the academic profession;
- (5) how to view the traditional unity of academic teaching and research in universities in the context of the prioritization of research areas and the concentration of research funding (and more targeted and more competitive research funding expected);
- (6) what is the wider impact of changing public and political views (increasingly regarding the university as private good) on the future of cost-sharing (student fees) and of academic research funding;
- (7) how to cope with the growing differentiation of both student populations, institutions and their educational offers, and finally of the academic profession itself;
- (8) to what extent changes in higher education policies in Europe are becoming part and parcel of much wider social (political, ideological and philosophical) changes in welfare state policies and public sector policies, and how the uniqueness of the university sector *vis-à-vis* other public services sectors could be maintained in the future;

- (9) to what extent the impact of globalization and demographics on policy thinking about other public services (healthcare, pensions) will change policy thinking about higher education, especially in terms of funding and governance structures; and
- (10) how can the “European dimension” be saved as part of the attractiveness of European higher education to other regions of the world in the context of market-related changes to universities worldwide which are global in nature, similar in kind, and not specific to Europe.

The most general, structural policy issues with regard to public universities (as presented in the EC, OECD and World Bank documents of the last decade, especially regarding funding) do not seem substantially different from structural policy issues discussed with reference to other segments of the public sector. The major difference – namely, the widely acknowledged fact that universities have much wider options to diversify their income – may lead to viewing universities as even more financially self-reliant than before, and potentially being much more open to new funding patterns (mostly to new non-core non-state income). The policy challenge at national levels is to what extent particular countries are willing and able to accept global thinking about the future of public sector institutions in general (and of public universities in particular), and to what extent responses to this new way of thinking can vary between the countries. Surprisingly, the worldwide reform agenda for universities already in the 1990s, as observed by Bruce Johnstone (1998: 1) in his report for UNESCO, was remarkably consistent: there were “very similar patterns in countries with dissimilar political-economic systems and higher educational traditions, and at extremely dissimilar stages of industrial and technological development”. Historically, and based especially on the US experience, we know that budget cuts in higher education in harsh times have always been disproportionately higher than in other public services, and that, from a longer historical perspective, “a constant element of the history of the universities, and certainly in the Middle Ages and early modern times, is the lack of financial resources. ... there is no doubt that many institutions were hardly able to function

decently, and always lived, as it were, below the breadline” (de Ridder-Symoens 1996: 183-184).<sup>69</sup>

We are witnessing today the creation of new public policy contexts that define the functioning of state-subsidized public universities over the next decade, apart from state-subsidized healthcare and pension systems. While the world is changing faster than ever before, while the role of contingent historical events which social, political and economic consequences may be difficult to predict increases, constructing future scenarios for universities is a risky business (see ideas of “building future scenarios for universities”, developed in the last few years by the OECD, the OECD 2006k, Vincent Lancrin 2004, 2006, 2007 or CHEPS 2004). However, we consider the presentation of current trends in their functioning and their possible future contexts as an important part of both the public and the academic debate. Never before has there been so much discussion about the universities but also never before have they occupied such a key position in national economies. The scale of the challenges faced by national higher education systems leads to the intensity of global and EU-level responses to a question of what directions their transformations (adaptation, reconfiguration, recalibration, etc.) could follow and in what directions the renegotiation (re-engineering, reformulation, etc.) of the traditionally solid social state-university pacts could proceed. This leads us to key questions about the future institutional identity:

Universities are uncertain about their identity – what they are, what they want to become, and in what directions to go. Boundaries between institutions are

---

69 Which is probably also the case under the recent global financial crisis. As comprehensive, comparable data on higher education spending takes several years to become available (EC 2011b: 10), “it is not yet possible to accurately assess the impact of the crisis on government spending on higher education. However, a recent survey by the EUA [*The Impact of the Economic Crisis on European Universities* of January 2011] highlights substantial cuts in public spending on higher education in a number of Member States, including Greece, Italy, Latvia and the UK, with smaller scale reductions in a number of other Member States. While the picture is stable in other countries, only a few Member States appear to have increased funding for their university sector: most notably France and Germany. ... Moreover, there is evidence that the crisis itself is further increasing demand for higher education, as individuals postpone or avoid entry into difficult labour markets by choosing to study or study longer. In the short to medium term, this situation is likely to have an adverse effect on quality, as funding per student place declines further, and/or increase pressure for tuition fees to compensate for the decrease in public funding per place”.

blurred and it is difficult for universities to find their place in a larger order of research and higher education institutions and in the political system and society at large. Institutional confusion, in turn, generates disappointment, criticism and sometimes an atmosphere of crisis. Historically, universities have survived by turning institutional confusion and crisis into reexamination, search, innovation, and rejuvenation. There is no guarantee it will happen again. Developments will, as before, depend upon many factors the University can not control. What the University can do is critically to re-examine its self-understanding as an academic institution: its purposes, core values and principles, its organization and governance systems, its resources and friends, and its social obligations (Olsen 2007b: 53).<sup>70</sup>

---

70 Institutional change, including institutional change in higher education, can be studied from several, often competing, perspectives. From institutional view, a major difference is between theories focusing on radical change and those focusing on gradual change. Institutions indeed change both swiftly, radically – and slowly, gradually. Research literature on institutional change until recently was focused almost exclusively on the role of radical changes caused by external shocks, leading to radical institutional reconfigurations (on critical junctures and historical trajectories, see Collier and Collier 2002, Mahoney 2000, Pierson 2000). And research literature about gradual, incremental institutional change have been emergent for less than a decade now. Both types of transformations – radical on the one hand, and gradual on the other – may lead to equally permanent changes in the functioning of institutions, equally deep transformations of their fundamental rules, norms and operating procedures. It would be analytically useful to go beyond traditional approaches to institutional analysis – beyond new sociological institutionalism, rational choice institutionalism and historical institutionalism, traditionally termed “new institutionalisms” (Hall and Taylor 1996, Scott 2008, Peters 2005) in explaining institutional change. Questions about institutional change are questions about characteristics of institutions undergoing changes; about the way in which these characteristics lead institutional agents of change to new types of institutional behaviors; about links between types of institutional strategies and types of institutional settings in which these strategies are undertaken; and finally about links between institutional characteristics and their susceptibility to various types of strategies leading to changes. Endogenous institutional change is thus as important as exogenous change (Mahoney and Thelen 2010: 3).



## Chapter 2

# **The University and the State in a Global Age. Renegotiating the Traditional Social Contract in Europe?**

### **2.1. Introduction**

This chapter is of a largely contextual character: it seeks to show a comprehensive social and economic context which should be taken into account when considering the various futures of the institution of the university in Europe. Higher education research can make good use of broader, external contexts of transformations already taking place in the universities' social and economic environments, we assume. Proposals of answers to the questions on external causes of transformations of educational systems and educational institutions (relatively homogeneous on a global scale) are essential to understanding what is changing in universities in Europe and what we could expect for them in the near future.

#### *Interrelated underlying assumptions*

There is a number of wider, loosely interrelated assumptions developed in this chapter (for a wider picture, see Kwiek 2006a). First, higher education has been largely publicly-funded in its traditional European forms and its period of largest growth coincided with the development of the post-war welfare state. The massification processes in European higher education were closely linked to the growth and consolidation of (major forms of) European welfare states. Currently, massification (and universalization) are in full swing across Europe, sometimes with unclear prospects for graduates.<sup>71</sup> The only

---

71 The universalization of higher education (a next step, after massification, in Trow's classification) may redefine the traditional links between higher education credentials and the labor market. The changes can be theoretically tackled with the tools provided by Fred Hirsch' theory of "positional goods" (critically elaborated in various places over the years by Robert H. Frank, Hugh Lauder, Phillip Brown and Simon Marginson). Positional goods refer to goods and services whose value depends to a large degree on their relative quality. Positional goods by nature are rare (Frank 2007:

exceptions to the rule were Central and Eastern European communist countries in the 1960-1990 period where the expansion was slow or non-existent; the growth of higher education occurred there a few decades later, in the 1990s, following the collapse of communism and, in several of them, through the emergence of the demand-absorbing private higher education (Slantcheva and Levy 2007, Levy 1986b, Levy 2002a, Kwiek 2011b). Second, we are currently witnessing the growing significance of knowledge production, acquisition, dissemination and application in the emergent

---

196, Frank 1985, Frank and Cook 1995, Brown *et al.* 2011). In Hirsch's theory of social scarcity and social congestion, "if everyone stands on tiptoe, no one sees better" (Hirsch 1976: 5), and effects of our (higher) educational efforts and capabilities depend, first of all, on (higher) educational efforts and capabilities of others – with whom we compete (Brown *et al.* 2011: 136, Marginson 2011). Twenty years of increasing access to higher education in Poland provides a fascinating empirical material to study the theory of positional goods in a dynamic, postcommunist social and economic setting. A broad question can be asked whether European comparative studies based on large-scale datasets (such as the European Union Survey on Income and Living Conditions, the European Labour Force Survey, and the European Social Survey, or EU-SILC, EU LFS and ESS) show the social congestion of well-educated citizens, or their overeducation – and what is the professional future of graduates from Polish and European higher education institutions from comparative perspectives? Is it possible to show that what can be achieved by the minority of a population – is hard to be achieved for the majority of a population, or is the law of decreasing returns from education already in force? To what degree, and, possibly, in which study fields? To what extent Poland differs from other, economically more advanced economies? Is constantly increasing access to higher education causing wage premium for higher education to decrease? Is the competition for the so-called "good jobs" (Holzer *et al.* 2011) in the setting of increasing "social congestion" (Hirsch 1976) and slowly increasing pool of jobs for professionals leading to an inevitable loss of social energy, and possibly frustration of new, well-educated generations of Europeans? To what extent can relatively open, common access to higher education (in Poland and in major parts of Europe) be a "social trap" (Brown and Hesketh 2004, Lauder *et al.* 2011): if all take the same life strategy, its desired effects decrease. European comparative data provisionally show that the situation of graduates in Poland (and elsewhere in Central Europe) is still exceptional: trends related to their employment and education credentials differ from trends observed in more advanced OECD economies. Higher education seems still to be a good private (as well public) investment. A research question can be formulated in this context: to what extent (Hirsch's) lower social congestion, combined with a lower stage of economic competitiveness of Poland (Porter 1990, Kwiek 2012c, Kwiek 2011a) and a different employment structure in the era of globalized labor markets sustain good prospects of Polish individual investments in higher education in the coming decade?

knowledge-based societies and economies on the one hand – and the still mostly traditional role of European higher education systems in the (being reformed and restructured, either in theory, or in practice, or both, depending on the country) public sector on the other. Despite – as it seems – radical changes in the functioning of European universities that have been taking place for the last twenty or thirty years, both European societies and, especially, European policymakers seem to be only beginning to think about further structural (“transformational” in Ecker and Kezar’s (2003) typology)<sup>72</sup> changes in national higher education systems. Reading national governmental and international reports, transnational and EU visions of the functioning of universities and of the whole public services sector in the future – we may come to the conclusion that profound transformations of the higher education sector, as well as of the narrow research universities sector, are still ahead of us (EC 2011a). Permanent processes of reforming universities do not lead to their complete reform but rather to further, ever deeper, reform processes. The original proposals of national higher education reforms are getting blurred both while being under discussion and while being implemented, arguments in favor of reforms vary over time, becoming largely and increasingly homogenous (at least in the most developed countries which have always provided basic models of functioning of universities to the rest of the world).

Thus higher education systems throughout Europe have been under powerful reform pressures for a long time, and in the last three decades they were always viewed as dramatic, critical or fundamental (as Kogan and Hanney put it in 2000, “perhaps no area of public policy has been subjected to such radical changes over the last 20 years as higher education”; for Cerych and Sabatier already the late 1970s and the early 1980s were “a most critical period”; also for Williams in the early 1990s, the 1980s was a “turbulent decade”, Kogan and Hanney 2000: 11, Cerych and Sabatier 1986: 3, Williams 1992: 1-16). Reforms increasingly, and throughout the European continent, tend to produce “further reforms”, as suggested in the

---

72 In their typology (Eckel and Kezar 2003: 31-33), transformation in institutions (not systems) is differentiated from three other forms of change (adjustment, isolated change, and far-reaching change). Transformation “is not about fixing discrete problems or adjusting current activities. The depth of the change affects those underlying assumptions that tell an institution what is important; what to do, why, and how; and what to produce. Its pervasiveness suggests that transformation is a collective, institution-wide phenomenon, although it may occur one unit (or one person) at a time”.

organizational studies in general (Brunsson 2009: 91; Brunsson and Olsen 1993). Universities, throughout their history, change as their environments change, and the early 21<sup>st</sup> century is not exceptional. Despite relatively homogeneous arguments for reforms, there are different directions of current and projected academic restructuring in different national systems which adds to the complexity of a general picture at a European level, as shown in Chapter 1.<sup>73</sup> As Clark notes (1998a: xiii), universities of the world have entered “a time of disquieting turmoil that has no end in sight” and “higher education lost whatever steady state it may have once possessed”:

Since expanding demands will not relent, conditions of constancy cannot return. ... Governments expect universities to do much more for society in solving economic and social problems, but at the same time they back and fill in their financial support and become unreliable patrons. ... Caught in the swell of knowledge production, even the richest institutions find full coverage of old and new fields beyond their capacity. Pushed and pulled by enlarging, interacting streams of demand, universities are pressured to change their curricula, alter their faculties, and modernize their increasingly expensive physical plant and equipment – and to do so more rapidly than ever.

### *Transformations to the state, pressures on welfare state services, and pressures on higher education*

Europe, and especially Central and Eastern Europe, has been witnessing increasing global (and European-level) pressures on national policies with respect to the welfare state, accompanied by the ideas (and ideals) of the “minimalist” (or “effective”, “intelligent” etc.) state with smaller social duties than Western Europe in general was used to under (different) post-war welfare systems.

---

73 As James G. March and Johan P. Olsen argued in their book on institutions, and what could be referred to as the never-ending story of European university reforms, there are often no clearly defined links between problems and their solutions: “the linkage between individual solutions and individual problems is often difficult to make unambiguously. Almost any solution can be linked to almost any problem, provided they arise at approximately the same time. When causality and technology are ambiguous, the motivation to have particular solutions adopted is likely to be as powerful as the motivation to have particular problems solved, and changes can be more easily induced by a focus on solutions than by a focus on problems. Solutions and opportunities stimulate awareness of previously unsalient or unnoticed problems and preferences” (March and Olsen 1989: 62).

Education, including higher education, as noted, is viewed throughout this book as a significant component of the traditional welfare state (and we are following here Stiglitz's *Economics of the Public Sector* 2000, Barr's *Economic Theory and the Welfare State* 2001, Castles 1989, Lindert 2004, Titmuss 1968, Wilensky 2002, Barr 2004, Garfinkel *et al.* 2010).<sup>74</sup> Transformations to the state, and the welfare state in particular, affect – both directly and indirectly – public higher education systems in Europe. (We leave aside here completely the potential transformations in thinking about the institution of the state, welfare state included, that might be born as a consequence of the recent global financial crisis. The long-term implications of the economic crisis are still very much unclear, and we do not want to speculate in the areas where the knowledge base is too limited and, at least now, all options seem possible).<sup>75</sup> All wealthy nations are welfare states (Garfinkel, Rainwater and Smeeding, 2010: 2) – that is, they are:

- 
- 74 As Garfinkel *et al.* highlight (2010: 6), Esping-Andersen in his influential *The Three Worlds of Welfare Capitalism* included education to the welfare state as well, although turned to studying education only about a decade and a half later: “What then constitutes salient dimensions of welfare state stratification? ... The education system is an obvious and much studied instance. ... At this point, we confine our attention to the welfare state’s traditional, and still dominant activity, income maintenance” (Esping-Andersen 1990: 57-58). As they point out, “the conceptual definitions of welfare states put forth by the leading scholars in the field include education. ... although education is generally missing from most empirical analyses of the welfare state, and increasingly large minority of welfare state scholars do include education in their inquiries” (Garfinkel *et al.* 2010: 6).
- 75 On a large welfare-state scale, as Castles *et al.* (2010b: 14) note, “in that crisis we saw a climactic change in the role of the state, a change that had been building for some years into the New Millennium: the state was forcibly brought back in, first in slowly freezing privatization or reconsidering nationalization...”. On a smaller, academic research scale, “a qualitatively different response” is needed, Etzkowitz and Ranga (2009: 799) argue about the future of the innovation system: “Large-scale targeted government intervention in the innovation system and support to knowledge-based firms, technologies, products and services are required to compensate for declining innovation support from the private sector and boost economic growth”. There is a “fundamental difference” between this and other crises: “the fact that it occurred in the transition from an industrial to a knowledge-based society and is thus potentially subject to a different set of dynamics than those manifested for instance in the Great Depression, which occurred within an existing mode of production. An industrial mode of production has now run out of steam in many countries, making it more urgent to foster the generation of knowledge-based growth firms, products, technologies, services and an innovation culture altogether”.

primarily capitalist states with large, selective doses of socialism. What have been socialized are institutions that reduce economic insecurity. By its name, capitalism produces too much economic insecurity. A hallmark objective of welfare state institutions is therefore to reduce economic insecurity. Education, health, and some forms of insurance all reduce economic insecurity. ... social welfare transfers in the form of education, health, and social insurance flow to citizens as a matter of law or entitlement and are paid for by other members of the community by law or requirement. Social welfare transfers are publicly provided or subsidized goods that provide predominantly private benefits. ... Social welfare transfers from one to another part of the population make up the lion's share of the budgets of all rich nations and amount to 30 to 40 percent of the total value of goods and services produced in most of these nations.

As Castles in *Comparative Public Policy. Patterns of Post-War Transformations* (1998: 174-175) points out, education has rarely been studied from the welfare state perspective:

education is generally regarded as a part of the welfare state, it has rarely featured in comparative public policy analysis broadly focusing on that area. The reason is that, while education, like health, is a major state-provided service, it has often been seen as serving purposes quite different from those of other aspects of the welfare state. ... However, it is certainly true that education differs in important ways from other areas of state intervention in the welfare arena. In particular, education is as much about services to the economy, society and the state as it is about services to the individual. Modern economies require an educated work force if they are to be productive, and modern democratic institutions require an educated populace if they are to maintain their legitimacy and vitality. ... The fact that education is, in important respects, different is not, however, a reason for neglecting its study.

Throughout this book, higher education will be treated as both a public service and a component of the welfare state.

### *Globalization, demographics, and welfare state futures: towards a new social contract?*

This is not only globalization that affects the welfare state futures. Challenges of globalization (in its most recent embodiment) – which have been present in Europe for at least three decades and which are here to stay – for all public services are accompanied by powerful demographic challenges. Demographic challenges are different in different countries because in the most developed European economies the processes of population aging differ substantially. As Leibfried and Mau emphasize in their introduction to a recent three-volume

*Welfare States: Construction, Deconstruction, Reconstruction* (2008: xii), since the oil crises in the mid-1970s,

[t]he welfare state has been grappling with deep-rooted challenges. A series of major economic, social and political shifts – such as globalization, demographic pressures, individualization, persistent high unemployment, greater social diversity and fiscal scarcity – have raised the question: How sustainable is the welfare state in the long run?<sup>76</sup>

In general terms, Europe is witnessing more general attempts at a reformulation of the post-war social contract which gave rise to the welfare state as we know it (with public higher education as we know it). We argue here for a strong thesis according to which Europe is facing the simultaneous renegotiation of the postwar social contract concerning the welfare state in Europe and the accompanying renegotiation of a smaller-scale, by comparison, modern social pact between the university and the nation-state (for the origins of the social pact between states and universities in France, see Weisz 1983, in Germany, see McClelland 1980; see also such classics as Ringer 1969 on Germany, Sanderson 1972 on Great Britain, Ben-David 1992 on Britain, France, and Germany, and Rothblatt and Wittrock 1993, with Wittrock 1993: 303-362 on the “three transformations” of the modern university).<sup>77</sup> The renegotiation of the (nation) state/university pact

---

76 There are currently four large-scale comparative attempts to view the welfare state, either more retrospectively or more prospectively, in the last decade or so. There were three volume-sets of: Robert E. Goodin and Deborah Michell’s *The Foundations of the Welfare State* (2000), Nicholas Barr’s *Economic Theory and the Welfare State* (volumes on *Theory*; *Income Transfers*; and *Benefits in Kind*, 2001) and Stephan Leibfried and Steffen Mau’s *Welfare States: Construction, Deconstruction, Reconstruction* (volumes on *Analytical Approaches*; *Varieties of Transformations*; and *Legitimation, Achievement and Integration*, 2008). And there are four volumes of Pete Alcock and Martin Powell’s *Welfare Theory and Development* (consisting of three parts: *Welfare Theory*, *The Development of Welfare*, and *The Social Context of Welfare*, 2011). The volumes provide insights into major welfare state discussions throughout the 20th to the early 21st century, with fruitful comparisons between Leibfried and Mau’s *Analytical Approaches* volume, Barr’s *Theory* volume, and Alcock and Powell’s *Welfare Theory* section.

77 As Stephan Leibfried and colleagues argue in their presentation of an analytical framework for the whole “Transformations of the State” Palgrave book series started in 2007, “the state today operates in a radically new environment – multinational corporations, accountable only to their shareholders, gain bargaining power vis-à-vis the state’s democratic institutions by threatening to relocate production. Capital mobility restrains state control over monetary policy. Competitive pressure to lower

is not clear outside of the context of the changing welfare state contract, as state-funded higher education formed one of the bedrocks of the European welfare system in its major forms, and state-funded higher education remains one of its foundations.<sup>78</sup>

### *The structure of the chapter and introductory remarks*

The present chapter is divided into four sections: a brief introduction, a section on the relationships between the university and the welfare state in Europe, a section on the relationships between the university and the nation-state in Europe, and tentative conclusions. It moves back and forth between the institution of the university and the institution of the state, seeing them as closely linked (Kogan, Bauer, Bleiklie, and Henkel 2000, Kogan and Hanney 2000, Henkel and Little 1999, Becher and Kogan 1980, Becher and Kogan 1992, Maassen and Olsen 2007): problems of the latter inevitably bring about problems of the former, as historically, in the post-war period in Europe, the success of the latter led to the success of the former. We view the modern university and the modern state closely linked throughout the last two centuries, from the very beginning in the Humboldtian ideas of the research university from the early 1800s (Kwiek 2006a: 81-138, Wittrock 1993). This way of thinking about the university and the state can be found in the ideas of new institutionalism in organization studies, especially those emerging in the last three decades in political sciences. Institutions do not undergo their transformations in isolation: institutions operate in parallel,

---

tax rates undermines the state's resources and has the potential to unleash financial crises that, in turn, trigger cuts in welfare spending". What they term "the golden-age constellation" of the four components (the territorial state, the constitutional state, the democratic welfare state and the interventionist state) is threatened: "different state functions are threatened to a greater or lesser degree, and subjected to pressures for internationalization of varying intensity" (Hurrelmann *et al.* 2007b: 7, 9). Educational policies are one of the dimensions of the "golden-age constellation" under renegotiations today.

78 In general, we are using the terms "university" and (public) "higher education" interchangeably: in more historical contexts, especially in relationships with the nation-state, it is more often the former; as the educational landscape today is becoming increasingly diversified, in more general and more current contexts, it is more often "higher education". Wherever we want to mean, in Europe, top national public institutions offering the traditional scope of areas of teaching and research, we tend to use the term "university", too.

and in parallel they change (see, for instance, an organizational ecology line of research as in Aldrich 2008, Hannan and Freeman 1989, Hannan, Pólos, and Carroll 2007, and Aldrich and Ruef 1999, as well, in normative institutionalism, March and Olsen 1989 and Brunsson and Olsen 1993). There is a complex interplay of influences between institutions and their environments, and universities are perfect examples of powerful connectedness between changes in institutions and changes in the outside world from which they draw their resources, founding ideas, and social legitimacy. The institution of the university in Europe may be undergoing a fundamental transformation – along with the traditional institution of the state in general, and the welfare state in particular (see March and Olsen 2006a, Olsen 2007b). Institutions change over time, and social attitudes to institutions change over time, too. “University attitudes” in European societies today may be studied in parallel to recently studied (Svallfors 2012a) “welfare attitudes”. Svallfors’ large-scale comparative research project considered the following issues which can be clearly related to universities as public institutions, and their current organizational transformations:

Policy reformers need to deal with normative orientations and expectations that have been established by previous politics and policies, and this often hinders or derails policy changes. ... Attitudes toward the welfare state and other public institutions should be seen as central components of social order, governance, and legitimacy of modern societies. They tell us something about whether or not existing social arrangements are legitimate? Are they accepted only because people see no alternatives or think that action is futile, or are they normatively grounded? Are institutions considered to be fundamentally just or not? (Svallfors 2012b: 2).

In a similar vein, perfectly legitimate questions today about the existing social arrangements in the higher education sector may be about their legitimation, justice, and normative grounding (or about universities’ “raison d’être”, Olsen 2007b).

Reforming higher education systems in Europe has been at the top of national reform agendas across the continent for twenty to thirty years now and it is hard not to associate it with the theoretical and practical attempts to reform state institutions, especially with reforming the public sector. New ideas leading to changes in the overall functioning of the state in Europe can have far-reaching consequences for the functioning of European universities because of, among others, their fundamental financial dependence on state

funds (unlike, for example, in the USA where the dependence on state funding has traditionally been considerably weaker). Ideas matter – in this case, the last two decades of neoliberal thinking about public services and private providers of public services, ideas of New Public Management in thinking about the public sector and ideas associated with globalization and European integration processes (such as the free movement of capital and services, the legal equality of private and public providers, the illegality of public support in the areas of public-private competition, the equality of national and international providers in access to educational markets, the transnationalization of patterns of public spending etc.). These ideas have directly and indirectly influenced policymakers' thinking about higher education. The processes are double-edged: on the one hand, there is the economization of education (the increasing importance of the economic dimension and the decreasing importance of the academic dimension in thinking about higher education, see Teixeira 2009 on “economic imperialism”), and, on the other hand, there is the educationalization of economy (the growing public conviction that the economic well-being of nations is closely dependent on the shape of higher education, that lack of reforms in the university sector leads to the civilizational backwardness and to measurable damages to national economic well-being, and that reformed higher education contributes to economic growth, in accordance with the human capital theory and the endogenous growth theory in economics, see Lee 1970, Checci 2006, Keeley 2007, Groot and van den Brink 2007, Hartog and van den Brink 2007, Keeley 2007, Aghion and Howitt 2009). Both processes, brought to their extremes, seem to be able to completely change the traditional rules of the academic game known from the times before the intensification of globalization and Europeanization processes, before large-scale public sector reforms and before the knowledge-economy discourse became prevalent in the policymakers' communities throughout Europe (Välimaa and Hoffman 2008 and Dale 2007).<sup>79</sup>

---

79 Therefore “modesty” and “humbleness” count; as Dani Rodrik (2007: 5, 242) points out, “economists have probably had more influence on policy [including higher education policy – MK] in recent decades than at any other time in world history. But the sad reality is that their influence in the developing world has run considerably ahead of their actual achievements” (and they will have to “learn to be more humble”).

## 2.2. The Modern University and the Welfare State

In the new global order (Hale and Held 2011, Held *et al.* 1999, Sassen 2007, King and Kendall 2004, Büthe and Mattli 2011, Slaughter 2004, Djelic and Quack 2012, Morgan and Whitley 2012, Held and Young 2011, Held and McGrew 2007), universities as institutions are striving for a new social, cultural (and perhaps especially economic) place as they are increasingly unable to maintain their traditional roles and tasks and, at the same time, they cannot, and do not want to, afford the frustration associated with declining institutional prestige and dwindling financial resources. Universities as institutions need to remain a key social institution in contemporary fast-evolving societies, as they have been so at least since the early 1800s and since the Humboldtian and the Napoleonic reforms in Prussia and France.

### *A new chapter in the history of European universities?*

The social and economic environment of universities has been changing radically in the last two decades (Temple 2012a, Amaral, Neave, Musselin, and Maassen 2009, Paradeise, Reale, Bleiklie, and Ferlie 2009, Mazza, Quattrone, and Riccaboni 2008, Bonaccorsi and Daraio 2007, Maassen and Olsen 2007), the positions taken by their most important stakeholders have been evolving (primarily those taken by the state and, to a lesser extent, students and labor markets). Market opportunities for the functioning of universities have been growing continuously, as European economies have been getting more and more market-oriented with respect to public sector services, and as, increasingly, students and their families have been having increasingly marketized and customer-like demands (on the latter, see the Eurostat report on self-reported attitudes of European students, Eurobarometer 2009; see Teixeira, Jongbloed, Dill, and Amaral 2004, Clarke, Newman, Smith, Vidler, and Westmarland 2007, Simmons, Powell, and Greener 2009, as well as Molesworth, Scullion, and Nixon 2011). Both the official discourse of the emergent European Higher Education Area and European Research Area, as well as a large part of academic debates accompanying their formation in the last decade, increasingly emphasize the belief that universities today should play a role of an effective engine for economic growth (through teaching, research, and various third mission activities including innovation, regional mission, and the American “service

to the society” mission) in the emergent knowledge-based economies.<sup>80</sup> In this way, the university in the European context, basically without any large-scale public and academic debates about its fundamental principles, seems to be opening a new chapter in its history (such public and academic discussions accompanied the formation of its Humboldtian model in the early nineteenth century in Berlin, and accompanied the most important twentieth-century debates on “the idea” of the university, on the occasion of publications devoted to the issue of the university such as pre-war works by Ortega y Gasset and Max Weber and postwar works by Karl Jaspers and Jürgen Habermas, on which we have written extensively in the discussion on the German idea of a university, Kwiek 2006a, Kwiek 2008c, Gasset 1944, Weber 1973, Habermas 1971, Jaspers 1959). At the same time, to further complicate the picture, changes in higher education policies often become themselves the context of subsequent changes, as Kogan and Hanney point out in their *Reforming Higher Education*:

In identifying the major shifts in policy and structure that might affect academic workings and values, it is possible to identify the contextual frames within which changes took place. Some of the changes in policy and structure themselves became the contexts of further change. For example, whilst the expansion of the system was led partly by policy, partly by demography and partly by changes in social attitudes, it was itself a strong factor in causing many of the subsequent principal policy changes. Demography, changes in the economy and in society, developments in the nature and transmission of knowledge and in ideology constituted the contexts within which change took place (Kogan and Hanney 2000: 48).

While in the 1990s, the key concept in the discussions about the future of the state was that of globalization, since the beginning of the new century, more and more strongly, especially in Europe, the concept of the knowledge economy has been emphasized. It has been consistently promoted in official discourses of such supranational organizations as the OECD and the European Commission (we can clearly observe how the second term in

---

80 Florida and Cohen (1999: 589), discussing the university role in economic development, also ask whether that would be the role of the “engine” or of the “infrastructure” (in what they termed “knowledge-based capitalism”), and stress the latter role. They highlight tensions between “the quest for eminence and the pursuit of research support from industry”, with the following conclusion: “the university functions less as a direct engine of economic development than as an actor fulfilling even more important role: that of an enabling infrastructure for technological and economic development” (1999: 590).

increasingly broader contexts is currently displacing the first – therefore leaving globalization, with reference to the European social model or European universities as just one of several key drivers of social and economic changes, next to, for instance, changing social demography and population aging or post-industrialism).<sup>81</sup> However, globalization processes did not disappear, and clearly intensify.

The logic of the present chapter (as the logic of my previous book, *The University and the State. A Study into Global Transformations*, Kwiek 2006a, from which this Chapter draws) has been underpinned by a view that to debate the future of (public) higher education, especially (public) universities,<sup>82</sup> it is useful to discuss the complex issue of current and potential transformations of the welfare state, the nation-state and the public sector resulting (mostly but not exclusively) from current globalization pressures (and regional responses to globalization, for example, through processes of Europeanization) and demographic pressures, discussed here only incidentally (see Kwiek, forthcoming, Antonowicz 2012a, with reference to Polish higher education).<sup>83</sup>

---

81 The perhaps most influential example of the knowledge economy discourse was the OECD report, *The Knowledge-Based Economy* (1996). Most of its statements within a decade and a half became commonplace, especially, although not exclusively, in the policy-making communities across the globe.

82 Throughout the book, we will be referring to “higher education” as (almost always) “public higher education” (which is a standard practice in higher education research). Whenever we want to mean “private” higher education, we tend to stress it (which is a standard in private higher education research). I discuss the critical role of demographics for the future of Polish higher education in an article forthcoming in *Comparative Education Review* (Kwiek, forthcoming).

83 From a global perspective, the most promising grounds for comparative research about the demography-related contraction in Central European higher education systems is the US higher education facing demographic declines in the 1970-1990 period; see a whole series of American reports (in both the Carnegie Council on Policy Studies and the Carnegie Commission on Higher Education series) about the future of higher education under changing demographics e.g. *More than Survival. Prospects of Higher Education in a Period of Uncertainty*, Carnegie 1975, *Three Thousand Futures. The Next Twenty Years for Higher Education*, Carnegie 1980, *Shaping Higher Education's Future. Demographic Realities and Opportunities, 1990-2000*, Levine et al. 1989 and *Demand and Supply in U.S. Higher Education*, Radner et al. 1975. Lessons drawn are highly relevant, especially that, “demography is not destiny in higher education”, as Easterlin put it (1989: 135).

### *Institutions and their supportive discourses*

The public university is increasingly viewed as merely one of several institutions of the public sector and its traditional claims to social (and consequently economic and political) uniqueness are increasingly falling on deaf ears. Let us recall here James G. March and Johan P. Olsen's seminal conclusions – which, so far, have not been applied to the institution of the university, though:

There are also situations where an institution has its *raison d'être*, mission, wisdom, integrity, organization, performance, moral foundation, justice, prestige, and resources questioned and it is asked whether the institution contributes to society what it is supposed to contribute. ... There is rethinking, reorganization, refinancing and possibly a new “constitutional” settlement, rebalancing core institutions (March and Olsen 2006b: 18-19).

As it seems, a current Europe-wide discourse on the future of the university as a key institution for the economic growth in Europe, in the version consistently promoted by the European Commission for over a decade now, suggests the above interpretation: the European university, in general, is being questioned to its very core. The European university as an institution is generally criticized across Europe in all its aspects, to its very foundations. Although March and Olsen do not refer above to the university, the remark can be successfully referred to another public institution. And yet, as shown by theories of institutional change (Dryzek 1996: 104),

no institution can operate without an associated and supportive discourse (or discourses). Discourses may best be treated as institutional software. Institutional hardware exists in the form of rules, rights, operating procedures, customs, and principles.

The European university is not an exception; as it seems, its strength in the last two hundred years resulted from the power of the accompanying discourse of modernity in which the university held a central, highlighted, specific (and carefully secured) place in European societies (Rothblatt and Wittrock 1993, Wittrock 1993, Wittrock 1991, Wittrock 2003, and Delanty 2001). A new location of the institution requires a new discourse which legitimizes and justifies it and sustains public confidence, without which, in the long run, it is impossible to maintain a high level of public trust (and, consequently, a high level of public funding). Therefore, the struggles over a future form of the institution are also, and perhaps above all, the struggles over a form of a discourse which legitimizes its place: in the last decade, those struggles have

intensified and for the first time became global, with the strong engagement of international and transnational organizations and institutions.<sup>84</sup> To a large extent, the future of European universities will depend on the social and political acceptance of the legitimizing discourses currently emergent around them. An associated and supportive discourse for public universities seems to be still in the making, amidst the transformations of their environments (Välilmaa and Hoffman 2008 and Dale 2007).<sup>85</sup>

The question of university reforms is also about (in Becher and Kogan's terms: two major dimensions to study higher education, Becher and Kogan 1980, Becher and Kogan 1992) "normative" and "operational" modes of higher education being in tune or out of phase across European systems:

As long as the normative and operational modes are in phase with one another, the system as a whole can be said to be in dynamic equilibrium – if not in harmony, then at least in a state of balanced tension. But when the two modes become significantly out of phase, some kind of adjustment is necessary to avoid breakdown and to restore the possibility of normal functioning (Becher and Kogan 1980: 17-18).

- 
- 84 Discourses and policies are intricately linked, as are global and national dimensions in currently produced educational policies. As Rizvi and Lingard (2010: 14-15, emphasis in original) stress, "the discourses that frame policy texts are no longer located simply in the national space but increasingly emanate from international and supranational organizations ... Globalized discourses and agenda-setting and policy pressures now emerge from beyond the nation. The relationships between the various sites of policy production and implementation have been extended in many instances. ... those involved in policy text production compared with those involved in policy implementation or practice will often have different and competing interests".
- 85 A highly promising route to discuss European universities comes from an institutionalist perspective(s). The general question of institutionalism is classic (North 1990): how do institutions (of higher education) change? Change is one of leading motives of social sciences and higher education research (Clark 1983a: 182). Theoretical grounds can be provided by the concepts of change, continuity and differentiation of higher education systems in Burton Clark (Clark 1983a: 182-237), and by Johan P. Olsen's pair of concepts unity and diversity (Olsen 2007b, Olsen 2010: 128-160, Maassen and Olsen 2007, Olsen and Maassen 2007), critically important to the normative type of institutionalism and referred to European integration processes. The premises of the two theoretical approaches are, on the one hand, the endogenous nature of (educational) institutions and, on the other hand, their social construction. Institutions are not merely epiphenomena mirroring preferences of individuals or initial conditions related to resources or initial social conditions (Olsen 2007b: 3-4, Peters 2005).

Currently, the two modes across Europe are viewed to be out of phase (mostly by policymakers, the society at large, or sometimes both; much less often by the academic community). Therefore reform pressures are strong, as “a predisposition for change is created when the normative and operational elements at any level become significantly out of phase. The situation will usually give rise to some appropriate change in belief or practice designed to restore normal functioning” (Becher and Kogan 1980: 120)

Reforms of the public sector are underway worldwide, and the university has been subject to them, despite its traditional, historical exceptionality. It seems better to be able to steer the changes rather than to drift with them, the political economy of reforms suggests (Drazen 1998, OECD 2009b, OECD 2003a, OECD 2010b), so in some national systems universities are indeed suggesting the directions of changes. At the same time, as in the case of welfare state reforms in general, politicians will engage in reforms “only in the case that this promises to be less damaging for their re-election prospects than any other coping strategy would be” (Manow 2010: 281; exceptions include what Leszek Balcerowicz termed “extraordinary politics” with reference to postcommunist transformations in the early 1990s, Balcerowicz 1995: 302-312, Balcerowicz 2002: 45-52).<sup>86</sup> Current debates about the future of the university are more central to public policy and wider public discussions than ever before. Generally, discussions on the institution of the university so far have not accompanied huge social transformations of the last one hundred years, and, have not accompanied the emergence of postwar welfare states in Western Europe. However, today, these discussions invariably accompany the transition to new forms of economy and society – simplifying and selecting only one item from among a plethora of descriptions in sociology and political sciences – knowledge-driven economy and knowledge-based society (Stehr 2002, Stehr and Meja 2009, Foray 2006, Leydesdorff 2006, Kahin and Foray 2006,

---

86 As Balcerowicz (1995: 311-312) explains, “‘extraordinary politics’ by definition is a period of very clear discontinuity in a country’s history. It could be a period of very deep economic crisis, of a breakdown of a previous institutional system, or of a liberation from external domination (or end of a war). In Poland, all these three phenomena converged in 1989. ... Extraordinary politics is a short period and gives way to ‘normal’ politics: politics of political parties and of interest groups, a sharply reduced willingness to think and act for the common good, and stronger institutional constraints with respect to the individual political actors. In the period of extraordinary politics, these constraints are fluid or loosely defined”.

OECD 1996). It is hardly possible to view the transformations to the institution of the university without viewing the transformations to the social fabric in which it has been embedded. The modern university, the product of (Ulrich Beck's first, national – as opposed to the second, postnational, Beck 2000a) modernity, is under the very same pressures as other modern institutions and other social arrangements.<sup>87</sup> The possible decline of the historical exceptionality of the modern institution of the university (at least compared with the post-war period, if not with the two hundred years of the materialisation of Wilhelm von Humboldt's ideas) results from the same pressures as those affecting other modern institutions – including the institutions of the state, its agencies and public services, international or supranational institutions, and institutions of the private corporate world (see Held and Young 2011, Held and McGrew 2007, Hay, Lister, and Marsh 2006, Djelic and Quack 2012a, Djelic and Quack 2008, Djelic and Quack 2003, and Campbell 2004).

*The end of the Golden Age of the welfare state in the  
“postnational constellation”*

Political scientists often stress the idea that the economic space of the nation-state and national territorial borders no longer coincide. Examples include Fritz Scharpf, a former director of the Max Planck Institute for the

---

87 Major social arrangements are under renegotiation today, and renegotiations refer often to the political economy of reform. The success of higher education reforms, as suggested by the experiences of the OECD (see OECD 2008 and a huge work summarizing the reform of the pension sector and the labor market, *The Political Economy of Reform. Lessons from Pensions, Product Markets and Labour Markets in OECD Countries*, OECD 2009b), depends largely on the compromises made between policymakers and stakeholders. The compromises comes out of negotiations and persuasions (solutions should be “acceptable to all, even if preferred by none”, see also Santiago *et al.* 2008a and 2008b), and the most popular tool used to implement reforms are financial incentives. The political economy of structural reform – not just higher education reforms (Høj *et al.* 2006) – suggests that none of the OECD countries (with the exception of postcommunist transition countries) have ever used a “big bang” reform, that is, sudden revolutionary changes (Høj *et al.* 2006: 6-7). See also Boeri, Castanheira, Faini and Galasso (2006) on political support for structural reforms with a conclusion that the role of information is critical: “government may gain further support by providing information about the short- and long-term benefits to be expected from the reform, as well as about the costs of maintaining the status quo”.

Studies of Societies in Köln and John G. Ruggie of Harvard University (see also Hurrelmann, Leibfried, Martens and Meyer 2007a, Beck 2000a, Beck 2000b, Beck 2005, Giddens, Diamond, and Liddle 2006, Held, McGrew, Goldblatt, and Perraton 1999, Held 2000, Held and McGrew 2007). Consequently, the postwar “embedded liberalism compromise” – the social contract between the state, market, and labor – does not work anymore as it was designed to work within closed national economies (see Hays 2009: 150-158). Scharpf argues that in the history of capitalism, the decades following the Second World War were “unusual in the degree to which the boundaries of the territorial state had become coextensive with the boundaries of markets for capital, services, goods and labor” (Scharpf 2000a: 254; see also Scharpf 2010: 91-126 and 221-246). At the moment of the emergence of classic European welfare states, investment opportunities existed mainly within national economies and firms were mainly challenged by domestic competitors. At the time, however, when major European welfare state regimes were being constructed, it was not fully realized how much the success of market-correcting policies depended on the capacity of the territorial nation-states to control their economic boundaries. Under the forces of globalization, though, this controlling capacity was lost. “The ‘golden years’ of the capitalist welfare state came to an end” (Scharpf 2000a: 255; Scharpf and Schmidt 2000, Schmidt 2002, Hurrelmann, Leibfried, Martens, and Mayer 2007a, Mishra 2011).

The social contract which had allowed the nation-states in advanced capitalist countries to be accompanied by a welfare state originated right after the Second World War (as Jürgen Habermas sadly concluded in his studies on the “postnational constellation”, Habermas 2001: 52, “in some privileged regions of the world, and under the favorable conditions of the postwar period, the nation-state – which had in the meantime established the worldwide model for political organization – succeeded in transforming itself into a social welfare state by regulating the national economy without interfering with its self-correcting mechanisms”). With the advent of globalization, the social contract is eroding, or is at least under powerful pressures, though, to different extent in different countries. The compact between state and society in postwar territorially-bounded national democracies was intended to mediate the deleterious domestic effects of postwar economic liberalization (and was based on Enlightenment beliefs in scientific solutions to social problems). Now it is under question, in theory,

in practice, or both (Held and McGrew 2007, Held, McGrew, Goldblatt, and Perraton 1999, as well as Blyth 2002 and Polanyi 1956).<sup>88</sup>

This postwar compromise assigned specific policy roles to national governments – which governments seem increasingly unable, or unwilling, to perform. One of the indirect effects of globalization on the state is its impact on the ability of the state to “live up to its side of the postwar domestic compact” (Ruggie 1997: 2, see also Ruggie 1998: 62-84 on “embedded liberalism and the postwar economic regimes”).<sup>89</sup> The emergence of global capital markets posed entirely new policy problems. The second wave of economic globalization (since the 1970s), as Castles *et al.* (2010b: 11; see also Pestieau 2006: 1-8, Svallfors and Taylor-Gooby 1999: 1-13, Ferge 1999: 218-240, Swank 2002: 274-289, Kuhnle and Sander 2010, Nullmeier and Kaufmann 2010, Swank 2010, Glatzer and Rueschmeyer 2005, and Seeleib-Kaiser 2008b: 1-13) summarize recent changes,

increased competition between nation-states for footloose capital and intensified pressures on national social standards. Enhanced exit options for capital imposed tighter limits for taxation and redistribution and also led to a newly asymmetric balance of power between labour and capital. It also led to an ideological climate

---

88 One of the most promising avenues in recent research on the European welfare state change, including the change in Central Europe, is an analytical framework and conceptual tools provided by historical institutionalism, particularly through the concept of “gradual transformative change” developed by Streeck, Thelen, and Mahoney (Streeck and Thelen 2005, Mahoney and Thelen 2010, Thelen 2010). See three large-scale comparative studies based on this concept: *A Long Goodbye to Bismarck? The Politics of Welfare Reforms in Continental Europe* (Palier 2010a), *The Politics of Welfare State Reform in Continental Europe. Modernization in Hard Times* (Häusermann 2010), and *Post-Communist Welfare Pathways. Theorizing Social Policy Transformations in Central and Eastern Europe* (Cerami and Vanhuyse 2009). For direct applications, see especially Palier 2010b: 21-34, Häusermann 2010: 8-12, and Cerami 2009: 36-44. As Streeck and Thelen (2005: 18-19) explain in their seminal introduction to a collection of essays, “rather than abrupt and discontinuous”, transformative change often results from “an accumulation of gradual and incremental change. Moreover, rather than emanating on the outside, change is often endogenous and in some cases produced by the very behavior and institution itself generates”. And more categorically, in Mahoney and Thelen’s (2010: 1) presentation of what they term “a theory of gradual institutional change”, “once created, institutions often change in subtle and gradual ways over time. Although less dramatic than abrupt and wholesale transformations, these slow and piecemeal changes can be equally consequential for patterning human behavior and for shaping substantial political outcomes”.

89 See also Ruggie’s earlier studies and his notion of *embedded liberalism* in Ruggie 1982.

shift contrasting radically with that of the era of nineteenth-century globalization. Now there is marked tendency to perceive social investment as a dead weight on the economy rather than as a factor providing a boost off the starting blocks in a “race to the top”. In a nutshell, the transformation of the international political economy decreased the autonomy and sovereignty of the nation-state – but did not support the evolution of functionally equivalent higher authorities at the international level.

The existing systems of supervision and regulation, systems of taxation and accounting, were created for a “nation-based world economic landscape” (and as Ulrich Beck argued, “we live in a world where new and old players use incommensurable sets of rules: it is a bit as if nation-states and their citizens were playing checkers but transnational players, politically and economically, were already playing chess”, Ruggie 1997: 2; Beck 2000a: 65). Economic policies are becoming increasingly denationalized and the state is increasingly unable, or unwilling, to keep its promises from the Golden Age of the welfare state (see a framework of the analysis of the end of the “Golden-age nation state” in Hurrelmann, Leibfried, Martens, and Meyer 2007b).<sup>90</sup> As Leibfried and Obinger (2001: 2) summarize the consensus, “the welfare state is having hard times. ... The welfare state, until then [the mid-seventies] anchored deeply and unquestioned in most Western democracies’ postwar consensus, has increasingly been challenged by a new market-liberal world view. The welfare state is now seen as a part of the problem, not as part of the solution, as it was in the earlier Keynesian view” (see also Rieger and Leibfried’s 2003 book on “limits to globalization” and welfare states, concerned with the empirical verification of the strong globalization-welfare state nexus and, particularly, their more programmatic positions expressed in a recent “Introduction” to *The Oxford*

---

90 It is hard to keep promises from the Golden Age of the welfare state while “fiscal termites” are gnawing at the foundations of the fiscal house in all major developed economies. Vito Tanzi argued already a decade ago in his “Taxation and the Future of Social Protection” that the most direct and powerful impact of globalization on the welfare state will probably come through its effect on tax systems: “for the time being there is little, if any, evidence that the tax systems of the industrial countries are collapsing. ... While the fiscal house is still standing and looks solid, one can visualize many fiscal termites that are busily gnawing at its foundations” (Tanzi 2001). The issue of the tax levels is not only globalization-related but also hinges on the will of the European electorates. Until the recent economic crisis in Europe, increasing both personal and corporate taxes seemed almost impossible; currently, increases seem an open option to many European governments, Tanzi argues (2011).

*Handbook of the Welfare State*, Castles, Leibfried, Lewis, Obinger and Pierson 2010: 1-15 and Leibfried and Mau's "Introduction to their three-volume *Welfare States: Construction, Deconstruction, Reconstruction*, 2008: ix-lxiv). The whole idea of the welfare state is under renegotiations, and the access to and eligibility for tax-based public services are under discussions, increasingly related to possible individual contributions. And the welfare state has traditionally been one of the main pillars in the appeal of the nation-state construction. As Ruggie describes the process,

The postwar international economic order rested on a grand domestic bargain: societies were asked to embrace the change and dislocation attending international liberalization, but the state promised to cushion those effects, by means of its newly acquired economic and social policy roles. ... Increasingly, this compromise is surpassed and enveloped externally by forces it cannot easily grasp, and it finds itself being hollowed out from the inside by political postures it was intended to replace (Ruggie 1997: 8; see also Ruggie 1982).

### *Globalization, states, and markets*

The power of the nation-state, and the power of the loyalty of its citizens, has rested, *inter alia*, on a firm belief in (historically unprecedented) welfare rights. When the Keynesian welfare state was formed, the role of the state was to find a fair balance between the state and the market – which had fundamentally transformed postwar social relations in all the countries involved in this social experiment (mostly advanced Western democracies). The task of this postwar institutional reconstruction was to devise a framework which would safeguard and aid the quest for domestic stability without triggering the mutually destructive external consequences that had plagued the interwar period. At the same time, we can only speculate about the future relationships between the state and the market and the role of the state in the economy. As Tanzi (2011: 7) remarked, from a historical perspective,

the role of the state in the economy changed enormously from the beginning to the end of the 20<sup>th</sup> century. It is reasonable to expect that it will continue to change significantly over the course of the 21<sup>st</sup> century. The key question is how it will change. Will it continue the trend that characterized much of the past century, toward continuously growing public spending and higher taxes? Or will the direction change toward less spending and lower taxes? ... How will globalization influence the role of *national* governments? No crystal ball exists that can provide us with answers to these questions. The best that can be done is to speculate.

Many political scientists, exemplified here by Scharpf and Ruggie, view the impact of globalization on the nation-state through the undermining of the founding ideas behind the postwar welfare state: through liberalization and the opening up of economies, nation-states begin to lose their legitimacy provided, in vast measure, by a social contract valid only in closed, national economies. To what extent it matters to European universities? It matters a lot, as we shall discuss below. We shall follow here Barr's definition of the "welfare state" in his monumental *Economic Theory and the Welfare State* (2001b: xiv): "the term 'welfare state' is used for the state's activities in three broad areas: income transfers, health and health care, and education" (see especially sections on the economics of education and financing higher education in vol. 3 on *Benefits in Kind* (Barr 2001c: 313-374, 521-624; as well as Barr on higher education under "benefits in kind" part in 2004: 321-348).

In the "Golden Age" of the post-war Keynesian welfare state in Europe (1950-1975, roughly speaking), higher education was very important – as testified by the constant growth of student enrollments, an increasing number of higher education institutions, and the relatively lavish public research funding available to universities, both in natural sciences, social sciences and the humanities (Martin and Etzkowitz 2000, Ziman 1994, Guston 2000, Guston and Keniston 1994b; as well as Bush 1945). Science, and finding for science, was in a state of perpetual expansion (Ziman 1994). The massification of higher education was in full swing in Europe, with universalization (already achieved in practice) as its aim. The stagnation which started in the mid-seventies in Europe was perhaps the first symptom that the welfare system in the form designed for one period (the post-war reconstruction of Europe) might be not be working in a different period.<sup>91</sup> The social conditions have changed considerably; the post-war social contract was related to an industrial economy in a period of considerable growth, the male bread-winner model of work (and currently European economies are adapting to what Esping-Andersen termed recently (2009:

---

91 As Gøsta Esping-Andersen put it succinctly in "A Welfare State for the 21st Century", "most European social protection systems were constructed in an era with a very different distribution and intensity of risks and needs than exist today. ... As a consequence, the welfare state is burdened with responsibilities for which it was not designed" (Esping-Andersen 2001). Or, as Häusermann rephrased the argument recently (2010: 2), "post-industrial labor markets, a changing family structure, and female labor market participation have given rise to a whole range of new social needs, many of which modern welfare states are poorly prepared to meet".

77-110) “the incomplete revolution”: “the female revolution”), closed, national economies with largely national competition for investment, goods, products and services. Since the seventies, the marriage of the nation-state and the welfare-state has been under powerful internal and external pressures.<sup>92</sup> The social agenda of the eighties and nineties changed radically: after the policies of the golden age of expansion, European welfare states have been shaped by what Paul Pierson termed “politics of austerity”, leading to a context of “permanent austerity” (Pierson 2001a).<sup>93</sup>

Welfare scholars have divergent views about the causes of the current pressures on the welfare state; they agree on a single point, though; we are facing the end of the welfare state as we know it (with Castles’ (2007: 17) reservation that “mapping of the multidimensional aspects of the modern state suggest that we should be wary of generalised trends and generalised conclusions” in mind; see various contributions to recent volumes on the welfare state futures: Powell and Hendricks 2009, Palier 2010a, Castles, Leibfried, Lewis, Obinger and Pierson 2010, Connelly and Hayward 2012a, and Seeleib-Kaiser 2008a; see also Esping-Andersen 1996, Hacker 2002, Ferrera 2005, Pierson 2001a, Scharpf and Schmidt 2000) An interesting question is: does it also mean the end of public higher education as we know it? The answer is fairly positive, although transformations are expected to be gradual and long-term rather than abrupt and short-term. Constructing higher education architectures in Europe took decades, and dismantling (or transforming) them can take decades too; what may increase is the role of an accumulation of small, subtle, gradual, transformative changes (Mahoney and Thelen 2010).

- 
- 92 Dumas and Turner (2009: 49) point out from a longer historical perspective that “in traditional societies with high fertility and low life expectancy, the survival of human beings into old age was a relatively unusual occurrence. There was no significant problem of dependency. ... Old age and retirement are products of the demographic transition (from high to low fertility and increased life expectancy) and industrialization. Citizenship and welfare were, in part, responses to a new situation – how to provide adequate cover for the elderly unemployed where relatives and kinfolk could not be relied upon. The social right of citizenship were then closely tied to compulsory retirement”.
- 93 Consequently, the rhetoric of a “crisis” of the welfare state has been with us since the 1970s. There have also been a growing interest in non-state welfare providers. The OECD report, *The Welfare State in Crisis*, had stated already in 1981 that “new relationships between action by the state and private action must be thought; new agents for welfare and well-being developed; the responsibilities of individuals for themselves and others reinforced” (OECD 1981: 12).

### *Higher education and welfare state debates*

It would be misleading to say that higher education is widely discussed in welfare state debates, for instance, in political sciences. Surprisingly, it is rare to see more than a few parenthetical remarks on education, not to mention higher education, in these debates. The major issue in these debates is the future of the welfare state in very general terms, with both theoretical research and more empirically-oriented studies devoted to healthcare systems and pensions systems (as the two biggest and fastest-growing consumers of tax-based welfare state resources, Rothgang, Cacace, Frisina, Grimmeisen, Schmidt and Wendt 2010), as well as unemployment issues. While there are quite a few papers and studies which closely link higher education and the nation-state, there are very few studies analyzing the links forged between higher education and the welfare-state. On reviewing the existing literature, it should be stated that while the interrelations between nationhood, the nation-state, higher education and globalization are perceived as important for the future of the Humboldtian model of the research university, the parallel interrelations between the potentially redefined post-war social contract between the Keynesian welfare state and higher education – are somehow, in general terms, under-researched. We have extensively discussed this theme in *The University and the State* (Kwiek 2006a); here we will refer only to some of its findings in this domain, so far marginal in higher education research.

There may be several reasons for this omission: an American understanding of “welfare” refers much more to social security, unemployment benefits<sup>94</sup> and social safety nets in general (and education

---

94 See, for instance, an excellent book written at the beginning of the 1990s by Paul Pierson, *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment* (Pierson 1994). Pierson discusses programmatic retrenchment in three sectors: a core sector (old-age pensions), a vulnerable sector (housing policy) and a residual sector (income-support policy). Neither education in general, nor higher education in particular, are discussed in any detail, even though the period analyzed would have shown universities as an excellent research topic. In his “Coping With Permanent Austerity” paper, Pierson provides the following definition of the welfare state: “‘The welfare state’ is generally taken to cover those aspects of government policy designed to protect against particular risks shared by broad segments of society. Standard features, not necessarily present in all countries, would include: protection against loss of earnings due to unemployment, sickness, disability, or old age; guaranteed access to health care; support for households with many children or an

seems to be excluded in most general accounts), and Anglo-Saxon discussions about the dismantling, retrenchment, and restructuring of the welfare state have for the most part been dominating the discussions since the mid-1990s; in a Continental European context, on the other hand, even though the welfare state has been debated, such radical transformations of higher education as those observed in the Anglo-Saxon world (the UK, the USA, Australia, New Zealand, and Canada) have not actually been perceived and analyzed. Additionally, the transnational and neoliberal contexts of thinking about higher education were much less interesting to European scholars than to Anglo-Saxon scholars, often directly affected by new neoliberal educational policies in their own institutions. However, in a Continental European context, one of the major issues to have been discussed was the “European” welfare and the “European social model”, or the future of this model in integrating Europe. Such issues as, for instance, the “minimalist state” promoted in the 1990s by the World Bank and some development agencies in Latin America and in several European and post-Soviet transition countries, the “downsizing” (or “rightsizing”) of the public sector in general, the changing balance between the state and the market in providing public services (including educational services), and the privatization of education (together with, or following, the privatization of the healthcare and pension systems) – are directly related to the future of the

---

absent parent; and a variety of social services – child care, elder care, etc. – meant to assist households in balancing multiple activities which may overtax their own resources” (Pierson 2001b: 420). It is different in the case of Anglo-Saxon studies on the public sector conducted by economists, from the flagship work of Joseph E. Stiglitz, *Economics of the Public Sector* (2000) to Nicolas Barr’s *Economics of the Welfare State* (2004), his *The Welfare State as Piggy Bank. Information, Risk, Uncertainty, and the Role of the State* (2003) and his *Economic Theory and the Welfare State* (2001) where the sphere of education, including higher education, is a key element of the welfare state. We feel attached to the latter tradition of viewing the scope of the term “welfare state”, following a recent idea that after years of the neglect of the study of education as an aspect of social policy, “what is required is a refocusing of the analytical perspective of the comparative welfare state literature in such a way that it systematically incorporates the study of education” (Busemeyer and Nikolai 2010: 494-495). See also Garfinkel *et al.* (2010) for an American context of incorporating education to welfare state studies.

university. But they have largely been absent from the debates about the welfare state in Europe.<sup>95</sup>

Consequently, the link between higher education systems as a significant part of the public sector (under scrutiny globally) and the welfare state has been largely overlooked for, so to speak, structural reasons: in Anglo-Saxon countries education traditionally does not belong in a general sense to the “welfare state”; in Continental Europe, by contrast, in the 2000s, there has been no actual major restructuring – or theoretical thinking about it – with respect to education as part of redefining the future role(s) of the welfare state. Paradoxically enough, it was in Central and Eastern Europe, exposed to the influences of global agencies in redefining their future models of the welfare state and consequently national welfare policies, that the direct link between the new “effective” and “minimal” state on the one hand, with a downsizing of the public sector and a redefined minimal welfare state, and higher education policies on the other, was very much visible in the 1990s (which is an excellent example of “policy borrowing”, or the import of reform packages, as a condition for receiving financial aid in the transition period, see Steiner-Khamsi 2012: 5-8).<sup>96</sup>

---

95 As Gary Teeple in *Globalization and the Decline of the Social Reform* pointed out a decade and a half ago, the privatization of the welfare state could take different routes: “The least visible and yet a widely taken route of privatization is the policy of incremental degradation of benefits and services” (Teeple 1995: 104-5). In the context of the last route, it is worth mentioning that this can be seen in the case of public higher education in many transition countries by looking at the national statistics on public investment in higher education and research and development throughout the 1990s and, in some cases, beyond (on privatization in higher education in Central and Eastern Europe, see Kwiek 2011b, on Central European knowledge production from a European comparative perspective, see Kwiek 2011a).

96 One of the major differences between affluent Western democracies and the European transition countries is that the point of departure for welfare transformations is different. Paul Pierson rightly notes that “in most of the affluent democracies, the politics of social policy centers on the renegotiation and restructuring of the terms of the post-war social contract rather than its dismantling” (Pierson 2001a: 14). In CEE countries, in general terms, there was no social contract to renegotiate and welfare provisions needed to be defined from the very beginning (apart from entitlements in some social areas). Consequently, while the dismantling of the welfare state, especially with strong democratic electoral structures and powerful civil society groups, might not occur in the near future in Western Europe, the process might be long-term and therefore eased by social protection measures, an already “dismantled” welfare state may be built along neoliberal lines in CEE countries without actually renegotiating the postwar European

Thus we argue that in the context of debates about the future of higher education, and of research universities in particular, the close links between higher education, the welfare state and the nation-state have not been emphasized strong enough. Although the university/globalization/nation-state nexus has been thoroughly studied, the parallel nexus of the university/globalization/welfare state is still largely under-researched, the links between the university and the welfare state being somehow underestimated. From our perspective, it is intellectually promising to keep seeing transformations of the university sector closer to transformations of the state in general. Such social scientists as Ramesh Mishra, Gary Teeple and Anthony Giddens emphasize that the welfare state developed and still remains a “national enterprise” (Mishra 1999: 11); that the nation-state was the “political and operational framework of the welfare state. That is, social reforms have been defined and administered as national programs” (Teeple 1995: 18). Or, as Anthony Giddens argued in *Beyond Left and Right: the Future of Radical Politics*, “the welfare state has always been a national state and this connection is far from coincidental. ... Who says welfare state says nation-state” (Giddens 2001: 152).

### *The renegotiation of the postwar social contract*

No matter how we view the origins of current reformulations of the welfare state (more radical in theory than in actual practice in most countries but already perceived in changing national policies, national legislation and the general political attitude taken towards the public sector as a whole, regardless of the specificity of its individual components), and no matter whether we link them to the impact of domestic and internal developments or to external and global forces, these reformulations are here. As Giuliano Bonoli *et al.* phrased it already a decade ago in *European Welfare Futures. Towards a Theory of Retrenchment*,

---

social contract – which was absent there. There is an important difference between the potential dismantling of the welfare state (in Western Europe) and the actual dismantling of the remnants of bureaucratic welfare from the ancient regime (in Central and Eastern Europe). It is extremely interesting to draw parallels between Paul Pierson’s description of welfare state retrenchment in the United Kingdom and the US (in the times of Reagan and Thatcher) and the welfare reforms ongoing in the 1990s in selected transition countries (see especially Barr 1994 and Barr 2005, Lane 2007a, Cook 2007, Inglot 2008, Cerami 2010, Cerami and Vanhuyse 2009).

There are no voices that globalization has increased government power. ... There is general agreement that the forces of globalization have important implications for the volume, the generosity and the composition of contemporary European welfare state provision (Bonoli *et al.* 2000: 65; see also Häusermann 2010, Taylor-Gooby 2004a, Scharpf and Schmidt 2000, Scharpf 2001, Pierson 2001a).

In broad outline, the current state of affairs is the simultaneous renegotiation of the postwar social contract concerning the welfare state and the renegotiation of a smaller-scale, by comparison, modern social pact between the university and the nation-state (or the pact between knowledge and power).<sup>97</sup> The renegotiation of the pact between the university and the state is not clear outside of the context of the renegotiation of the postwar welfare state contract, as state-funded higher education formed one of the bedrocks of the European welfare system.<sup>98</sup>

---

97 There is an accompanying – crucial, although somehow neglected – internal (academic) dimension to the issue as well. There has been a clear interdependence between decreasing state subsidies for universities and academics becoming “entrepreneurs” or “academic capitalists”, as shown by Sheila Slaughter and Larry L. Leslie regarding Canada, Australia, the USA and the United Kingdom. The uniqueness of the institution of the university seems to be less compelling since the above two processes became more widespread (which started in the 1980s). Certainly, the causal arrow goes from *diminished state funding to increased academic entrepreneurialism*, not the other way round. Slaughter and Leslie stress the significance of the participation of academia in the market which “began to undercut the tacit contract between professors and society because the market put as much emphasis on the bottom line as on client welfare. The *raison d’être* for special treatment for universities, the training ground of professionals, as well as for professional privilege, was undermined, increasing the likelihood that universities, in the future, will be treated more like other organizations and professionals more like other workers” (Slaughter and Leslie 1997: 5, on the institutional uniqueness of the university, see also Krücken and Meier 2006, Musselin 2007a, Enders and Musselin 2008, and Slaughter and Rhoades 2004).

98 Jürgen Habermas, Ulrich Beck, and Zygmunt Bauman view the social future of Europe from a wider perspective and provide additional arguments, through their rethinking of the welfare state, to support our point that the transformation of public higher education on a global scale is a gradual, long-term but unavoidable process. Despite coming from different philosophical and sociological traditions, they agree on one point: the transformations of the welfare state we are currently witnessing are irreversible, we are passing into a new age with respect to the balance between the economic and the social. With respect to welfare futures, the emergence of Habermas’ “postnational constellation” carries the same message as the emergence of Beck’s “second, postnational modernity” and Bauman’s “liquid modernity”: the traditional

The related social phenomena relevant for our purposes here are the increasing recommodification of society, the desocialization of the economy, the denationalization of both societies and economies, the deterritorialization and despatialization of economic activities, the changing distribution of risks in society (towards the individual, and away from the state<sup>99</sup>, as well as the emergence of new social risks in post-industrial societies, existing alongside old social risks, see Taylor-Gooby 2004b: 5-13 on “new risks, new welfare”<sup>100</sup>), the growing individualization, the growing market orientation in thinking about the state and public services, the disempowerment of the nation-state, the

---

postwar Keynesian welfare state, with its powerful “nation-state” component, is doomed, and for the three thinkers the culprit behind the end of this social project in Europe is globalization, in its theories and its practices. None of them focuses on the internal developments of the European welfare state (like changing demographics, including the aging of Western societies; shifts in familial structures; the burden of past entitlements within the inter-generational contract between the old and the young, the working and the unemployed etc.); they clearly link the new geography of social risks and uncertainties with the advent of – mainly economic – globalization. See Ferrera (2005: 205-255) on the links between welfare policies and the European integration and Orenstein and Haas (2005: 131-134) on the “Europe effect” on welfare state spending patterns in the future EU candidate countries, clearly differentiating themselves from postcommunist “Eurasian” countries. As they point out, “despite starting with very similar welfare state structures and spending levels, European and Eurasian countries diverged dramatically during the first decade of transition. During the first ten years, welfare state spending increased on average in the European countries, while it stagnated or fell in the Eurasian countries. But why has geography had such a significant effect? ... the answer is Europe” (2005: 133).

- 99 And, as in case of the USA, towards employers as “mini-welfare states”, and as the first line of defense against risk. American “new economic uncertainty” is “risky jobs”, “risky families”, “risky retirement” and “risky health care”, as stated by the subsequent chapter titles of the book by Jacob S. Hacker on the “great risk shift” (2006: 7, see also Hacker and Pierson 2010, Hacker 2002, and Orenstein 2009 on the “privatization of risk”).
- 100 Taylor-Gooby (2004: 2-5) lists four processes linked to new social risks (that is, “the risks that people now face in the course of their lives as a result of the economic and social changes associated with the transition to a post-industrial society”): large numbers of women in paid work and the failing proportion of men who are economically active; the increase in the absolute and relative numbers of elderly people with implications for social care and the cost of traditional welfare state pensions and health services; a tightened link between education and employment, with increasing risks of social inclusion for those with poor education; and, finally, the expansion of private services. At the same time, populations are still facing the old social risks (derived from interruptions to the family wage).

globalization and transnationalization of welfare spending patterns, and the detraditionalization of nationhood and citizenship. They all influence the way welfare services are perceived. Per analogiam, most of them is bound to influence the way higher education services are perceived. And these processes are intensified by globalization. What we can see as the current situation of the welfare state, and how we can see the issue, is largely framed by the processes, phenomena and interpretations that globalization has already brought about.

### **2.3. The Modern University and the Modern Nation-State**

It is the overall argument of the present chapter that current transformations to the state under the pressures of globalization (and under the influence of accelerated Europeanization processes viewed as the reaction to globalization and internationalization pressures) will not eventually leave the university unaffected, and consequently it is useful to discuss the future tasks and mission of the university in the context of the current global transformations of the state. This context seems fruitful for higher education studies. Just to signal further developments: the legitimacy of, and loyalty towards, modern liberal democratic welfare states is under severe stress today and the whole idea of a (European) postwar “social contract” between the state and its citizens is widely debated. The sovereignty of the state has traditionally meant also the sovereignty of national educational policies and full state support for nation-state oriented universities (from their inception as modern institutions bound by a “pact” with modern nation-states). The university used to provide the modern nation-state with “a moral and spiritual basis” and professors, as Gerard Delanty argues in *Challenging Knowledge. The University in the Knowledge Society* along Humboldtian lines, “constructed themselves as the representatives of the nation” (Delanty 2001: 33, 34).

#### *The “nationalization” of European universities and globalization*

As we argued in (Kwiek 2006a), national education systems were created as part of the state forming process which established the modern nation-state.

They were born when states based on absolutistic or monarchical rule gave way to the modern nation-state: as Andy Green stresses in his *Education, Globalization, and the Nation-State*, the history of “national education” is thus very much the history of the “nation state in formation” (Green 1997: 131). National education systems contributed to the creation of civic loyalties and national identities and became guardians for national languages, cultures, literatures and consciousness. The modern university and the modern nation-state went hand in hand, or were parts of the same wider process of modernization (and we mean here two Continental models: the Humboldtian and, to a lesser extent, the Napoleonic one). Consequently, reconfigurations of the modern nation-state today (mostly, but not exclusively, under the pressures of globalization) are bound to affect the modern institution of the university. State-sponsored mass education was in modernity the primary source of socialization facing the individual as citizen of a nation-state (see Spybey 1996). European nation-states were engaged in authorizing, funding and managing education systems, including higher education, to construct unified national policies. The knowledge-power relationships were very strong in both models of the university.

The crucial step in the historical development of European universities is what Guy Neave termed the process of their “nationalization” – bringing the university formally into the public domain as a national responsibility. With the rise of the nation-state, the university was set at the apex of institutions defining national identity (Neave 2001: 26). The emergence of the universities in Berlin and in Paris marked the termination of the long process for the incorporation of the university to the state (Neave 2001: 25). The process of the “nationalization” of the university settled the issue of what the role and responsibilities of the modern institution in society should be. The emergent nation-state defined the social place of the emergent modern university and determined its social responsibilities. The nation-state determined the community to which the university would be answerable: it was going to be the national community, the nation. The services and benefits the unitary and homogeneous nation-state gradually, and over the passage of time, placed at the disposal of society went far beyond education and included e.g. generous healthcare systems and old-age pension schemes. Nowadays, as the redefinition of material foundations of the welfare state in general progresses smoothly (and mostly in an unnoticeable manner e.g. through new legislation) in most parts of the world, social contracts with regards to these (and possibly other) areas of

state benefits and state-funded services may have to be renegotiated, significantly changing their content, range and the validity of the contract itself. In many respects, higher education (in the European transition countries in the 1990s) seemed to be an experimental area and a testing ground on how to reform the public sector; both healthcare and pensions systems were being experimented with as well but on a smaller scale, both in theory and in practice.<sup>101</sup>

Increasingly, at the beginning of the 19<sup>th</sup> century, culture in the sense of *Bildung* (until then more related to the development of the individual as the individual and not to the individual as the citizen) became mixed with political motivations and aspirations, focused around the notion of the German national state (Wittrock 1993).<sup>102</sup> In a global age, these motifs have been put under pressure. Forging national identity, serving as a repository of the nation's historical, scientific or literary achievements, inculcating national consciousness and loyalty to fellow-citizens of the nation-state do not serve as the rationale for the existence of the institution of the university any more. But also the production of a "disciplined and reliable workforce" is not fulfilling the demands of the new global economy which requires workers with the capacity to learn quickly and to work in teams in reliable and creative ways, Robert B. Reich's "symbolic analysts" – as Raymond A. Morrow and Carlos Alberto Torres emphasize (Morrow and Torres 2000: 33). At the same time, the disinterested pursuit of truth by curiosity-driven

---

101 The biggest empirical evidence about the direction of changes in the transformation of the public sector were various "structural adjustment" programs in developing and transition countries which required the states taking the IMF or World Bank loans to e.g. reduce public expenditures, reduce consumer subsidies, eliminate price controls, drastically reduce tariffs, charge users for public services and privatize public enterprises and social services (see Carnoy 1999: 49, Ferge 2001). Similarly, higher education policies were affected through the processes of "policy borrowing and lending" (Steinmer-Khamsi 2012). With respect to education, structural adjustment policies were linked to globalization to the extent that "all strategies of development are now linked to the imperatives of creating stability for foreign capital" (Morrow and Torres 2000: 43). Recipient governments were encouraged to adopt policies which Thomas L. Friedman termed "the Golden Straitjacket".

102 We present detailed arguments combined with reading of the relevant works by Wilhelm von Humboldt, Johann Gottlieb Fichte, Friedrich Schleiermacher, and Friedrich W. J. Schelling as well as the discussion on the German "idea" of the university between Jürgen Habermas and Karl Jasper in Kwiek 2006a: 80-136, in a Chapter: "The Idea of the University Revisited (the German Context)".

scholars in the traditional sense of the term is no longer accepted as a general *raison d'être* for the institution either.

Consequently, no matter whether we focus more on the cultural unity of the nation or on the political unity of the nation as the two distinct driving forces behind the development of the modern university, both motifs are dead and gone in post-national and global conditions. Neither serving truth, nor serving the nation (and the nation-state) can be the guiding principles for the public subsidization of the institution today, and neither of them are even mentioned in current debates at global or European levels. What increasingly counts is its economic “relevance”, and its possible contribution to economic growth (see Brennan 2007, Brennan 2002, Välimaa 2009, Välimaa and Ylijoki 2008). Today, not only the two traditional missions of the modern university are subject to far-reaching renegotiations (education and research), but also various third missions, such as the public service mission (American “service to the society” mission, the regional mission, the innovation mission etc.) are subject to further reformulations (see Välimaa 2008a, Trani and Holsworth 2010: 1-46, Jacoby and Associates 2009, Kezar, Chambers, Burkhardt, and Associates 2005, Weber and Bergan 2005, Harding, Scott, Laske, and Burtscher 2007, Pinheiro, Benneworth and Jones 2012). For example, a key question arises, to what extent current transformations lead directly or indirectly to “academic capitalism in the new economy,” or – in other words – to what extent they have played a key role, for more or less a decade, in the formation of what Sheila Slaughter and Gary Rhoades termed the “academic capitalist knowledge/learning regime”. (In short, as they argue, American universities do not intend to become private enterprises – they want to maintain the status of a non-profit institution while operating fully under the rules of the market in the private sector, see Slaughter and Rhoades 2004: 306 ff).<sup>103</sup>

---

103 Market behaviors of universities are no longer confined to science and engineering and are not imposed from the outside. The state subsidizes new relationships between academic institutions and economy: academic capitalism pervades the entire university which operates in new networks connecting universities with corporations and government agencies. The starting point of Slaughter and Rhoades analysis is the gradual blurring of boundaries between higher education, the market and the state, and the processes of blurring the boundaries between the public and the private sector in which universities themselves play a crucial role (Slaughter and Rhoades 2004: 27): "these boundaries between private and public are fluid: colleges and universities, corporations, and the state (of which public universities are a part) are in constant

## *Universities and “constructing organizations”*

The process of the “nationalization” of the university (Neave 2001) has come to a close right now, together with the advent of globalization (but its end was also closely associated, on a different plane, with the massification and then the universalization of higher education). Globalization processes (and their consequences) increasingly separate the university from the state and, at least potentially, convert it into an important factor of economic competitiveness (Kwiek 2011a, Kwiek 2012c). It is enough to view from this perspective the rhetoric of the analysis of the knowledge economy (in conjunction with the systems of education and the basic dimensions of the pillars of competitiveness), and the components of European and global economic competitiveness rankings. Higher education and research, development and innovation systems are at the core of such rankings. Suffice it to look from this perspective at the components of studies on the progress in the implementation of the EU's Lisbon Strategy or the components of pillars of economic competitiveness, as measured annually by the World Economic Forum in the Global Competitiveness Index GCI (*Global Competitiveness Index, Business Competitiveness Index 2011-2012*, or in the *World Competitiveness Scoreboard 2011*). In all three indexes, the role of higher education and science and innovation systems is of crucial importance.

The processes of globalization disentangle the university from the state, turn the university potentially into a major contributor to the global economic competition and increasingly impose on it corporate models of organization (Bastedo 2012a, Kezar 2012, Krücken, Kosmützky and Torca 2007b, Musselin 2007a, Rhoades 2007, Bastedo 2007, Drori, Meyer and Hwang 2006, Krücken and Meier 2006, Kezar 2001, and Eckel and Kezar 2003). Public sector reforms throughout the Western world can be viewed as “turning public services into organizations” and as attempts at “constructing organizations” (reforms being of a “constructive nature”), as Brunsson and Sahlin-Andersson (2000; reprinted in Brunsson 2009: 44) argue:

Constructing organizations involves the setting up or changing of entities in such a way that they come to resemble the general and abstract concept of

---

negotiations. ... The ‘firewall’ that once separated public and private sectors has become increasingly permeable”. At the same time, the *public good knowledge regime* exist in parallel with *academic capitalist knowledge regime*, within the same system, and, it happens, even within the same institution.

organization. ... traditional public services in many countries have lacked some of the key aspects of organization. They can be described, at the most, as conspicuously “incomplete” organizations. When existing services have been compared with the organization concept, their incompleteness in organizational terms have become obvious, and they have seemed to call for reforms to render them – in this sense – more complete. In fact, many public sector reforms can be interpreted as attempts at constructing organizations. This interpretation provides some clues as to why the reforms occurred at all, why they acquired their particular content, and how they were received.

Consequently, the social mission of the university is under scrutiny and, as Neave points out, such processes as privatization, deregulation and accountability in higher education appear to be moving the university “without the slightest shadow of a doubt towards a new definition of its responsibilities” (Neave 2000: 23). The possible new future contract between the society and the state on the one hand, and the university on the other hand will certainly include points directly related to the academic profession – whose current social status, working and employment conditions are already under scrutiny. The direction of these changes can already be imagined from numerous studies of the academic profession from a global perspective. Literature shows that the processes affecting the state mean that it is *repositioned, recontextualized, transformed, reconstituted, re-engineered, restructured, displaced, rearticulated, relocated, re-embedded, decentered, reconfigured, reshaped, eroded* etc., and we are witnessing its *end, hollowing out, withering away, demise, decline, collapse* etc.<sup>104</sup> (Which does not have to mean that the actual spending on the welfare state is being cut: as Castles (2007: 16-17) reports from a large-scale comparative project on retrenchment, “the evidence for globalization-induced cutbacks in expenditure turns out to be as weak as the evidence for a dramatic reversal of trajectory

---

104 As Ulrich Beck (2005: xi) pointed out, we Europeans act as if various European countries still existed. But “they have long ceased to exist, because as soon as the euro was introduced – if not before – these isolated nation-state containers of power and the equally isolated, mutually excluding societies they represented entered the realm of the unreal. To the extent that Europe exists, there is no longer any such thing as Germany, or France, or Italy, or Britain, and so on, as these exist in people’s heads and in the picture-book accounts of the historians. This is because the borders, responsibilities and exclusive experiential spaces on which this nation-state world was based no longer exists”. See also cosmopolitan visions of Europe and the structural blindness of sociology towards Europe and its inability to leave the nation-state paradigm in Beck and Grande, 2007: 94 ff.).

across most categories of spending. Not only has the state not disappeared, but the main account offered for that phenomenon fails nearly all the tests asked of it". But the reviews of empirical data follow both major hypotheses: the "compensation hypothesis" – in which financial globalization (as economic openness) and welfare efforts are mutually reinforcing – and the "efficiency hypothesis" which supports negative relationships between globalization and social expenditure. For instance, Vis, van Kersbergen, and Hylands 2012: 9, reflecting on the impact of the financial crisis on the pressures to reform the welfare state across Europe, note that "we do catch sight of the fact that the issue of radical retrenchment is capturing the political agenda in many a nation").

### *Post-industrial societies and the foundations of the welfare state*

The loyalty of citizens of nation-states is closely related to this bilateral agreement (never fully codified) between citizens and the state. Should the nation-state be threatened, so also will be its role as the primary guarantor of citizenship rights. Redefinitions of what is fair and just in a society within benefits of the welfare state are the easiest way out of difficult situations but they undermine the "personal sense of security and identity as well as social solidarity." There appear powerful tensions between "social protection" and "global connection"; as a result of globalization processes, there appears "an unprecedented pattern of social risk" (Powell and Hendricks 2009: 8-10), as the editors of *The Welfare State in Post-Industrial Society. A Global Perspective* put it (see Ferrera 2005, Taylor-Gooby 2004a, and Pontusson 2005). Renegotiations of the foundations of the welfare state affect the roots of the nation-state – especially the foundations of the social citizenship. As Esping-Andersen (2009: 1) summarized recent fundamental changes,

The past few decades have been marked by turbulent change. Turbulent indeed, since the well-trodden corner stones of society, as described in any standard textbook, are eroding as new principles of social life emerge with a thrust that few would have expected. The "logic of industrialism" used to be a forceful synthetic concept for what propelled our life as workers, our place within the social hierarchies, and the kind of life course we could expect to follow. As, now, two-thirds of economic activity is centred on servicing, the concept is clearly outmoded.

The post-industrial society shatters the foundations of welfare state assumptions of the industrial society, with new social risks and new social

challenges. All four dimensions of the modern state are affected (the territorial state, the constitutional state, the democratic nation state, and the interventionist state, as Hurrelmann *et al.* show: “different state functions are threatened to a greater or lesser degree, and subjected to pressures from internationalization of varying intensity”, 2007b: 9). The golden-age nation-state is hugely affected by internationalization and globalization processes (Hurrelmann *et al.* 2007c: 193-205). Globalization processes and increasing international economic integration seem to be changing the role of the nation-state: the nation state is gradually losing its power as a direct economic player (this is one of the elements of the neoliberal transformation in thinking about the economy in developing countries which seek both ideas and funding for their reforms) and, at the same time, it is losing a significant part of its legitimacy as it appears not to be willing, or able, to provide the welfare services seen as the very foundation of the postwar welfare state. Nation-states seem to prefer not to use the financial space of maneuver still left to them, even if they could be much more pro-active than reactive with respect to the impact of globalization on public services, including higher education (the key role played by voting and voters need to be mentioned here, see Swank 2002, Swank 2010, and even more importantly, the key role of “welfare attitudes”, as a recent large-scale comparative study led by Stephan Svallfors shows, 2012b: 1-24).<sup>105</sup>

### *Financial pressures, ideological pressures*

Western liberal democracies are reforming (or trying to reform) all their welfare state institutions, and the modern university, as a significant claimant to public resources, is a significant part of the public sector. If we

---

105 There is an important difference between the developed and the developing world, as Layna Mosley highlights in *Global Capital and National Governments* (2003: 3): in the developing world, “the influence of financial markets on government policy autonomy is more pronounced. The risk of default in developing nations renders financial market participants more likely to consider a wide range of government policies when making investment decisions. Developing – or emerging market – nations are, by definition, lacking in capital endowments. They have greater needs to attract investment from abroad and, therefore, are more susceptible to capital market pressures”. In a similar vein, postcommunist transition economies were heavily dependent on international aid agencies in reforms of the 1990s, with numerous explicit and implicit conditionalities in force, restricting the range of policy options available.

assume an extended view of the welfare state which includes education, then higher education (and its contribution to the reduction of economic inequality and lowering economic insecurity through education and skills) is a very expensive component of the modern welfare state. The costs of both teaching and research are escalating,<sup>106</sup> as are the costs of maintaining advanced healthcare systems (Rothgang, Cacace, Frisina, Grimmeisen, Schmidt, and Wendt 2010) and pension systems for aging European populations (in the vast majority of countries in Europe, there are still *pay-as-you-go* systems, based on inter-generational solidarity – as opposed to *multipillar* systems, based on several parallel, mandatory and voluntary pillars, emerging increasingly on a global scale). As Dumas and Turner (2009: 50) argue, “pensions imply a social contract between the individual and society. ... It is well recognized that the welfare states of Europe have rested on an explicit social contract between generations”. Now all segments of the welfare state are under new, mostly unheard of before, and mostly financial, pressures.

In addition to financial pressures, however, there are also ideological pressures that come mainly from global financial institutions and international organizations involved in the analysis of the broader public sector services. They tend to disseminate the view – in different countries to different degrees, but most strongly in Anglo-Saxon countries, with Great Britain at the forefront – that the public sector is less efficient than the private sector; that its maintenance costs exceed the social benefits brought by it; and, finally, that it deserves less unconditional social trust combined with an unconditional public funding. This lack of confidence in the public

---

106 In research, as evident from both data and historical studies of science in the last three centuries, the costs are ever-increasing: as John Ziman (1994: 53) argues, “scientific and technological progress is not merely the outcome of past research: it continually raises the level of resources required for further research. ... In spite of all time-saving techniques and labour-saving devices, the sheer cost of producing a recognizable scientific discovery or technological invention steadily increases” A history of rapid, unimpeded growth seems to be over: “ever since modern science ‘took off’ in the seventeenth century, it has been a growth industry. Knowledge and technical capabilities have not only accumulated steadily: the rate of accumulation has also accelerated over time. The scale of all scientific and technological activities has continually expanded. Every measure of these activities – numbers of people engaged, resources employed, output of published papers and patents, commercial and industrial impact, etc. – seems to have been increasing exponentially for the best part of three centuries” (Ziman 1994: 67).

sector in general is observed in studies on social trust in the representatives of that sector, in the research on the willingness of the electorate to raise the level of personal taxation, and in the research on the level of satisfaction with public services provided by the public sector. So alongside undoubtedly financial pressures – universities have to simultaneously deal with the effects of changes in the beliefs of European electorates (both “welfare attitudes” and “university attitudes”), of key importance for changes in positions of political parties. As Fritz W. Scharpf and Vivien A. Schmidt summarized a decade ago several years of their studies on the welfare state subjected to the pressures of economic competitiveness, pointing to the key role of political choice:

Welfare states remain internationally viable only if their systems of taxation and regulation do not reduce the competitiveness of their economies in open product and capital markets... . Within these economic constraints, however, the overall size of the welfare state and the extent of redistribution remain a matter of political choice (Scharpf and Schmidt 2000: 336; see also Swank 2002, Swank 2010, as well as van Oorschot and Meuleman 2012)

In this context, one way that globalization has had a major impact on education has been through what Martin Carnoy (1999: 37-46) termed “finance-driven reforms” (as opposed to “competitiveness-driven reforms” and “equity-driven reforms”, the main goal of which is to reduce public spending on education and to raise the share of private funds in education spending). We can analyze those trends in the statistical data from the OECD area for the last decade (see the OECD *Education at a Glance* series or recent CHEPS reports on governance and funding reforms across Europe: CHEPS 2010a, CHEPS 2010b, CHEOPS 2010c). As Carnoy argues (1999: 52), the former set of reforms may contribute to the shortage of public resources for education “even when more resources could be made available to education with net gains for economic growth”.

Linking economic and social change to changes in how societies produce and transmit knowledge, as Carnoy and Rhoten (2002: 1) argue, is a relatively new approach to studying education. Before the 1950s, comparative education focused mainly on the philosophical and cultural origins of educational systems: the educational change was seen as resulting from changing educational philosophies. In the 1960s and 1970s this view was challenged by various historical studies in which educational reform was situated in economic and social contexts. Today, they claim, it is the phenomenon of globalization that is providing a new empirical challenge and a new

theoretical framework for rethinking higher education: “one point is fairly clear. If knowledge is fundamental to globalization, globalization should also have a profound impact on the transmission of knowledge (Carnoy and Rhoten 2002: 2). And the impact of globalization on the transmission of knowledge is the impact of globalization on, *inter alia*, higher education and educational institutions. Carnoy argues elsewhere (1999: 14) that although education appears to have changed little at the classroom level, globalization is having a “profound effect” on education at other levels. But at the heart of the relationship between globalization and education is the “relationship between the globalized political economy and the nation-state” (Carnoy and Rhoten 2002: 3). This major shift of concern by today’s states is towards economic and global concerns at the expense of social and domestic ones, which makes the state completely different from what Bob Jessop called once “The Keynesian National Welfare State” (Jessop 1999: 348). What it may mean in practice is a shift in public spending and monetary policies: from measures favoring workers and consumers to those favoring (global) financial interests. Or as Carnoy and Rhoten (2002: 3) put it, “globalization forces nation-states to focus more on acting as economic growth promoters for their national economies than as protectors of the national identity or a nationalist project” (certainly, the global financial crisis may turn any firm statement into mere speculations, as we are warning several times in this book).

Consequently, the role of universities seems quite different from these two perspectives: the traditional (modern, national) perspective saw universities as useful instruments for inculcating national identity and the new (post-national, global) one sees universities as (equally useful) instruments in promoting economic growth and boosting national economies.<sup>107</sup> At the same time, the debate on the institutional change in

---

107 Things seem to have changed from a quantitative rather than a qualitative perspective. As Geuna and Muscio (2009: 102) argue, “universities have always made a significant contribution to economic development; however, the scale of current university research and the increased reliance on knowledge in the production process have created strong incentives for a more efficient way of transferring the discoveries made in academia to the business world. The partially tacit nature of knowledge, the importance of the social capital/networks of connections of scientist and the difficulty involved in pricing knowledge ... have complicated the design of a governance structure that creates the right incentives for academics to improve KT [knowledge transfer from universities] without damaging the traditional role of the university as a knowledge producer and a locus of higher education”.

universities today comes as part and parcel of a much wider debate on the institutional change in the public sector today (and state intervention in, or provision of, different, traditionally public, services).<sup>108</sup>

## 2.4. Conclusions

There are four tentative conclusions. Firstly, traditional relationships between higher education and the state are changing, and the main forces of change are globalization-related (and, in Europe, Europeanization-related). Globalization processes affect the institution of the university mainly indirectly while the processes of European integration affect it mostly directly. The changes are occurring on a global scale, the patterns of transformations are very similar indeed, even though national and regional

---

108 The key word here is “institutional change”. In research literature, there are several basic types of institutional change within the institutional model assumed here (five types in Streeck and Thelen 2005: 18-33, two types in Thelen 2003: 225-230, three types in Pierson 2004: 137-139). We would refer here to four types: institutional displacement (the removal of existing rules), layering (the introduction of new rules on top of or alongside existing ones), drift (the changed impact of existing rules due to shifts in the environment) and conversion (the rules remain formally the same but they interpreted differently, see Mahoney and Thelen 2010: 15-18, Thelen 2003: 225-230). Gradual institutional changes in higher education can be analyzed with the aid of all four types. In the case of Polish transformations, elements of each of the four type of change can be analyzed. In each case, the key element of research is the study of interactions between characteristics of the political (social, economic) context of the institution and characteristics of the institution itself. Different institutional environments coexist with different change agents and types of strategies taken. In the Polish case, an example of institutional layering is the introduction of private higher education to the educational system, alongside public higher education (similar to the introduction of a multipillar pension system alongside a traditional pay-as-you-go system). Each new element in itself may be a small change but small changes may accumulate and lead to large-scale changes, and institutions are subject to permanent social controversy, negotiations, and reinterpretations (Hall 2010: 216-19, see Martens *et al.* 2007, Paradeise *et al.* 2009, Neave and Van Vught 1994). Apart from the focus on more obvious, large-scale institutional transformations, we should focus on the theoretical and empirical analysis of cumulative small changes in the system of higher education in Poland, in a broad context of global and European transformations. The theory of gradual institutional change as a theoretical point of departure is open to modifications and corrections, as well as testing procedures through case studies from various geographical areas and institutional sectors.

differences do exist.<sup>109</sup> Higher education is likely to be strongly affected by these globalization-related processes mainly through the indirect impact of the ongoing transformations to the state. Thus the effects of globalization on the university are to a large extent indirect, via the transformations of the state.<sup>110</sup> As Peter Scott (2005: 47-48) summarized the threats of globalization to universities, there are three immediate threats: the first is the threat “to the exclusive privileges granted to universities by the state – as the providers of higher education”, the second is the threat “to traditional patterns of governance”, and the third is to the funding of higher education (which we view as the most important throughout this book). As he argues, consistently with arguments in this chapter,

as the welfare state struggles to preserve core services – for example, in basic education, health, and social security – universities may find that their current funding base is increasingly eroded. ... The autonomy traditionally enjoyed by universities, and their consequent semi-detachment from state bureaucracies, have made them especially vulnerable to these new experiments in “semi-detachment” (in other words, reduced availability of state subsidy. The upward pressure on tuition fees in “state” universities is perhaps an example of this phenomenon (Scott 2005b: 48).

Secondly, public higher education worldwide is a much less exceptional part of the public sector than it used to be a few decades ago: either in public perceptions, or in organizational and institutional terms (governance and funding modes), or both. This disappearing – cultural, social, and economic – exceptionality of the institution of the university will heavily influence its future relations with the state which, on a global scale, is increasingly involved in reforming (or thinking about reforming) all its public services

---

109 See isomorphism in John W. Meyer’s and Francisco O. Ramirez’ works over the years; according to them, “the university is a world institution, and that leads to isomorphic changes: educational systems in the world, as time goes on, are getting more and more similar” (Meyer, Ramirez, Frank and Schofer 2007: 193).

110 We are following here Roger Dale in “Specifying Globalization Effects on National Policy: a Focus on the Mechanisms” who argues that while states have retained their formal territorial sovereignty more or less intact, they have all, to a greater or lesser degree, lost some of their capacity “to make national policy independently. ... Absolutely central to arguments about the effect of globalization on public services like education is that those effects are largely indirect; that is to say, they are mediated through the effect of globalization on the discretion and direction of nation states” (Dale 1999: 2; on Europeanization, see Dale 2007, Dale 2008a, Dale 2008b, and Dale 2009d).

(see Musselin 2007a, Krücken and Meier 2006, and Maassen and Olsen 2007 on universities as “specific” organizations).

Thirdly, further reforms of higher education in Europe – both in terms of teaching and research – seem inevitable, as the forces behind these changes are global in nature and similar in kind throughout Europe. The forces of change are similar, although their current influence varies from a country to a country, and from the world region to the world region. In Europe, they seem structurally similar, although they seem to act through various “national filters” (Gornitzka and Maassen 2011). The creation of mass higher education is no longer a dominant goal of states and governments as it has already been achieved: there are many other, competing, social needs today, though. And even in the context of “knowledge economies”, the knowledge in question does not have to be – although still can be – the knowledge as currently produced and disseminated by traditional public universities, as testified to in a European setting by the documents about the future of the institution prepared for discussion by the European Commission over the last ten years.

And fourthly, it is certainly not enough to understand today that reforms of teaching and research institutions for emergent knowledge societies are definitely needed, in different countries to different degrees; the point is to see why these institutions need to be changed, and why we need to take into account the issues of the state, public services it provides, and the market setting in which they are bound to operate. It is increasingly difficult to understand the dynamics of possible future transformations in higher education without understanding the transformations of the social world today, including transformations to the state in both forms studied in this chapter, the welfare state and the nation-state. And as one of the most striking features of the new world order is its increasingly global nature, neither policymakers nor policy scholars in higher education can ignore the far-reaching (and still undefined) impact of the ongoing transformations of the state on the traditional educational business.

It is hard to imagine that the university could remain an isolated island in a sea of transformations of all other public sector institutions and of the very foundations of modern states. New ideas of functioning of the state indirectly give life to new ideas of functioning of universities – which in Continental Europe have traditionally been heavily, directly or indirectly, dependent on public funding. Another dimension which determines the inevitability of changes of the university sector is demography: the

massification, and in many countries, the universalization of higher education, has a powerful impact on the core academic activities. One can say briefly about European welfare state models: things will never be the same (see Glennerster 2010, Pestieau 2006, Palier 2010a, and Greve 2012). Presumably, the same can be said about the future of European universities, keeping in mind the multi-dimensionality of these transformations, and their powerful embodiment in the cultural traditions of particular nation states and their strong dependence on the pace of changes taking place across the public sector and the long-term financial projections for this sector.

However, the university is eight hundred years old and the modern university is burdened with two hundred years of its history – and its role in the society and the economy continues to grow. Never in its history has the university been so intensively funded, and never before has it had such a huge number of graduates; it has never been cooperating so closely with the economy, and it has never before been such a powerful economic player, powerful investor and large-scale employer. Never in its history has the university been analyzed in so much detail and compared, on a national, regional and finally global, scales. Never before has it been raising such a sustained, both general public's and policymakers', interest (often combined with sustained criticism). The academic community must unconditionally believe that despite the current turmoil, the university as a highly resilient and adaptive institution can go on further even more strengthened – without losing its traditional mission. But, on the other hand, the academic community should not believe that in the face of a radically changing world and its public and private institutional arrangements, only one institution, the university, will remain unchanged. Sharing that believe would be fundamentally naive, and this book, especially in its second part based on large-scale empirical material taken from multi-year, international, comparative research projects, attempts to show some directions of possible changes.

## Chapter 3

# **The University and the Welfare State in Transition: Changing Public Services in a Wider Context**

### **3.1. Introduction**

The chapter, as a preceding one, is also of a largely contextual nature: it relates current transformations in higher education in European economies to current transformations of the public sector in general, and links changes in higher education to changes in other public services provided within traditional European welfare states. In particular, it links ongoing discussions about the future of the welfare state under the pressures of globalization and changing demographics towards aging populations to discussions about the future of public investment in higher education and to the wider question of the production and reproduction of the institution of the university. In particular, first, it discusses the position that the World Bank is taking with respect to both the state, public sector reforms and higher education reforms, both in general and for transition economies, and highlights the contrast between its publications on the future of the welfare state and on the future of public higher education. The World Bank has been particularly institutionally involved in both the conceptualization and the implementation of reforms of major public services, especially but not only in developing and transition countries: the reforms of education (including higher education), healthcare, and old-age pensions. Further, the chapter discusses the state's changing fiscal conditions and major competitors of higher education among welfare (and other) services, especially in the European transition countries. It links the question of the reformulation of the pact between the nation-state and the modern university to the issue of the renegotiation of the postwar welfare contract in general, as discussed already in Chapter 2. It refers to the exceptionality of Europe from a global perspective: a characteristic feature of "Europe", and especially the European Union, in the eyes of the world being, as it seems, the "European

social model”).<sup>111</sup> The chapter finds it useful to view higher education in the context of changing welfare state policies as higher education is a significant part of the public sector and welfare state services, in general, have been under severe pressures, both on the theoretical and practical levels, across the European continent. The chapter also analyzes the privatization processes in higher education, especially in Central and Eastern Europe. Finally, tentative conclusions are given.

## 3.2. The welfare state, globalization, and the public investment in higher education

### *The reformulation of the welfare state as we know it*

Social scientists have different detailed views about the causes of the current pressures on the traditional Keynesian postwar European welfare state regimes (to different degrees and with different intensity; see Powell and Hendricks 2009, Leibfried 2001, Scharpf and Schmidt 2000, Pierson 2001b, Iversen 2005, Taylor-Gooby 2004a). They seem to agree on a single point, though: Europe is facing a radical reformulation of the welfare state as we know it from most industrialized nations. There does not seem to be a major disagreement, broadly speaking, about the future of the welfare state in its current European postwar forms: its foundations, for a variety of internal and external reasons and due to a variety of international and domestic pressures, need to be renegotiated today (Obinger, Starke *et al.* 2010, Seeleib-Kaiser 2008a, Palier 2010a, Palier 2010b, Greve 2012; Mishra 2011, Pierson 2001a). European societies can expect a new social contract (initially within their national states) which may gradually revise social and economic assumptions of the post-war welfare state, as we have argued in the preceding chapter. “Globalization has produced a distinctive phase in the history of aging and the welfare state, with tensions between nation-state-

---

111 As Giddens (2006: 14) pointed out, the European welfare states are “often regarded as the jewel in the crown – perhaps the main feature that gives the European societies their special quality. ... The ‘European social model’ is, or has become, a fundamental part of what Europe stands for”. Or as Svallfors (2012: 1) opens his report on welfare attitudes in Europe based on a large-scale comparative project (using the European Social Survey dataset), “the welfare state in many ways can be seen as a particular trademark of the European social model”.

based policies concerning demographic changes and those formulated by global actors and institutions”, as Phillipson (2009: 62) argues. Two different positions about the impact of globalization on the post-war welfare state in Europe can be distinguished in research literature (as for the impact of demographic processes, there is full agreement – they constitute a key dimension of the coming transformations to the welfare state, see Powell and Hendricks 2009): according to the first position (Scharpf 2000a, Scharpf 2001: 145, Schmidt 2000, Scharpf and Schmidt 2000: 1-20 and 310-336, Mishra 2011, and Mishra 1999), globalization is the most important factor determining its shrinking or demise, and its processes of redefinition; according to the second position, globalization is an important but not critical factor determining welfare state futures (Bonoli and Palier 2001, Ferrera *et al.* 2001, Leibfried 2001, Castles, Leibfried, Lewis, Obinger and Pierson 2010, Obinger and Zohlnhöfer 2007). In particular, out of the three main current directions in comparative European welfare state research (“categorization and cluster formation”, derived from Esping-Andersen’s ground-breaking *The Three Worlds of Welfare Capitalism*, 1990; “retrenchment” or “the crisis discourse”, associated with the studies of the globalization-welfare state nexus; and the “path dependence and convergence” direction, Schubert *et al.* 2009b: 4-8), at least the second and the third ones assume the critical role of globalization (and Europeanization) in determining welfare state(s) futures. There seems to be no major disagreement about the future of the (European) welfare state in the existing post-war forms: due to various internal and external pressures and the combination of global, international and national factors, its foundations are expected to be – with varying strength in different countries – renegotiated. However, what is of key importance for our concerns in this chapter, the renegotiation of the welfare state in question also includes, in its small fragment and on the occasion of broader public sector reforms, higher education. The idea of the welfare state will continue, albeit in modified, adapted forms. Major differences between social scientists researching the area of welfare state are based on different explanations about what has been happening to the European welfare state regimes since the mid-1970s until now, about different variations and paths of restructuring in different European countries, and different degrees of emphasis concerning the scope of welfare state downsizing in particular European countries in the future.

### *Globalization and the welfare state*

The impact of globalization on the welfare state is thus an issue that divides welfare scholars (see Leibfried and Obinger 2001, Rigier and Leibfried 2003, Genschel 2004: 632; see Kwiek's distinctions between globalists, skeptics, and moderates, 2006a: 169-214). The way of perceiving issues related to potential and current reforms of the welfare state and the way in which we grasp the problems as problems and we take solutions as solutions affect the way of perceiving various social phenomena and processes (such as, already mentioned in this book, the processes of recommodification of society, desocialization of the economy, denationalization of economies and societies, and despatialization and deterritorialization of economic activity, the changing distribution of risk in the society, etc.). As known from organizational studies, reforms need problems and reforms need solutions: a supply of problems needs to be complemented with a supply of solutions, preferably more or less ready solutions. As Brunsson argues:

reforms benefit from problems. The perception of problems in the present functioning of an organization can initiate the search for reforms and offer a strong incentive for attempts to implement them, as well as providing arguments for convincing those whose support is needed. ... Problems are not enough to trigger administrative [organizational] reforms. A supply of ideas for solutions is also needed, solutions which deal with organizational structures, processes, and ideologies and which differ from the solutions presently practiced. Solutions, like problems, can be fabricated by those who wish to pursue reforms; but the task of reformers is easier if a supply of more or less ready solutions is available. Solutions can exert an attraction on those who pursue reforms and on those who are affected by them (Brunsson 2009: 96).

These processes, if not directly result from globalization, are at least intensified by it. The question debated today is not whether recasting the European welfare state has come to be seen as necessary by the national governments of most affluent Western democracies, international organizations (such as the OECD), global organizations and development agencies (such as the World Bank) and the European Commission<sup>112</sup>. The

---

112 For international and supranational organizations, "globalization" throughout the 1990s and the 2000s was a key word (Henry *et al.* 2001: 19) "with which to interpret the enormous economic, political and cultural changes characterise human society at the beginning of the 21st century". The term was used as a basic point of reference in discussions between the social sciences and the world of politics. Obviously, there were numerous other broad concepts and corresponding theoretical terms which could

question rather is why it is seen as necessary, and the answers include globalization-related economic integration, demographic changes, changes in societal norms, changes in family patterns etc. As Maurizio Ferrera explained the fundamental logic that is guiding policy solutions to the reform processes of the welfare state today: “system-wide searches for novel, economically viable, socially acceptable and politically feasible policy solutions are underway” (Ferrera 2003: 596). Solutions should be both fundable and socially and politically acceptable. Transition from industrial to post-industrial societies has “fundamentally challenged social policy arrangements of Western welfare states. ... In particular, the state is no more able (or willing) to protect citizens against new social risks. ... The effects of globalization on the development of welfare state are unclear. We do not yet know the specific extent to which globalization will alter socio-political systems and indeed change the course of the entire welfare state models”, as Sipilä *et al.* (2009: 181) emphasize in the Nordic context. As they argue,

Globalization eats away at the very foundation of welfare politics by heightening economic disparity, which thus increases the burden of social equalization, and by decreasing public confidence, which makes finding political solutions increasingly more difficult. There are a number of reasons why both citizens’ solidarity and their confidence in the state’s ability to protect and organize their rights have decreased in recent years. Today, fewer citizens belong to labor organizations or other interest groups which aim at protecting their rights. Today’s workers see themselves not only as workers but also as consumers, taxpayers, beneficiaries, and, increasingly often, owners (Sipilä *et al.* 2009: 184).

---

be used comparably well for similar purposes: postfordism, postindustrialism, consumerism, post-national era, the late modernity, liquid modernity, post-work society rather than work-society, risk society, knowledge-based society (and economy) instead of a society based on industry and services, information society, etc. but the term “globalization” seemed to capture most aspects of the above terms and hence its wide usage in the period. In recent years, especially at the junction of policy and research, the usefulness of the term “knowledge economy” has been increasing, especially in the largest non-scientific expert and analytical centers (from the European Commission to the OECD to the World Bank). Its heuristic usefulness may come from the same basis as the usefulness of the term globalization – it can become a key reference point in academic discussions which intend to reach towards policies and politics (in such areas as welfare state research, innovation research, entrepreneurship research, economic competitiveness research or higher education research).

### *Investing in education*

Under these new circumstances, the prospects for the future in those countries with largely publicly funded higher education seem to be that higher education will be increasingly seen as just one part of public services (as it already is seen in many countries), with its traditional uniqueness gone, with many consequences (one way of describing this process is “turning the university into an organizational actor”, as Krücken and Meier formulated it, 2006: 241). The public sector, especially in transition countries, is often viewed as ineffective and unaccountable, in need of being restructured. One way to break away from this perspective is to view higher education as a social investment, rather than a social burden, crucial for the development of “knowledge-based” societies and economies, or to view higher education through the lenses of social capital formation. Martin Carnoy sounds moderately optimistic when he concludes in his book about globalization and educational reforms that: “because knowledge is the most highly valued commodity in the global economy, nations have little choice but to increase their investment in education” (Carnoy 1999: 82).

In current discussions, the starting point in thinking about increasing investments in education in general is not necessarily increasing investments in higher education in particular – economic analyses (particularly important for developing countries) show that the (public) return on investments is higher for lower education levels and that it decreases with the age of population being educated. It is the lowest for higher education and lifelong learning which can lead to a growing conviction that new public resources should be concentrated in the primary and secondary level of education. It is interesting to note Gøsta Esping-Andersen’s arguments against increasing public investments in higher education for knowledge-based societies (as opposed to massive public investments in early schooling and families with children).<sup>113</sup> In his view, a knowledge-intensive economy will lead to a new social polarization. The long-term scenario might very well be “a smattering

---

113 Esping-Andersen argues that vocational training and increased participation in higher education are unlikely, by themselves, to solve the problems caused by a fall in the demand for low skill labor: “if fighting social exclusion through employment remains the principal policy goal of the European social model in the early 21st century, the learning offensive will have to be complemented with strategies of raising employment opportunities for *low skill* workers through other means” (Esping-Andersen *et al.* 2001: 230). See also Esping-Andersen 2009.

of ‘knowledge islands’ in a great sea of marginalized outsiders”. To avoid this bleak development, cognitive capacities and the resource base of citizens must be strengthened. On numerous occasions, he recommends increased public investment in families with children, rather than in higher education (e.g. Esping-Andersen 1999: 180-184, Esping-Andersen 2002: 3, 2001: 134-135, Esping-Andersen 2007). This argument, if taken seriously by national governments, could be used against free (“tax-based”) higher education in major parts of Europe – especially together with the argument that higher education credentials are increasingly a private and individual (rather than a public and collective) good (the defense of higher education as a public good, see especially Marginson 2011, Rhoten and Calhoun 2011, Calhoun 2011: 1-33, Willinsky 2011, Pusser, Kempner, Marginson and Ordorika 2012, Marginson 2012, Watson, Hollister, Stroud, and Babcock 2011, Bloom, Hartley, and Rosovsky 2006, and Pusser 2012).<sup>114</sup> Interestingly, the European Commission, perhaps for the first time, has emphasized recently that free access to higher education “does not necessarily guarantee social equity. Member States should therefore critically examine their current mix of student fees and support schemes in the light of their actual efficiency and equity” (EC 2006f: 7, see also Kwiek 2010a, Kwiek 2009d), thereby openly putting cost-sharing in higher education on the European policy agenda.

Until the recent economic crisis, the claim shared by many economists, sociologists and welfare analysts was that the limits of public expenditure and taxation had probably already been reached in the EU member countries. Investment for the knowledge society was already subject to strong external financial constraints. Esping-Andersen rightly mentions “new winners and losers” and a deepening gulf between those with and without skills (incidentally, the widening access to lifelong learning and the implementation of its idea lead to even deeper polarization of society because of the possibility of an informal, non-school training exercised to the greatest extent by those who are already well-educated: OECD research shows that in all member states the growing productivity gap comes with the growing skills gap: “the learning rich are getting richer”, see OECD

---

114 This is one of the reasons why we think, fully agreeing with Busemeyer and Nikolai (2010: 508) that “future research in social policy needs to clarify the relationships between educational investment, educational institutions, and the distribution of life chances in different welfare state and education regimes”.

2004b).<sup>115</sup> He suggests two ground rules for policy making: one, “we cannot pursue too one-dimensionally a ‘learning society’, a human capital-based strategy in the belief that a tide of education will lift all boats. Such a strategy inevitably leaves the less-endowed behind”; and two, “new social policy challenges cannot be met by any additional taxation or spending as a percent of GDP. We must accordingly concentrate on how to improve the status quo” (Esping-Andersen 2001: 146-47). So the same (or sometimes even smaller in transition economies) pie may have to be divided up differently. Higher education funding is currently

### *The post-war slice-cutting of the pie of the state funding – renegotiated?*

The whole traditional post-war slice-cutting of the pie of state funding may have to be renegotiated. Former winners may be future losers (and vice versa) under changing priorities, growing inequalities and possibly new ideas regarding what counts most as just and fair in our societies and what counts less.<sup>116</sup> Even though the outcome of these changing priorities is

---

115 A distinction between the “knowledge rich” and the “knowledge poor” comes from (EC 2003d: 8). See OECD data and analysis of growing social inequalities such as *Growing Unequal. Income Distribution and Poverty in OECD Countries* which on the basis of the analysis of 30 countries clearly shows that, at least since the mid-eighties or mid-seventies, there have been a steady increase in income inequality in the vast majority of OECD countries studied (OECD 2008d : 15). As Powell and Hendricks alert in the volume on the welfare state in the postindustrial society, a gap between the rich and the poor is steadily widening and social inequalities are pervasive (Powell and Hendricks 2009: 3-4). Conclusions of an American report *The State of Working America 2006/2007* are similar (Mishel, Bernstein and Allegretto 2007: 39-92).

116 For instance, even in traditional welfare state services, the traditional “outsiders” seem to be winning more than its traditional “insiders”. “Insiders are people in unionized sectors with stable, full-time, and permanent work contracts, whose income is fully insured against the main life risks. Outsiders, by contrast, are in atypical employment, are unemployed, or are outside paid employment, and their discontinuous employment biographies lower entitlement to social benefits. During the golden age of economic growth in continental Europe, there was generally full male employment, and outsiders were mostly women whose participation in the labor market was discouraged. During this period, women enjoyed social rights as wives or widows of their male breadwinners. Hence, it was both a normative ideal and an empirical reality that most outsiders were indirectly covered by the social insurance programs through marriage and family” (Häusermann 2010: 19, see Palier 2010b: 39-40). Certainly, the biggest

uncertain, so far public higher education has not competed successfully with two major welfare state areas, pensions and healthcare (there were indications of a new theoretical context, though, in which there is a possibility of a “re-calibration of social insurance from ‘old-age protection’ to ‘societal integration’ and ‘human capital upgrading’”, Ferrera 2003: 592, which could lead to new ideas favoring higher education more than before).

From a historical perspective of the four decades of 1960-2000, as Schmidt (2007) shows in his “testing the retrenchment hypothesis”, there was a double phenomenon of expansion and retrenchment in different “families” of OECD nations (Castles 1993a) in educational spending and the critical factor was private spending:<sup>117</sup>

While the much-debated “threat of globalization” is not identifiable in the data on education expenditure, a significant impact can be attributed to a variable which has almost completely been neglected in the comparative analysis of public policy, namely private spending. ... [there is] a noteworthy inverse relationship: the larger the role of private spending, the stronger the inclination to opt for retrenchment of public expenditure, and the smaller the role played by private spending, the less likely were governments to cut back public financing of educational budgets (Schmidt 2007: 175; see also Castles’ volume on “retrenchment realities in an age of globalization”, 2007).

### *Public funding for higher education and increasing intergenerational conflicts*

The negative impact on public subsidies for higher education may also be exerted by demographic processes (Easterlin 1987, Easterlin 1989, Frances 1989) – the increasing dependence rate in the economy, the aging of European societies, the growing population in a retirement age and, finally,

---

renegotiations, and hence a possible new distribution of resources between the winners and the losers, will concern the major traditional claimants to tax-derived funding (pensions, healthcare; and higher education rather than education in general) and growing large-scale infrastructural needs.

117 From an international comparative perspective, as Garfinkel *et al.* (2010: 20) summarize their findings, “clearly, the richer the country, the greater the share of their income that citizens devote to welfare state transfers. The same pattern holds within the United States and within Europe. The higher the income of states or countries, the greater the share of income that they devote to welfare state transfers”. Higher education as part of education as part of the welfare state (in this extended definition) is certainly following the above spending pattern in “rich democracies” (Wilensky 2002).

perhaps, changes in political thinking associated with the growing political role of the elderly – as the electorate in Western European societies has been graying steadily (Dumas and Turner 2009, OECD 2003a, OECD 2004a, OECD 2005a). The different age structure of the electorate in the coming decades could in a natural way downgrade other social priorities – and upgrade pensions and healthcare, closing the traditional higher education in the paradigm of increasingly fewer public subsidies and ever more private funding. As Dumas and Turner argue in their study of aging in post-industrial societies and intergenerational conflicts, the elderly can use their political influence “to steer resources toward pensions and health care and away from educational investments for younger generations. As age conflict increases, the possibilities for age integration decline”.<sup>118</sup> Cost-sharing ideas in higher education policy can therefore become more popular than ever before, for both financial and ideological reasons (Johnstone and Marcucci 2007, Johnstone 2006, and the original ideas in Johnstone 1986). In the rapidly evolving contemporary world, one cannot exclude in principle any direction of future developments, though.<sup>119</sup> Effects of the evolution of

---

118 Consequently, age wars could replace class wars: “any significant prolongation of life certainly intensifies conflicts over resources even where these public conflicts may be absent within the family and the domestic household. ... The appeal to responsibility and personal choice against mandatory measures remains a potent aspect of the view that generational interests are on a collision course” (Dumas and Turner 2009: 52). On top of that, there emerge what Esping-Andersen termed the “heightened *intragenerational* inequities” inherent in Bismarckian pension systems: there are strong and growing social differentials in life expectancy (e.g. manual workers vs. professionals) which lead to a “hugely unfair redistribution in favor of those who live the longest” (2010: 17, 18). In a similar vein, one of the surprising research findings in Silja Häusermann’s recent *The Politics of Welfare State Reform in Continental Europe. Modernization in Hard Times* (2010: 215) is that cross-class alliances and intra-class heterogeneity are “inherent in the post-industrial class structure itself”. Post-industrial labor markets have become so diversified “that we must think in terms of a new class schema that divides the workforce into a highly differentiated set of classes” (2010: 9). Consequently, “blue-collar workers are low-skilled, traditionalist-leaning insiders, whereas sociocultural professionals tend to be high-skilled libertarians with a high proportion of outsiders and women. It is hardly surprising that their interests in a particular welfare state design diverge widely in almost every respect”.

119 As Pierre Pestieau reminds, restricting access to certain services or programs of the welfare state is not a problem; the problem is the political will and political feasibility of such moves (the so-called “entitlement problem”, that is, in short – the question of acquired rights. The changes are indeed extremely difficult to implement in the

social priorities may be different in different countries but in European transition countries they may mean the introduction of cost-sharing in public higher education, following the example of England in Europe and, above all, that of non-European Anglo-Saxon countries, with USA, New Zealand and Australia at the forefront. One can therefore expect a gradual linkage between tuition fees and sophisticated student loans and scholarships systems, despite still existing constitutional limitations throughout Central and Eastern Europe.<sup>120</sup>

### *Constraints on public revenues*

Thus, although it is possible to claim substantial increases in the share in the gross domestic product of the public funds for national public higher education systems using the “knowledge economy” and “human capital upgrading” arguments, in practice it has not worked in any of the major OECD countries or European transition countries so far. According to the recent data collected by CHEPS (Center for Higher Education Policy Studies at Twente University, Enschede), in the years 1995-2008, the share of basic state funding in university funding declined almost everywhere, its average share dropped significantly in 31 European countries, to the level of 67 percent, while the share of university revenues from tuition fees and research contracts and grants raised in the same period by 50 percent (CHEPS 2010b). Higher public funding for higher education recalls raising taxes for the sake of raising the standards of the welfare services provision: even though transition countries would like to have better public universities, their citizens do not seem to be willing to pay higher taxes for this reason (compare the generally supportive attitude towards welfare and the general unwillingness to be taxed accordingly; also in all Central European economies except Poland, a flat tax rate was introduced in the last

---

countries of Central and Eastern Europe where many acquired social rights come from the communist era). As he points out, “at any time public authorities can raise the eligibility requirements for any program, modify it, or cancel it altogether. But in order to do that, they face powerful lobbies” (Pestieau 2006: 29-30). In aging societies, lobbies against high levels of public funding for higher education may be more powerful than ever before in the postwar period.

120 On the social dimension of cost-sharing and the detailed distribution of costs between the state and students and their families in six European countries, see *Public/Private Funding of Higher Education: a Social Balance* (Schwarzenberger 2008).

few years). Most OECD countries are currently experiencing a shrinking tax base: as Pierre Pestieau put it, “the share of regular, steady salaried labor is declining in a large number of countries, and thus the share of payroll tax base in the GDP is shrinking”, Pestieau 2006: 35). The constraints on public revenues are combined with growing social needs under the pressures of economic globalization and the passage to post-industrial societies. The synopsis of external and internal challenges to “mature welfare states” (as well as to “emerging welfare states” in Central and Eastern Europe) can be the following:

The shift to a predominantly service economy and economic globalization entails tighter constraints on public revenues, while societal modernization and changes in the economic structure produce mounting social needs, new risk patterns, and new priorities for social policy intervention, with education and social service provision on top of the list. Moreover, shrinking public revenues and rising pressures on public expenditure constitute a situation of what Paul Pierson (1998) calls “permanent austerity”, which must be managed by nation-states whose sovereignty and autonomy have declined significantly in the wake of globalization and European integration, without international authorities able to pick up the clack (Castles *et al.* 2010b: 14).<sup>121</sup>

The option of more public funding for higher education (or for academic research and development) in Europe in the future is explicitly ruled out even by the European Commission which suggests substantially more private funding, both for teaching (through fees) and for research (from private companies). In general terms, ongoing (and envisaged for the future) reformulations of the welfare state in European economies, no matter whether related only to globalization and economic integration, or only to domestic national factors related to demographic changes, or finally related to both, at the moment do not provide promising ground for policies treating higher education as public investment. This may have fundamental effects on both students and academics: fee-paying students increasingly view themselves as customers of services provided by academics (for higher education, see Molesworth, Scullion and Nixon 2011, and for public services in general, see Simmons, Powell and Greener 2009 on rising consumerism and Clarke, Newman, Smith, Vidler and Westmarland 2007 on

---

121 See also Pierson 2001a on “post-industrial pressures on the mature welfare states” and Pierson 2001b on “copying with permanent austerity and welfare state restructuring in affluent democracies” as major manifestations of the classic early “retrenchment” literature in international comparative welfare state research.

the emergence of “citizen-consumers”) and as clients of university services (as is the case in the booming private sector of higher education in several transition countries, Poland included); there may also be more managerialism and stronger business orientation of academic units less reliant on core state public subsidies, more market ideology and sets of practices drawn from the world of business, more reliance on market forces and non-core non-state, “earned” (rather than “received”) income, and the intensification of work of the increasingly contracted academic staff etc., as we show in the last three chapters of this book. Higher education is increasingly viewed as public cost/burden and a private good. But welfare transfers still, under strong globalization-related pressures, remain a political choice (Gizelis 2005: 159) and the role of electorates in democratic systems is fundamental in determining the depth and character of welfare state restructuring (Swank 2001: 198, Pestieau 2006: 30, Swank 2010; electorates have “welfare attitudes” which might determine the future level of public support for welfare, Oorschot and Meulman 2012).

While one can predict that for this reason reforming financial foundations of the pension and healthcare sectors (for example, towards various forms of privatization and towards individuals sharing bigger responsibility, including financial responsibility<sup>122</sup>) may be weaker than expected, reforming the financial foundations of higher education might be deeper than it is generally predicted today.<sup>123</sup> While in the rich OECD economies this could mean a lack of further growth of currently high state subsidies, in the majority of relatively poorer economies in Central and Eastern Europe, this may mean no increases in currently low state subsidies, hitting especially the functioning of public research universities.

---

122 What Jacob S. Hacker termed in his book “the great risk shift”: “economic risk has been offloaded by government and corporations onto the increasingly fragile balance sheets of workers and their families”. The process is a fundamental transformation which “connects the insecurities of the new workplace, the strains facing modern families, the rising uncertainties of retirement, and the growing gaps in American health insurance” (Hacker 2006a: ix-x).

123 All major welfare state components are heavily resource-dependent. Dumas and Turner (2009: 52) argue that “any significant prolongation of life certainly intensifies conflicts over resources even where these public conflicts may be absent within the family and the domestic household”, which increases the needs of the healthcare sector and the pensions sector and, given the overall (relative) scarcity of resources, potentially increases intergenerational tensions.

### 3.3. Globalization and the public sector

#### *Higher education debates mirroring public sector debates*

The debate on the future of higher education is closely linked to a much wider, and often ideological, debate on the future of the public sector in general (and the state provision of public services; on pension reforms and privatization of pensions globally, see Orenstein 2008a, Orenstein 2009, Holzmann and Stiglitz 2001, Holzmann and Hinz 2005, Whitehouse 2007, Holzmann and Schwarz *et al.* 1999; on pension reforms in Europe, see Bonoli 2000, Häusermann 2010, Holzmann 2004, Holzmann *et al.* 2003, and Holzmann and Palacios 2001; on pension reforms in Central Europe, see ILO 2002; on healthcare reforms in OECD economies in the last decade, see Rothgang, Cacace, Frisina, Grimmeisen, Schmidt, and Wendt 2010, in Central and Eastern Europe in the 1990s, see Adeyi *et al.* 1997, Kornai *et al.* 2001, Kornai and Eggleston 2001, and on the nexus of Central and Eastern Europe and globalization, see Orenstein *et al.* 2002).

Certainly, in the acme of the traditional Keynesian postwar welfare state regimes in Europe, it was the state – rather than the market – that was deeply involved in the economy and in the protection of nation-state citizens against the potential social evils of postwar capitalism (Hurrelmann, Leibfried, Martens and Mayer 2007a, Castles 1989, Barr 2001a). As the World Bank's flagship publication on the role of the state in the 1990s (*The State in a Changing World*) argued, for much of the 20<sup>th</sup> century people looked to government or the state to do more; but since the 1980s, the pendulum has been swinging again, and the existing conceptions of the state's role in society and economic growth have been challenged by such developments as e.g. the collapse of command-and-control economies or the fiscal crisis of the welfare state. Consequently, politicians keep asking again the question what government's role ought to be and how its roles should be played (World Bank 1997: 17). (The state-market pendulum can be reversed once again, and the immediate cause of this turn could be reactions of the most developed economies to an unprecedented financial crisis and its consequences, see Calhoun and Derluguian 2011). And as Vito Tanzi highlighted in his recent *Governments versus Markets. The Changing Economic Role of the State*, the role of the state in the economic development is the fundamental question:

There is no more fundamental question in economics than what role the state or the government should play in a country's economy. How wide and deep such a role be in a market economy? What should the state do? How much should be left to the market and to the free economic decisions of individuals or groups of citizens? How should the state perform its role? What instruments should it use? ... Who decides what is the right balance? (Tanzi 2011: ix).<sup>124</sup>

It was in Central and Eastern Europe, exposed to the influences of global agencies in redefining their national welfare policies following the fall of communism in 1989 (which “took everyone by surprise. No one had expected that the communist system, styled by some as totalitarian precisely because it was supposed to be immutable, would collapse suddenly and peacefully”, as Przeworski noted in *Democracy and the Market. Political and Economic Reforms in Eastern Europe and Latin America*, 1991: 1) that the direct link between the new “effective” state on the one hand (with a downsizing of the public sector and a redefined minimal welfare state) and higher education policies on the other, was very much visible. With almost no exceptions, higher education in the 1990s was one of the lowest priorities in transition countries, with chronic underfunding of universities as a permanent feature. Still another paradox was that the social policies for the ten (then) accession countries which joined the European Union in 2004, generally promoted and praised in subsequent accession countries’ reports by the European Commission, were not exactly “European” policies rooted in European welfare state models with its generally accepted “European social model”<sup>125</sup>; on the contrary, as Zsuzsa Ferge convincingly

---

124 Anyway, it would be interesting, especially in the European postcommunist countries remaining outside of the eurozone, with highly volatile exchange rates of national currencies, to know the answer to such technical questions: “when a bond trader at Goldman Sachs, or a fund manager at Fidelity, sits at his desk, contemplating where to allocate investment, what information does he consider? Does he think only about inflation, the balance of payments, and the overall government budget deficit – a few figures he can gather before lunch? Does he seek more fine-grained information ... or does he keep his eyes on his Reuter’s screen, nervously watching for news of political developments and forecasts of government change?” (Mosley 2003: 25, with Goldman Sachs no longer in the investment banking).

125 The “selling” of the EU accession to electorates in the East and in the West was crucial. As Nicolas Barr (2005: 16) summarized the political pre-conditions for the accession: it was necessary to find “a meeting ground between two sets of political imperatives”: “were the accession arrangements sufficiently *parsimonious* for EU politicians to sell them to their electorates? A settlement too generous to the transition countries risked rejection by the

demonstrates (with respect to policies actually being implemented in the healthcare, pensions, higher education and other public sectors), these policies were largely neoliberal.<sup>126</sup> That is another reason to take the link between the reformulations of the welfare state and emergent higher education policies seriously in this part of Europe; it is here that educational policies, and consequently the future of public universities, may be going hand in hand with changing welfare policies, as in the traditional World Bank formulation of the “third wave of privatization” where changes in (higher) education follow changes in the two other major claimants on welfare state resources: healthcare services and public pensions systems (Rama 2000; Torres and Mathur 1996; Kritzer 2005; see also discussions focused on “redefining the state”, “shrinking the state”, “dismantling democratic states”, and “transforming the state” in Spulber 1997, Feigenbaum, Henig and Hamnett 1998, Suleiman 2003, and Hurrellmann, Leibfried, Martens and Mayer 2007a).<sup>127</sup>

---

existing EU members. Were the proposed arrangements sufficiently *generous* that politicians in the accession countries could sell them to their electorates?”

126 Ferge found the neoliberal tendency “dominant” in CEE countries in the 1990s. It was “practically ubiquitous” and “seems to be dictated by concerns allegedly related to globalization pressures” (Ferge 2001: 129-30). On the other hand, assessing the impact of EU accession conditionalities on higher education reforms in the accession countries, Michael Mertaugh and Eric Hanushek (2005: 227) emphasize that “EU accession conditionality did little either to help or hinder the accession countries in pursuing the education and training reforms required both by transition, and by the challenges that they face as members of the EU”. But a deeper European integration, as seen first in the underlying assumptions of the Lisbon Strategy and then of the current Europe 2020 strategy, increasingly takes into account a deeper integration of education, research and innovation systems in Europe (through the European Research Area and the European Higher Education Area).

127 See Jacob S. Hacker’s four main priorities of the privatization agenda in social policy: the scaling back of direct government action to encourage self-reliance and private provision; the expansion of private subsidies; increased government contracting with voluntary organizations and for-profit service providers; and fourth, “the infusion into established programs of vouchers and other mechanisms that would allow (or require) recipients to opt out of these programs and obtain benefits from private organizations instead” (Hacker 2002: 319). A similar agenda of privatization could be traced in relation to Poland throughout the 1990s, also (actually and potentially) in higher education.

### *The state/market pendulum*

To refer to an image used by numerous commentators – that of a state/market pendulum (Evans 1997: 83): the pendulum had swung from the statist development model to the “minimalist state” model of the 1980s. The countries involved in implementing “reinventing government” policies (Osborne and Gaebler 1993, with its ideals of entrepreneurial government which is “catalytic”, “community-owned”, “competitive”, “mission-driven”, “results-oriented”, “customer-driven”, “enterprising”, “anticipatory”, “decentralized” and “market-oriented”, as subsequent chapters define it)<sup>128</sup> had squeezed programs in education and health but the result of this “overzealous rejection of government” was, as the World Bank admits, the “neglect of the state’s vital functions, threatening social welfare and eroding the foundations for market development” (World Bank 1997: 24). So, after a few years, probably for the first time in the World Development Report of 1997 referred to here above, the World Bank, heavily involved in implementing structural adjustment policies in developing countries, had to admit that the idea of the “minimal state” did not work. It is here that a crucial passage which shows a considerable change in the Bank’s attitude to the state appears: “Development – economic, social, and sustainable – without an effective state is impossible. It is increasingly recognized that an effective state – not a minimal one – is central to economic and social development” (World Bank 1997: 25, Robertson 2009).

The state was thus viewed by the World Bank in the 1990s not as a direct provider of growth but a “partner, catalyst, and facilitator”, not as a sole provider but a “facilitator and regulator”, not as a “director” but a “partner and facilitator” (World Bank 1997: 1, 2, 18). The state should certainly be assisting households to cope with certain risks to their economic security but “the idea that the state alone must carry this burden is changing”.<sup>129</sup> Citizens (especially from the developing world) should not

---

128 The following programmatic statement might be referred to universities as well: “the idea of reinventing government may seem audacious to those who see government as something fixed, something that does not change. But in fact governments constantly change” (Osborne and Gaebler 1993: xv).

129 The picture and recommendations are clear: “Innovative solutions that involve businesses, labor, households, and community groups are needed to achieve greater security at lower cost. This is especially important for those developing countries not yet locked into costly solutions” (World Bank 1997: 5). Presumably – they have not yet been blocked by expensive solutions proposed in the postwar period by different

look for solutions provided by the state – but should focus instead on solutions provided by the market. The consequences for the public sector, including higher education, are far-reaching: “although the state still has a central role in ensuring the provision of basic services – education, health, infrastructure – it is not obvious that the state must be the only provider, or a provider at all” (World Bank 1997: 27). An “effective state” can leave some areas to the market and the areas where markets and private spending can meet most needs are “urban hospitals, clinics, universities, and transport” (World Bank 1997: 53). Thus universities mentioned here explicitly should be more open to market forces and private funds. While in Poland the World Bank's influence on thinking about reforming higher education was relatively small in the 1990-2010 period, this situation can always change (and one can imagine a large-scale technical assistance package combined with a large loan intended to support reforms started in the 2010-2011 wave of the higher education and research legislation). In developing countries, for a number of reasons, this impact still cannot be overestimated (following various mechanisms of global and international diffusion, Simmons, Dobbin and Garrett 2008, and “policy borrowing and lending”, Steiner-Khamsi 2012).<sup>130</sup>

### *The World Bank: the tertiary education sector and the state*

Publications on the tertiary education sector (and the role of the state in it) written by the World Bank throughout the 2000s carried different overtones, though. *Constructing Knowledge Societies: New Challenges for Tertiary Education* (2002) was very careful in describing state's obligations with respect to higher education: the obligations included working within a coherent policy framework, providing an enabling regulatory environment, and working towards financial incentives. The state's role was guidance rather than steering, and its role was in the elaboration of a clear vision for

---

variants of the European welfare state (which is important for most developing countries in the world and most postcommunist transition countries in Europe).

130 As Jeffrey Sachs remarked, while describing “life in the economic emergency room” in the transition countries in the 1990s (1994: 503-504), “the ability to succeed in reforms has two critical components. One is the capacity of the country itself to reform. ... Equally important is the role of the outside world in helping the country to overcome the crisis. ... countries cannot be transformed without the generous and farsighted involvement of the international community”.

the long-term development of the education system on a national level (World Bank 2002: xxii-xxiv). Despite diminished fiscal resources and competing claims from other sectors,<sup>131</sup> governments in the World Bank's account still had at least three strong reasons for supporting the higher education sector: investments in higher education generate external benefits essential for economic and social development; capital market imperfections make loans largely unavailable to students on a large scale, in a wide range of programs; and finally, higher education plays a key role in supporting basic and secondary education (World Bank 2002: 76). The report does not leave much doubt about the need to adequately finance higher education from the public purse when it presents a long list of the social and economic costs of under-investment in higher education:

The cost of insufficient investment in tertiary education can be very high. These costs can include reduced ability of a country to compete effectively in global and regional economies; a widening of economic and social disparities; declines in the quality of life, in health status, and in life expectancy; an increase in unavoidable public expenditures on social welfare programs; and a deterioration of social cohesion (World Bank 2002: xxiii)

Higher education in this view plays a crucial role in the construction of knowledge societies and the rationale for the state support of higher education (within clearly defined limits) is surprisingly strong here. But the differences between the Bank's major publications, including those on the role of the state, privatization of public services, reforms in healthcare and pensions, and the future of the welfare state on the one hand, and its (somehow niche) publications on the higher education sector on the other hand has to be born in mind. There is a significant difference between the Bank's writings on the state and related issues and its writings on higher education throughout the 1990s and early 2000s.<sup>132</sup> The difference has been

---

131 Arguments about competing demands are relevant both for the teaching mission and for academic research. As Salter and Martin (2001: 509) point out, "considerable government funds are spent on basic research in universities, institutes and elsewhere, yet scientists and research funding agencies constantly argue that more is needed. At the same time, governments face numerous competing demands for public funding. To many, the benefits associated with public spending on, say, health or education are more obvious than those from basic research".

132 Apart from a large and increasing body of academic work (by, for instance, Nicholas Barr, Giuliano Bonoli, Peter Taylor-Gooby, Fritz W. Scharpf and Vivien A. Schmidt, Torben Iversen, Jonas Pontusson, Paul Pierson and many others referred to in this and

evident from the Bank's first book on the education sector published in 1994 (*Higher Education. The Lessons of Experience*) to *Constructing Knowledge Societies* of 2002 (and further, in the subsequent works of a less declarative character, see Salmi 2009a on "establishing world-class universities" and Yusuf and Nabeshina on "how universities promote economic growth" 2007, both in a World Bank series "Directions in Development/Human Development").

There is thus an interesting incongruence between the way the Bank in general viewed the role of the state vis-à-vis higher education, and the way the relationship was viewed by its education sector. Consequently, such flagship publications as subsequent World Development Reports were not compatible in their views on the state/market relationships with most of the books published by its education sector for at least a decade. From a wider perspective, higher education seems to be still viewed by the World Bank as a unique part of the public sector which still needs substantial public investments. World Bank's package of reform policies is being developed over the years in greatest detail with reference to pension systems (away from "pay as you go" systems towards "multipillar" ones), in more general terms with reference to healthcare provision, and still in much less detail to higher education and its funding.<sup>133</sup>

---

the preceding chapters), there is also a vast amount of conceptualizations of pension reforms emerging in the last ten years in non-academic fields, closely related to policymaking – especially the work of the OECD and the World Bank experts. The link between academic works and non-academic works is weak in the area, as it is weak in the case of higher education reforms. Probably, at the moment, no other academic research center can compete with the two organizations in the long-term commitment to the study of pension reforms and the identification of practical solutions to problems of aging populations. New concepts emerge, statistics on a global scale is analyzed in detail, best practices from countries already involved in reforms are compiled and, at the same time, developing countries can count on the expertise and financial support (in the form of both technical assistance and loans). For most developing countries, at the moment, there seems to be no alternative to packages of technical assistance in reforms implementation combined with funding mechanisms (see Jakobi *et al.* 2010a on agenda-setting and policy diffusion from international organizations, and Woodward 2009 and Martens and Jakobi 2010a on the OECD as an actor in international politics).

133 In transition countries, there was a strong influence of the Washington Consensus institutions throughout the 1990s – through political pressures and aid and loan conditionalities. Compared with Western Europe, some countries in Central and Eastern Europe in the 1990s have gone much farther down the road of neoliberal

### **3.4. The state's fiscal condition and competitors to higher education**

#### *More public spending, or less?*

How could public funding for higher education (as part of social expenditure within the welfare state undergoing restructuring) be seen as an investment rather than a cost, and why should it be? Paradoxically, the unwillingness or inability of the state to increase the level of public funding for higher education (or in more general terms, to use Philip G. Cerny's expression (1995: 618), the recently decreased state's potential for "collective action"), is accompanied by a clear realization that – in the new global era – higher education is more important for social and economic development than ever before. The United Nations' report on "globalization and the state" argued already a decade ago that countries that want to benefit from globalization must invest in education to upgrade their citizens' skills and knowledge (United Nations 2001: 84). Higher education in most postcommunist transition countries is still highly selective and access to it is not equitable (Mateju et. al. 2007, Dobbins 2011, Dobbins 2010, Tomusk 2004, Tomusk 2006, Kogan Noelke and Gebel 2011). Martin Carnoy argues that what is needed is a coherent and systemic effort by the public sector – which "usually means more, as well as more effective, public spending" (Carnoy 1999: 86). There is thus an interesting tension between what most higher education sector experts and academics dealing with higher education say about the future of higher education and what political economists, political scientists or sociologists say about the future of the state, as well as the welfare state and its services in particular, including higher education. In recent years, this tension between students of higher education and students

---

reforms of e.g. pension systems (sometimes partially reversed after a decade, as in Poland in 2011). World Bank ideas were implemented in such diverse countries as Poland, Bulgaria, Croatia, Estonia, Hungary, Latvia, Slovakia, Macedonia, Romania, Ukraine and Uzbekistan, in different variants. By 2005, thirty one countries had implemented some type of personal accounts as part of their mandatory retirement income systems (see Kritzer 2005). For most postcommunist countries, the social security reform was not the priority in the first wave of reforms; it was only in the second half of the 1990s that pension reforms became unavoidable as the pay-as-you-go traditional systems were consuming ever larger percentage of the GDP (Poland establishing perhaps a record in 1996, spending 16 percent of its GDP on pensions, see Holzmann 2004: 3, Orenstein and Haas 2005: 142).

of the state is becoming stronger than ever before. The tension is then discernible in the discourse of policymakers who draw their reform vocabulary from both academic fields.

State funding for higher education, as for any other part of the public sector, depends on the overall outlook for state finances. The difference between higher education funding in the EU-15 and in post-communist new EU member countries is substantial (see the data for the OECD area in OECD 2011c).<sup>134</sup> The projections for the future suggest, especially now with the economic crisis in Europe well in progress, and a looming recession in the eurozone, that the tight fiscal environment will continue, if not intensify, in the coming years there. Basically, the situation faced by governments, under current fiscal conditions is that of a zero-sum game: gains in share by one program (e.g. higher education) would generally have to come at the expense of other programs such as e.g. social protection.<sup>135</sup> More tax-based

---

134 The questions Claus Offe (2009: 237) asked recently about the evolution of welfare states in postcommunist economies in the last two decades could be equally usefully asked about the evolution of higher education in these economies: “to what extent can the evolution of CEE welfare states be accounted for in terms of path-dependency and the continuity of state socialism as well as those institutional patterns that were adopted in the region during the interwar period – and to what extent do we encounter path-departures that were conditioned by the two dominant novelties of (a) the breakdown of state socialism with the subsequent deep transformation crisis and (b) the accession of the new members to the European Union and its patterns of capitalist democracy, as well as the conditionalities governing Eastern Enlargement”. Is what we have in higher education in the region today, in Offe’s words, “a joint outcome of ‘the past’ and ‘the West’”, as in the case of welfare states regimes? (see two volumes: Lane and Myant 2007 on “varieties of capitalism in post-communist countries” and Lane on transformations of state socialism and “system change, capitalism or something else”, Lane 2007a, and Hanson 2007).

135 Avner Offer (2006) in his study of affluence in the USA and the United Kingdom argues in a way similar to Fred Hirsch (1976) in his study of social congestion and what he termed “social limits to growth”: what works for the individual, does not work for society as a whole. “For an individual, if the odds are good, striving to rise is reasonable, even compelling. For society as a whole, it is more ambiguous: the winner’s gain is offset by the loser’s pain. ... To have winners, it is necessary to have losers. A lower rank is punished with less autonomy and control, stressful work, more illness, shorter lives, and greater ill-being overall. ... For society as a whole, the costs of losing need to be set against the benefits of affluence” (Offer 2006: 270). Or, as Hirsch (1976: 7) argued, “the bedrock is valuation by individuals of goods and opportunities in the situation in which they find themselves. At any moment of time and for any one person, standing on tiptoe gives a better view, or at least prevents a

resources for one part of the public sector can come, in general, only at the expense of tax-based resources for another part of it. (And, at the same time, social expenditures has been on the rise almost everywhere in the EU. The total expenditure for social protection – which does not include education – between 1990 and 2001 has increased in all EU-15 countries except Ireland, Luxembourg, and the Netherlands. In the vast majority of them, the single most expensive social service is old-age pensions; in others, it is health services; see full data in Pestieau 2006: 22-24, as well as the details in annual and bi-annual OECD series: *Education at a Glance*, *Pensions at a Glance*, and *Health at a Glance*, to compare the trends over time and their analyses).

A good argument for increasing public funding for the higher education sector is that investments in higher education are long-term investments in skills and competences of the workforce – but in the logics of the cycles of elections, this means that their weight for most political parties in European systems decreases rather than increases over time. Long-term investments are much less tempting to political parties (being viewed by them as less tempting for the electorates) than short-term investments, though. This short-termism in selecting priorities for public spending may have far-reaching negative impact on increases in public subsidization of higher education institutions. The competition between different claimants to public resources has been ever more fierce since wholesale reforms of the public sector in general started (between three and two decades ago). Each component of the public sector is expected to show its advantage over other competitors, and all public sector components need to show their advantage over such other competitors as spending on the general infrastructure, law and order, the military complex or prisons. New Public Management have been introducing corporate, competition-focused styles of thinking into traditionally public, non-competitive areas (with its question: “is it possible to envisage management in the public sector without due regard to the pursuit of results and the measurement of performance?”, Van Dooren, Bouckaert, and Halligan 2010: 1, and with “reforms that construct organizations”, Brunsson 2009: 43-90 and Brunsson and Sahlin-Andersson 2000, see Osborne and Gaebler 1993 and Osborne 2010; for higher

---

worse one. Equally, getting ahead of the crowd is an effective and feasible means of improving one’s welfare. ... The individual benefit from the isolated action is clear-cut. The sum of benefits of all the actions taken together is nonetheless zero”.

education governance, see Currie, DeAngelis, de Boer, Huisman and Lacotte 2003, and Paradeise, Reale, Bleiklie and Ferlie 2009, written from a public management perspective).

### *The competitive nature of public funding*

The competitive nature of public funding available was very clear in most postcommunist transition countries from the very beginning of market reforms: there were priorities in transformation processes, the pie of tax-based funding to be distributed was small indeed, and it was largely current electorates-focused politics – rather than explicitly formulated long-term government policies – that determined how the pie was cut.<sup>136</sup> As Marga sadly remarked a decade and a half ago in his paper on “reforming the postcommunist university”, summarizing the spirit of the times, “politics and law, macroeconomics and finance, civil rights and liberties, the church and the family, have all been objects of consideration. But universities – despite the vital roles they play in providing research and expertise and in selecting and forming the leaders of tomorrow – have not” (Marga 1997: 159). It was no different for welfare policies in general in European transition countries: Bob Deacon noted at roughly the same time that “what became immediately evident ... was that debates of any kind about social policy became relegated to almost last place in the priority of many of the new governments” (Deacon, Hulse and Stubbs 1997: 92, see also Deacon and Hulse 2011, and Deacon 2000). However, one must also recall a justifying remark, to some extent, by Tomasz Inglot in his recent book about transformations of the welfare state in Central Europe from the perspective of historical differences between the countries: welfare state programs represent “the most difficult, politically challenging, and economically burdensome components of postcommunist ‘transitions’ in Central and

---

136 Consequently, there emerged a “new post-Communist family of nations”, substantially different from Western European “families” (Castles 1993a), “manifesting extreme values in respect to nearly all the variables shaping the clustering of EU-25 policy patterns. These nations are the least statist in the EU (low outlays, low transfers, low subsidies and low direct taxes), manifest the greatest economic and social problems (low male labour force participation, high inflation, massive unemployment and low fertility), but, at the same time, exhibit much the highest rates of economic growth” (Castles and Obinger 2008: 337; a flat tax rate in personal income tax in all countries throughout the region, except for Poland, is another key difference).

Eastern Europe” (Inglot 2008: 3, see also Lane 2007a, Cook 2007a, Cook 2010, Pickles and Smith 1998, Nelson, Tilly and Walker 1997, Nelson 1994, Krueger 1993, and Blanchard, Froot and Sachs 1994, as well as Kornai 2008, Barr 1994 and Barr 2005).<sup>137</sup>

Higher education in the countries of Central and Eastern Europe (much more than in the old EU-15 countries) has had to compete strongly with other forms of state spending, and the costs of other forms of social needs have been growing steadily, although not as rapidly as between the second world war and 1980 (on the “long rise of social spending” from a longer historical perspective, see Lindert 2004). And higher education has not been competing successfully with other programs in the first decade of transition in most transition countries in attracting state funding (suffice it to consult the data on the generally declining public funding for higher education and research and development in almost all of them in the 1990s).<sup>138</sup> Allocating

---

137 Nicholas Barr shows the difference of priorities between the transition countries (especially in the 1990s) and countries of Western Europe in the following way: the aim of public policy, including social policy, is to maximize people’s well-being, which in turn “depends both on economic growth ... and on security”. An overemphasis on one or the other element is counterproductive (Barr 2005: 26): “social policy needs to assist the optimal balance between the two – a balance that will differ across countries. ‘Catching up’ is a major thrust of policy in the former communist countries, suggesting greater emphasis on growth; electorates in the richer countries of Western Europe might choose a somewhat different balance”. In the 1990s, the economic aspect of the people’s well-being – associated with economic growth, which at that time in most countries of the region was marginal or negative – was of key importance. Orenstein and Haas in “Globalization and the Future of Welfare States in Post-Communist East-Central European Countries” focus on the growing diversity of the welfare states of the region – and also on the difference between the postcommunist European countries and postcommunist countries in Asia – and refer to what they term “the Europe effect” as the most important differentiating factor (Orenstein and Haas 2005: 131-134).

138 In analyzing a (possible, emergent) “Central European knowledge production model”, it would be useful to go beyond the “Varieties of Capitalism” typology (Central and Eastern Europe does not fit its traditional formulations) and beyond “the three worlds of welfare capitalism” typology (the region does not fit it so far either, see Hall and Saskice 1991, Esping-Andersen 1990, Lane and Myant 2007, and Amable 2009). “Postcommunist universities” – as a substantial component of “postcommunist welfare state” – in “postcommunist capitalist economies” (or “varieties of capitalism in postcommunist countries”), after two decades of transformations, are still in the making. It would be also useful to go beyond other established typologies of the welfare state: the three worlds of “human capital formation” (Iversen and Stephens

priority to different programs is a highly political issue, and it does not seem to be any different in Europe, or in transition countries, for that matter. The future prospects for increasing public funding for public higher education are low unless some unexpected new shifts in global thinking about higher education occur (which, viewing the changes in viewing the role of the state following the recent economic crisis, cannot be ruled out, see Tanzi 2011). As already mentioned, the European Commission does not propose such actions either for higher education or for research and development, suggesting instead, as was in the case of the “3 percent” goal of national GDPs devoted to research and development activities in the EU Member countries by 2010, that private funds rather than public funds should contribute to reaching this goal. One of several solutions for public universities to thrive in the new financially adverse setting (“responding to adversity”, Williams and Blackstone 1983, and following “changing patterns of finance in higher education”, Williams 1992) could be to consider various models of the “entrepreneurial university” (as researched by Burton Clark, Henry Etzkowitz, Michael Shattock, Gareth Williams and others, see Clark 1998a, Clark 2004a, Etzkowitz 2008, Etzkowitz, Webster and Healey 1998, Shattock 2009a, Williams 2009, Temple 2011) in which universities increasingly rely on non-core non-state income (for Central and Eastern Europe, see Kwiek 2009a, Kwiek 2008a), with the full awareness of limitations of this proposal and its short- and long-term risks, that are well analyzed in the research literature, and to which we shall return in the next three chapters of this book).

---

2008) or “families of nations” (Castles 1993a, Castles and Ebinger 2008; see Kwiek 2011a). The issue of the “specificity” of the regional knowledge production and welfare regimes seems to be highly under-researched, despite several recent attempts (Aidukaite 2009, Aidukaite 2010, Inglot 2008, Cerami 2006, Cerami and Vanhuysse 2009, Lane 2007a, Kwiek 2011a, Kwiek 2012c, and Tomusk 2006).

### 3.5. Welfare state reforms, higher education reforms, and the privatization of public services in transition countries

#### *Towards a common postcommunist social model in Central Europe?*

Questions about welfare state reforms in Central and Eastern Europe are essential because postcommunist countries inherited the social model(s) unknown in Western Europe. They do not fit the classic Esping-Andersen's tripartite division (as the original formulation had it, "as we survey international variations in social rights and welfare-state stratification, we will find qualitatively different arrangements between state, market, and the family. The welfare state variations we find are therefore not linearly distributed, but clustered by regime-type", the three "ideal" types being. 1990: 26).<sup>139</sup> Esping-Andersen (1990), creating his models, for clearly historical reasons, paid almost no attention to Central and Eastern Europe, and Western European political sciences generally did not analyze emergent postcommunist welfare states (with exceptions: see Barr 1994, Barr 2005, ILO 2002, Fenger 2007, Holzmann, Orenstein and Rutkowski 2003, Inglot 2008, Inglot 2009, Haggard and Kaufman 2008, Cerami 2006, Cerami and Vanhuyse 2009, Szelenyi and Wilk 2010, Ferge 2008, Cook 2007; perhaps the welfare state in the region was "operating in extraordinary circumstances" and therefore previous attempts to classify it within existing divisions failed, Inglot 2008: 22, 306-314). This is a serious theoretical

---

139 As Leibfried and Mau pointed out recently about the unclear usefulness of the regime typology to understanding welfare state transformations in postcommunist countries (2008: xx, emphasis in original): "Eastern European countries were seldom included in comparative welfare state research. This was partly due to the lack of comparative data, partly due to the *fundamentally different character of the systems*. After the fall of Communism, governments in these countries had to balance the need to manage the transition from a command to a market economy with the need to maintain or enhance social protection and thus legitimize regime change. Though these countries went through common phases of transition, they *did not arrive at one single model but diversified*, with some countries already close to Western welfare states and others still disintegrated. For this reason it also seems questionable whether the regime typology provides an adequate framework for understanding post-Communist welfare state development in Eastern Europe".

drawback.<sup>140</sup> Because “East and Central Europe is clearly the most under-defined region, a virtual laboratory of experimentation” (Esping-Andersen 1996: 267), it was not easy to accommodate its welfare states to any existing taxonomies. In the Esping-Andersen’s tradition of “worlds of welfare”, it is methodologically improper to merely add a fourth “postcommunist welfare state” without rethinking the whole three-type configuration of liberal, conservative, and social-democratic welfare regimes. So far, there have been limited attempts at integrating the new EU member states into the common framework provided by the three worlds of the welfare capitalism research (in the “beyond varieties of capitalism” research, there appear “capitalism goes East” sections, Hancké *et al.* 2007a: 307-378, especially King 2007; see also Hancké 2009: 290-293 for a “revised typology of capitalist varieties” and the original formulation of the theoretical position, Hall and

---

140 The most important books analyzing the transformation of social policy and labor markets in Central Europe are still the two volumes by Nicholas Barr (Barr 1994 and Barr 2005). One of the first books devoted entirely to historical diversities of Central European welfare states was Tomasz Inglot’s *Welfare States in East Central Europe, 1919-2004* (Inglot 2008; see also an earlier book by Alfio Cerami, *Social Policy in Central and Eastern Europe. The Emergence of a New European Welfare Regime*, 2006). Inglot describes post-communist types of the welfare state (“emergency welfare states”) as not only differing from those analyzed in the research literature on European basic welfare state types (e.g., conservative, liberal and social, that is corporate, and residual social democratic in Esping-Andersen) – but also, paradoxically, seriously differing among themselves. Furthermore, their future remains undefined, they are “work in progress” (Inglot 2008: 8). Different history and its legacy also turns out to be of key importance: in Poland, the Czech Republic, Hungary and Slovakia, at different moments of the twentieth century, various ideal types of the welfare state were the main points of reference in political discussions about the welfare state reform and led to a partial adaptation of their respective components (Inglot 2008: 308). While Inglot elsewhere (2009: 73-95) highlights intra-regional differences and their historical origins, Haggard and Kaufman (2008) highlight the intra-regional commonalities (see a comparative volume grounded in historical institutionalism, especially that of Thelen and Mahoney (2010), recently edited by Alfio Cerami and Pieter Vanhuyse (2009): *Post-Communist Welfare Pathways. Theorizing Social Policy Transformations in Central and Eastern Europe* which contributes to discussions about the specificity of postcommunist welfare regimes focusing on questions of unity, diversity, path-dependence and path-departure. The conclusions are that the emergent postcommunist welfare models are hybrids, and as Claus Offe summarizes the findings of the collective volume, “what we see happening in the region must be accounted for in terms of a joint outcome of ‘the past’ and ‘the West’” (Offe 2009: 237; see also Nelson 1997, Kornai 1997, and Ferge 1997).

Soskice 2001: 1-70; and in the original formulation of the “families of nations” (Castles 1993a), clearly referring to “patterns of public policy in Western democracies”, postcommunist economies do not appear, Castles and Mitchell 1993: 93-127; for the first time, postcommunist countries are incorporated in this tradition as a “new postcommunist family of nations” in Castles and Obinger 2008; and in Iversen and Stephens’ three worlds of “human capital formation”, they do not seem to fit). As Schubert, Hegelich and Bazant argue about extending existing typologies,

[t]he addition of a new type of welfare regime or cluster affects the existing typology, since ... the danger exists that differences within the regimes could be greater than between them. Methodically speaking, it would be inadmissible to add a new cluster to an exiting cluster analysis without reassessing the overall ratio of the individual elements. ... Therefore, new elements cannot be added without new analyses. With the enlargement of the EU, the long-used empirical basis of the typology welfare regimes is eroding (Schubert *et al.* 2009b: 15).

We must also remember that “the welfare state does not follow a unified logic, nor do its reforms”, and in this sense the European landscape and the systems themselves, as well as their reforms are extremely diverse (Leibfried 2001: 5; see especially changes in France, Switzerland and Great Britain, as analyzed in Bonoli 2000, changes in different Western European countries in Taylor-Gooby 2004a, in France, Germany, and Switzerland in Häusermann 2010, and a groundbreaking – for the “retrenchment” tradition of international comparative welfare state studies – work of Paul Pierson about British and American reforms of the 1990s, Pierson 1994, see also Pierson 2001b). The focus of welfare state studies on rich nations does not come as a surprise (and postcommunist welfare transformations in Europe has been thoroughly studied in the last two decades, compared with the non-OECD economies in general; as Garfinkel *et al.* (2010: 20) note, “most analyses of welfare states focus exclusively on rich nations. ... all of these rich countries have large welfare states”).

### *Privatization and access to higher education*

From a wider perspective, the knowledge economy seems increasingly to require more and more skilled workforce. European higher education systems as a whole are assessed by the European Commission to need a further 50 percent increase in higher education enrolment levels to close the gap with the USA (EC 2005d: 11). The European Union is thus viewed as in

need of both improving access to higher education and increasing total (public and private) funding in higher education. But, at the same time, European economies are expected to be generally underfunding all their public services in the coming decade(s), including continuing to underfund higher education<sup>141</sup> (underfunding being a highly relative concept, especially compared with the USA<sup>142</sup>; see Powell and Hendricks 2009 and Pestieau 2006 for public services, Johnstone and Marcucci 2010, Aghion *et al.* 2008 for higher education services). Transition countries in the 1990s have been experimenting with the privatization of various segments of the welfare state, including both cash benefits (such as old-age pensions) and benefits in kind (such as health care and higher education, Barr 2004: 89-92). The traditional welfare state seems to have been “overburdened” (Spulber 1997) in the region, operating under increasing financial pressures, with huge consequences for tax-based funding for higher education in the future. Privatization in and of higher education in the region seems to be part and parcel of privatization in and of other public services (see Kwiek 2005, 2009d; see Feigenbaum, Henig and Hamnett 1998: 36-58 on the “political underpinnings of privatization”).

---

141 One way of clustering European countries according to their higher education spending patterns is the following (EC 2011b): “it is possible to categorise EU Member States into several broad categories according to their higher education spending profile. There are the UK, Cyprus and Bulgaria, which, by EU standards, spend a comparatively high proportion of GDP on higher education, with a high proportion of private investment. At the other end of the spectrum, there are Finland and Sweden, where the vast majority of the high overall levels of spending comes from public sources, and private investment is low. France, Belgium and Austria present a similar, but less pronounced pattern, with total expenditure at lower levels, but still above the EU average. Denmark is notable as the only EU Member State with high levels of both public and private spending on higher education. Then come a middle group of Member States, including Latvia, Romania, the Netherlands and Portugal with above average spending on higher education as a proportion of GDP, with a mixture of public and private investment. A final, large cluster of remaining Member States has comparatively low overall levels of spending, and low shares of private investment”.

142 Including education in the welfare state in the US context has huge consequences: “most of the comparative historical accounts of the development of the US welfare state exclude education and conclude that the United States lagged behind other nations in developing welfare state institutions. ... But including education completely changes the picture” (Garfinkel *et al.* 2010: 7).

Interestingly enough, and linking the two above processes: experimenting with privatization in higher education, and substantially increasing access to it in the last two decades, have been especially strong in Central and Eastern European systems, Poland being the biggest and most notable example. New “public-private dynamics” (Enders and Jongbloed 2007) seems to emerge across Europe.<sup>143</sup> Privatization in and of higher education in the region had at least two crucial dimensions: the first was ideological (ideologically accompanying massive privatizations in the economy, as part of the “Washington Consensus” and its three neoliberal guiding principles: stabilization, liberalization, and privatization policies, Orenstein and Haas 2005: 145ff; see Blanchard 1997, Kornai 2008, Blanchard, Boycko, Dabrowski, Dornbusch, Layard and Schleifer 1993, and Lavigne 1999), and the second was financial (severe financial austerity affecting all public sector services, see Kornai and Eggleston 2001 and Williamson 1994). In the 1990s, when privatization in higher education

---

143 Poland provides a very strong case for the “private-public distinctiveness”, stressed as a significant characteristic of the private sector (Levy 2009: 22). “Public-private blurring”, as discussed at length in Enders and Jongbloed (2007) does not seem to be analytically useful for the Polish case. As Levy notes, “this reality of private-public distinctiveness may be disturbing for those (in academia, higher education institutions, and governments) who proclaim that all legitimate private and public institutions are essentially alike; but it is a fact, albeit not uniform fact” (Levy 2009: 24). One of the popular arguments used in Polish debates about public funding for the private sector is that the major policy distinction should no longer be between “public” and “private” institutions; the distinction should be between “good” and “bad” institutions, which is certainly a variation of a global theme. The blurring of the public/private distinction seems to be serving the goal of making the channeling of public funding for private sector more publicly acceptable, though. Since declining demographic trends cannot be altered within a decade, the private sector is seeking to redefine national higher education funding architecture. In good times of ever-increasing student numbers, the independence of the private sector from the state was key. Today state interference (fees in the competing public sector, or public subsidies for the private sector) seems the only long-term policy solution for the privates. Still, the question is whether the subsidization of full-time students in the private sector as a policy option would be able to change the future of private providers dramatically. Higher education market is increasingly “prestige market” or “positional market” and credentials, as well as jobs and incomes, are “positional goods” (see Brown *et al.* 2011: 136, Hirsch 1976: 59-52, Frank 1985: 7-8). As elsewhere in postcommunist Europe, prestige is still in the traditional elite public universities (except for a handful of semi-elite institutions providing teaching in very selected areas like business and economics).

emerged, the financial dimension was certainly more important, and on the policy level it was accompanied by the lack of interest of policymakers in social policies generally, in the midst of large-scale economic reforms.<sup>144</sup> The “Washington Consensus”, as a commentator notes, had “little to say on the social-sector restructuring that was to become such a large part of postcommunist transformation” (Orenstein 2008b: 85). The process of reforming social policies in Central Europe during the postcommunist era turned out to be “much longer and much more difficult than most experts anticipated” (Inglot 2005: 3).<sup>145</sup> The general lack of reformers’ focus on

---

144 Following Feigenbaum *et al.* (1998: 1), privatization “involves the increased reliance on private actors and market forces to take over functions or responsibilities that had in recent decades come to be regarded as properly within the governmental sphere”. Privatization in higher education in the region took two major forms which we have termed elsewhere “internal” and “external” (income-generation in the public sector though the introduction of fee-paying tracks in a nominally fee-free environment; and the emergence of fully fee-based private sector, see Kwiek 2010a).

145 In research on transformations of higher education in Central Europe in the post-1989 period, it is useful to refer to the theory of gradual institutional changes emergent from literature focusing on the model of path dependence (historical embeddedness inspired by works of Douglass C. North, Ruth and David Collier, James Mahoney, Kathleen Thelen and Paul Pierson, see North 1990, Collier and Collier 2002, Mahoney 2000, Pierson 2004). Those scholars were often presenting premises according to which institutions are evolving gradually, even though they were doing research starting from models of change in which long periods of equilibrium coexisted with short periods of violent transformations (punctuated equilibrium models). In this theoretical approach, moments in which there emerge opportunities of performing deep institutional reforms are short, and between them there are long periods of institutional stasis and stability (Pierson 2004: 134-135). Research on transition economies may refer to these emergent analytical tools which allow for analyzing gradual institutional evolution in time in a different manner than within the generally dominating model suggesting long periods of institutional stability and short, radical moments of institutional innovation (in the Polish case, the latter model would be focusing in research, most of all, on the first years of radical postcommunist transformations). What is important is a cumulated effect of small changes in institutional solutions which are occurring in longer periods of time. The institution retains its fundamental characteristics – and at the same time is undergoing a deep transformation: the model of path dependence, and, broader, models of punctuated equilibrium, seems to have been overlooking the essential role of this type of institutional change. Furthermore, what is important in the case of transformations in the Polish higher education system, durability and sustainability of institutions are closely linked to such transformations which adapt institutions to changing social, political and economic conditions. A premise is that institutions transform themselves according to a dynamics of change in surrounding

higher education had far-reaching consequences: the policy of non-interference, or leaving reforms for the future (Kwiek 2008b), was dominant.

As Nicolas Spulber stressed in *Redefining the State*, “whatever its form, a privatization program involves a broad redefinition of the role of the state and of its relations to the market and the society. Specifically, it aims at shifting the prevailing balance between the public sector and the private economy, by rolling back the state’s power and activities via public ownership and public services – but in practice its impact is far more widespread”. The crucial role is played by wider political, economic and legal contexts (Spulber 1997: 148; Enders and Jongbloed 2007, Belfield and Levin 2002, Kwiek 2008b, Kwiek, forthcoming). Because of changing European demographics and the aging of European societies, the costs of both healthcare and pensions are very high, and they tend to be increasing as a percentage of the GDP in almost all Western EU countries (Pestieau 2006: 24, see Bonoli 2000, Palier 2010a, Häusermann 2010); the total costs of university research are escalating, and the participation rates in higher education has never been as high as today (although they seem to be stabilizing in many countries on current, very high, levels). The competition for (tax-generated) public funds has been growing. Higher inflow of private funds to research and development through technology transfer and corporate contracts, to higher education through student fees, to pension systems through multi-pillar solutions instead of pay-as-you-go ones, and to healthcare through semi-privatization and individual private insurance policies – is happening right before our eyes. Perhaps especially, but not inclusively, in the European transition economies. Current trends and priorities in funding do not represent the cyclical changes, though: they are structural.

### *Privatization and the divergent trajectories of costs and available revenues*

The two types of privatization are external privatization (the new, booming private sector) and internal privatization (fee-paying courses offered in the nominally free public sector, see Kwiek 2009d, Kwiek 2010a). If privatization is viewed as a “process or tendency of universities taking on

---

institutions; as they are functioning in a “complicated ecology of interrelated rules”, adaptations occurring in one part of an ecology “may cause adequate adaptations in its other part” (March and Olsen 1989: 170, see North 1990: 92-104).

characteristics of, or operational norms associated with, private enterprises” (Johnstone 2007a: 1), then the privatization of higher education has been flourishing in several major European transition countries for two decades now. In general terms, privatization is “the transfer of activities, assets, and responsibilities from government/public institutions to private individuals and agencies. Education can be privatized if students enroll at private schools or if higher education is privately funded” (Belfield and Levin 2002: 19; see Morphew and Eckel 2009 on “privatizing the public university” and Priest and St. John 2006 on “privatization and public universities”). Poland provides examples of both processes of privatization: increasing private provision and increasing private funding (see Kwiek 2010a). The emergence of powerful market mechanisms in public higher education and the emergence of the private sector in Poland can be viewed as the two different faces of the same process of the privatization of higher education. Both public and private sectors are following the same road (Kwiek 2010a).

An interesting angle to view the future of higher education in the context of the future of public services is to view it through what D. Bruce Johnstone has called “diverging trajectories of costs and available revenues”, which is a function of (1) per-student costs, (2) increasing participation and (often) population growth, and (3) increasingly inadequate government revenue (shrinking tax base) (Johnstone 2007a: 1). Viewed from this angle, higher education in several major European transition countries has been consistently turning towards privatization, both external (new booming private sector) and internal (fee-paying courses offered in the nominally free public sector). Johnstone finds it useful to look at privatization as a direction along the continua of several related yet distinct dimensions: from “high publicness” to “low privatness”, with 5 elements under consideration: mission or purpose, ownership, source of revenue, control by government, and norms of management (Johnstone 2007a: 2).<sup>146</sup>

The radical distinctiveness of the public sector from the private sector has been a constant point of reference in both research and policy analyses. But both sectors can also be looked at as following the same road of privatization if the phenomenon of privatization as applied to higher education is taken more widely. Privatization according to Johnstone suggests a movement along a

---

146 While governments can essentially respond in three ways to the fiscal stress: they can “cut costs, run a higher debt, or increase revenue” (Manow 2010: 280), higher education institutions seem to have only the first and the third option at their disposal.

dimension – rather than an “absolute quality or precisely measurable distinction”. It may mean any or all of the following: seeking greater autonomy from government, relying more on revenue from tuition fees, attention to marketing, “enrollment management”, adopting a culture of service (to the student-client), fund raising, contracting out auxiliary enterprises, and trimming departments and other units that seem not to be attracting students or research funds (Johnstone 2007a: 1-2). As Daniel C. Levy stressed, “institutions called private and public are not always behaviorally private and public, respectively” (Levy 1986b: 15) – and this is indeed the Polish case.

Seeing higher education policies in isolation from larger public sector policies and welfare state policies would be assuming a short-sighted perspective: higher education is a significant (and significantly fund-consuming) part of the public sector and a part of the traditional welfare state that is right now under severe pressures, even though they may not be as strong as pressures on the two main parts of the welfare state, healthcare and pensions. In still more theoretical than practical terms, these phenomena had their powerful impact on thinking about public services, including public higher education, in CEE. The theoretical impact was already translated into changed national legislation in the case of the pensions reform and health care reforms at the end of 1990s.<sup>147</sup> However, in the case of higher education, the theoretical influences are only now gradually being translated into (propositions of) changes in legislation.

---

147 The biggest impact on the theory and practice of pension systems reforms was exerted by the OECD and the World Bank conceptualizations, starting with *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth* of 1994, the first global study of the economic problems associated with rapid population aging in affluent Western countries (edited by Estelle James, World Bank 1994), through Robert Holzmann’s numerous works coauthored with, among others: Joseph E. Stiglitz, Richard Hinz, Mitchell Orenstein and Michal Rutkowski (*New Ideas about Old Age Security. Towards Sustainable Pension Systems in the 21st Century*, Holzmann and Stiglitz 2001; *Pension Reform in Europe: Process and Progress*, Holzmann, Orenstein and Rutkowski 2003, *Old Age Income Support in the 21st Century. An International Perspective on Pension Systems and Reforms*, Holzmann and Hinz 2005; see also Holzmann 2004 and Holzmann and Palacios 2001) and a recent volume by Edward Whitehouse, *Pensions Panorama. Retirement-Income Systems in 53 Countries* (Whitehouse 2007). For the analysis of the Polish and Hungarian pension system reforms, see the first volume of *Pension Reform in Central and Eastern Europe. Restructuring with Privatization: Case Studies of Hungary and Poland* (ILO: 2002). The OECD has been editing an influential *Private Pensions Series* for the last ten years.

### 3.6. Conclusions

#### *“Relevance”, “demand overload”, and “mission overload”*

What we can see today as universities’ missions seems to have been highly influenced by the two decades of reformulations (both in theory and in practice) of the role of public sector services. In wider terms, the university, as other public sector institutions, is increasingly viewed in the context of economic competitiveness of nations, global pressures on national economies, and global pressures on national welfare states. For public universities, these are fundamentally new contexts; and they are new to academics as well. Never before the functioning of the university has been so important both for the economy and for the huge (and historically unprecedented) numbers of graduates; it has never been absorbing so huge (public and private) financial resources, and also the social and economic expectations regarding universities (or their “relevance”, see Geiger and Sá 2008, Brennan 2007, Brennan 2008, Skolnik 2005, Wolfe 2005, Välimaa 2008a, with an overall, more general “demand-response imbalance, in which demands made upon universities are outstripping the inherent capacity of universities to respond”, Clark 2003: 99 and “mission overload”, Jongbloed, Enders, and Salerno 2008: 305) have never been so high and so widely publicly formulated. As Bonaccorsi, Daraio and Geuna point out (2010: 1-2), “it can be said that the social demand placed on universities has increased significantly. These are great expectations of their ability to produce more education, more research, and more direct interaction with society and the economy. ... Policymakers are devoting more attention to the workings of universities and have introduced significant institutional changes in several countries”. Current economic expectations from universities compared with those from the 1960s cannot be met, and, from a historical perspective, as Skolnik (2005: 120) argues,

not since the 1960s has there been such strong and unqualified belief on the part of governments and the public in the vital importance of higher education to national economic well-being. However, in contrast to the situation in the 1960s, today the capacity of the universities to respond to these economic challenges and at the same time maintain a healthy balance between the economic and non-economic aspects of their nature is greatly jeopardized.

There is an “enormous demand overload” in European universities (Clark 1998a: 129-132), combined with “mission overload” (Jongbloed, Enders, and Salerno 2008). As Clark (1998a: 129, emphasis in original) argues,

National systems of higher education can neither count on returning to any earlier steady state nor of achieving a new state of equilibrium. As principal actors within these systems, public and private universities have entered an age of turmoil for which there is no end in sight. Disjuncture is rooted in a simple fact: *demands on universities outrun their capacities to respond*. From all sides inescapable broad streams of demands rain upon the higher education system and derivatively upon specific universities within it.

Universities themselves are responsible for their present troubles: they are caused by their enormous institutional successes (though the dynamics of transformations is certainly much more complicated): their massive quantitative and financial expansion put them at the very center of social and political attention. Not accidentally, their permanent reforming in Europe coincides with the universalization of higher education.

### *The supranational production of university missions and the global policy diffusion*

The consequences of this shift in attention towards universities are far reaching: for a decade and a half, international and supra-national organizations have been involved in the production of new university missions (both the World Bank, the European Commission and the OECD became seriously interested in universities in the second half of 1990s, except for a few reports published earlier, such as *Financing Higher Education: Current Patterns, Universities Under Scrutiny, and Education and the Economy in a Changing Society*, World Bank 1994).<sup>148</sup> Their influence on policy thinking and policy making (as opposed to academic research on higher education) has been substantial all over Europe (see especially a whole strand of research within the German project “Transformations of the State” resulting in such recent books as Martens, Rusconi and Leuze 2007, Hurrelmann, Leibfreid, Martens and Mayer 2007a, Jakobi 2009, and Martens, Nagel, Windzio and Weymann 2010, as well as Martens and Jakobi 2010a with a strong link between transformations to the

---

148 The first three books about higher education published by the OECD in 1987-1990 had only about three hundred pages in total, and their goals were modest – which makes them substantially different from huge volumes published annually in the last ten years, most often several hundred pages each. A most recent OECD policy statement on higher education, based on substantial original international research, has more than seven hundred pages (Santiago *et al.* 2008a and 2008b).

nation-state and transformations to higher education, with special emphasis on “policy diffusion” and the “convergence of national paths in education”<sup>149</sup>: these organizations seem to be providing major concepts in which university futures are currently being discussed in policy circles, and the economic spaces increasingly seem to converge with the academic spaces in ongoing discussions (the subsumption of the goals of the Bologna process, of the ideas of the “Europe of knowledge” and of knowledge-based societies, under the overall EU “Lisbon Strategy” of “more growth/more jobs” in the 2000s being a good example, see Maassen and Olsen 2007, Dale 2007, Dale 2008a, Dale 2009c, and Dale and Robertson 2009). A substantially more “economic” space in which public universities are currently discussed in policy circles (at the expense of the traditional “academic” space of the discourse on its roles, missions, and futures which was dominant during almost the whole of the twentieth century, until the 1990s, with the exception of the human capital approach in economics from the 1960s onwards) affects institutions, academics, and students alike (Välimaa and Hoffman 2008 and Dale 2007). As in the case of other major public services, healthcare and pensions, the economic dimension of functioning of universities comes to the fore, especially in the transition countries. Students in massified systems increasingly view themselves as consumers and view academics as providers of educational services; institutions increasingly want to view individual academics as part-time knowledge workers rather than tenured professors making use of academic freedom in their quest for truth, as in traditional university models; and academic collegiality is losing with managerialism and business-like approaches taken from the corporate sector. Both policymakers and societies at large (following a knowledge economy discourse promoted by international organizations, Välimaa and Hoffman 2008 and Dale 2007) increasingly view higher education as a private good and are more inclined

---

149 In the context of transformations of nation-states in Europe, the question is about the “convergence of national paths” in education and about the role of international organizations. As Martens and Weymann (2007: 167-168, italics in original) point out, states “increasingly approach international organizations for solutions for commonly shared domestic problems. States thus initiated a process of internationalization in the field of education. As a result, they *unintentionally diffused responsibility over regulation ... to the intergovernmental level*. Today, the OECD influences national education policy as the sharper of standards in education, while the EU affects educational institutions by exerting pressures on harmonization”.

to pay for this good from their pockets (especially in those transition countries where the private sector is large and the public sector is still restrictive and elitist; see implications of marketization for the perception of education as public or private good in Kohlrausch and Leuze 2007). Finally, governments increasingly view universities as growth engines of knowledge economies. The links between rethinking universities and rethinking the welfare state are powerful and need to be taken into account in thinking about the production and reproduction of the university in the last two decades.

### *Experimenting with public sector services*

The welfare state in its traditional postwar European forms, and its services, including public higher education, seems to be undergoing substantial transformations in most parts of Europe, and especially in the European postcommunist transition countries. Lines of these changes and argumentation in support of them (whether by the European Commission, the OECD or national governments) point in a similar direction: more financial self-reliance of public universities, rethinking the introduction of student fees in the context of equitable access to higher education, more academic entrepreneurialism leading to more non-core non-state income etc. (even though the concepts used may be different in different systems).

Many discussions in Western Europe about welfare state futures may seem academic in the transition economies: what they shyly predict for affluent democracies is in fact already happening there. There is certainly a lot of social experimentation with respect to welfare going on in the transition countries. Nowadays, as the reformulation of the welfare state in general progresses smoothly (and often in an unnoticeable manner e.g. through new legislation) in most parts of the world, social contracts with regards to most areas of state benefits and state-funded services may have to be renegotiated.<sup>150</sup> In many respects, higher education and pensions (in transition

---

150 Numerous incremental changes can cause huge accumulated changes – across the whole public sector. There is extensive literature in the political economy of reforms (and in the organization theory) which analyzes, among others, advantages of such small changes on the one hand, and advantages of the sweeping, revolutionary changes of the “big bang” type on the other hand (see OECD 2009h). The idea of gradual change, to supplement that of radical change, was discussed in terms of the tension between “organic growth” and “radical change”, “organic evolution” and “imposed

countries and elsewhere) seem to be an experimental area and a testing ground on how to reform public sector institutions in general. The end-products of these experimentations are still largely hard to predict. What perhaps counts most in this context is a historical phenomenon that universities are highly adaptable institutions which tend to thrive under ever-changing circumstances (see adaptations of the modern, nineteenth-century and twentieth-century universities alike).<sup>151</sup> There is a plethora of nationally-specific and culture-related choices to be made by both policymakers and academic institutions, and the effects of these choices are still largely hard to predict.

---

change” in Becher and Kogan (1992). As Kogan *et al.* (2000: 23) note, “the implication for how we regard policy change is that the notion of consciously designed reforms and radical change needs to be supplemented. We propose therefore to add the idea of gradual change where new structures and values imposed by reforms are grafted onto established arrangements in a process of meandering and sedimentation that gives policies and institutions their character of complexity and ambiguity”.

- 151 See two volumes of the monumental *A History of the University in Europe*, Vol. II (*Universities in Early Modern Europe, 1500-1800*, edited by Hilde de Ridder-Symoens, 1996) and Vol. III (*Universities in the Nineteenth and Early Twentieth Centuries, 1800-1945*, edited by Walter Rüegg, 2004). Gareth Williams is right when he notes, on the occasion of the discussion of the enterprising university, that the university has kept its name only due to its ability to adapt to the changing political, economic, cultural, social and technological challenges (Williams 2004: 4): “Universities have been remarkably successful in managing the tensions between the old and the new, between tradition and iconoclasm, between continuity and change. One common feature of universities over the centuries has been that are communities of relatively clever people. They may at times have been idle, self-serving, decadent or corrupt but they have survived and, on the whole prospered by staying ahead of the game”. On the occasion of contemporary transformations of European universities, in the face of challenges posed by the knowledge-based economies (and societies), perhaps above all, universities must also take care of being always “ahead of the game”, that is, to always try to negotiate the terms of the game, and not to (indisputably) be subjected to, or drift with, them. In this sense, the cooperation between the world of academy and the world of policymakers that increasingly determines the fate of this institution, is highly desirable.

## Chapter 4

# Reforming Higher Education and Expanding the Regional Mission in the Contexts of the Postcommunist Transition, Accession, and Beyond

### 4.1. Introduction

#### *“Back to Europe?” Transition, Accession, and Beyond*

In general, higher education in Central Europe, Poland included, is one of *those social areas that have been exposed to various sustained and ad hoc* reform attempts following the collapse of communism in 1989.<sup>152</sup> Reforms in the region throughout the two decades were intended, implicitly or explicitly, to bring Central European academics and students back into what was regarded to be the European higher education community of academics and students. Reform attempts were led by specific, regional postcommunist concerns inspired by national higher education developments observed in Western Europe (with a powerful limitation, though: as Brunsson (2009) argues with respect to organizations, “reform is not equivalent to change. An organization may undergo several reforms and emerge with little change. During a certain limited time, some people may merely describe the organization in a new way, with no other consequences for the organization’s activities”). Clearly, national and regional reference points in reforms were accompanied by European reference points, especially when the Bologna Process started at the turn of the century and when this European intergovernmental initiative was used in national contexts in the region as a useful justification for further reforms.

The trajectory of policy changes in Central Europe is a special case in the second half of the 20<sup>th</sup> century: in no other part of the world a similar successful, massive transformation from command-driven economy to

---

152 This passage draws from two recent papers by Marek Kwiek and Peter Maassen (Kwiek and Maassen 2012a and Kwiek and Maassen 2012b).

market economy was undertaken by ten (mostly neighboring) countries, all desperately seeking to “catch up with the West” (or to be “back to Europe”, as the title of Karen Henderson’s book runs) after having been under communist regimes more than forty years (see especially several major book contributions on structural reforms of the transition period “in the making”: Lavigne 1995: 91-280, Blanchard, Froot and Sachs 1994, Bell 2001, Pickles and Smith 1998, Campbell and Pedersen 1996a: 3-27, 207-250, Blanchard, Boycko, Dabrowski, Dornbusch, Layard and Schleifer 1993: 109-150, Dawisha and Parrott 1997, Williamson 1994, Whitley 1995, Nelson, Tilly, and Walker 1997, Blanchard, Froot, and Sachs 1994, and Blanchard 1997; a separate research strand is the “institutional design” literature, including Elster, Offe and Preuss 1998, Offe 1996a, Offe 1996b, and Goodin 1996). The countries in the region wanted to join as soon as possible (both politically and economically) Western Europe, with its standards of democracy and its levels of material affluence. What later became known as the “transition” (Barr 1994, World Bank 1996) was actually a peaceful revolution in all economic and public service sectors, including the higher education sector (with perhaps most radical changes occurring in a special case of East German higher education being integrated into the German university system, see Offe 1996a).

During the last twenty years, the countries in the region were generally lumped together: first as “transition” economies (Barr 1994), then as “accession” economies, and finally, following the 2004 and 2007 waves of the European enlargement, as “new EU entrants” (Barr 2005, Lane and Myant 2007, Potuček 2008, and Kogan, Noelke and Gebel 2011). While in the transition period, the models of reforming all public services, including higher education, were coming mostly from the World Bank, in the pre-accession period and especially after the entrance into the EU as full members, the role of both intergovernmental European processes (the Bologna Process) and supranational European processes (the implementation of the Lisbon 2000 Agenda) has been gradually growing.

### *Communist-era universities and welfare states*

Historically, the university model prevalent in the region in the pre-war period (before 1939) was the Humboldtian one, even though in some countries, for example, Romania, there were strong influences of the Napoleonic model. Current university models in the region, though, cannot

be easily referred to as having clear Western European, i.e. French or German origins. Depending on the aspect under consideration, they can be termed both Humboldtian and Anglo-Saxon, just as current welfare state regimes in the region, Poland included, share characteristics of both conservative and strongly corporatist regimes and Anglo-Saxon liberal regimes (Esping-Andersen 1990). New models of higher education governance, as new models of public sector reforms and welfare state governance in general, are still only emergent in the region (for early theoretical formulations, see especially Nolan 2001, Lane 1996, and Lane 1993). Nonetheless, some scholars have started to discuss a potentially distinct “Central European knowledge production model” and “post-communist welfare state model” (see Kwiek 2011a, Aidukaite 2009; see Gornitzka and Maassen 2011 with reference to the “Nordic Model”). Polish reforms are a good example of a time sequence in reforming public services in general in the region: while pension and healthcare reforms were initiated in 1999, significant higher education reforms started only a decade later, in 2008-2011. As in many other parts of Europe, higher education reforms are viewed today as “incomplete” (as organizations can be viewed as “incomplete” and still not “true”, Brunsson 2006 and Brunsson 2009), and as leading, almost by definition, to next waves of reforms, especially in the context of the financial crisis in Europe.<sup>153</sup>

In the communist period, the economy, welfare, and higher education had specific features. Communist-era welfare states were unique, and, similarly, communist-era higher education systems were unique. Following Mateju *et al.* (2007), we can summarize them as having six core characteristics that need to be taken into account if one wants to understand the change dynamics in post-communist countries: (1) higher education was heavily centralized and part of the central planning system, the overall

---

153 The future of academic research in the context of the economic crisis seems bleak unless governments (viewed as “the white knight” to save academic research) intervene. As Viale and Etzkowitz (2010: 1, as well as Etzkowitz and Ranga 2009 with similar arguments) highlight, “the year 2009 may have represented a turning point for research and innovation policy in Western countries, with the apparently contradictory effects. ... The future outlook for R&D looks poor unless a ‘white knight’ comes to its rescue. This help may come from an actor whose role was downplayed in recent years, but that now, particularly in the USA, seems to be in the ascendant again. It is the national and regional government that will have to play the role of the white knight to save R&D system in Western economies”.

number of students and their allocation to major fields of study and programs were decided centrally. (2) There was an intense bureaucratic control over the entire system, which included balancing the number of graduates with the number of jobs, displaced job competition, and educational credentials being more important in job allocation than actual knowledge, skills, and competencies. (3) Curriculum guidelines, research goals, and requirement for filling teaching positions were defined and closely monitored by the communist party. (4) Traditional university education was a unitary system that lacked, for example, short bachelor's programs. (5) Decisions about the number of students admitted and enrollment procedures were based on central guidelines and quotas set by the communist party for controlling the proportions of students of various social backgrounds. (6) The funding of universities was entirely dependent on the government, based on incremental budgeting (Mateju *et al.* 2007: 374-375).

Education under socialism had very specific tasks to perform:

Socialist leaders viewed education as a crucial economic and political instrument to foster economic development and to politically indoctrinate citizens, and therefore placed the entire education system under firm state control. Educational planning became increasingly differentiated, regulating not only student quotas and resource allocation, but also the types of educational programs and specializations, curricula, and the content of textbooks, as well as regulating the flow of individuals through the education system and afterward into the labor market. Individual preferences bore little or no influence on the available educational options, which were constrained by the strict limits defined by planning agencies (Noelke and Müller 2011: 16; see also Tomusk 2004, Tomusk 2006, Kogan Noelke, and Gebel 2011, Szczepański 1974, and Szczepański 1978).

Or as Haggard and Kaufman (2008: 4) summarize the welfare state model in general in the region, with implications for higher education systems throughout the communist world,

In Eastern Europe, social policy was anchored by an overarching employment guarantee, but also by a strong commitment to education and training, universal healthcare and pensions, and family allowances. These commitments began as occupational ones but were transformed over the postwar period into universal citizenship rights (see also Haggard and Kaufman (2008: 143-177).

Thinking about reforms in Polish higher education: surprisingly, while all other public sector services in Poland are increasingly being reformed in the

direction of market or market-like models, higher education seems to be reconceptualized as a new governmental tool for national political agendas, with limited encouragement to be more market-oriented. The role of market mechanisms in new legislation, as well as in the two strategies for the development of higher education in Poland until 2020, seems much more modest than could be expected. Consequently, while the welfare policies generally are increasingly under pressure to become more marketized, higher education policies generally are under pressure to become more closely linked to the needs of the national economy and national economic priorities. Referring to Olsen's typology (2007) a strong market oriented vision of the university seems present at the level of rhetoric rather than at the level of national strategies, or at the level of higher education legislation.

### *Reforms from institutional / instrumental perspectives*

Polish reform programs and accompanying public debates are, as in other European countries undergoing reforms, driven by an instrumental view of the university: in this view, the university "is involved in a set of contracts. Support, economic and otherwise, depends on contributions. Change reflects a continuous calculation of relative performance and costs, and the University, or some of its parts, will be replaced if there are more efficient ways to achieve shifting objectives" (Olsen 2007b: 27). The logic of Polish reforms is clearly instrumental – while the undeclared, and not explicitly formulated nor properly understood logic of the Polish academic community is traditional and institutional (see also Antonowicz 2012a). The clash between institutional logic represented in general by the academic community and the instrumental logic represented in general by the policymakers was especially evident when two competing national strategies for the development of Polish higher education were prepared and publicly debated in 2010: one prepared under the auspices of the rectors' conference (KRASP), and the other prepared under the auspices of a consortium of a company and a think tank (Ernst and Young/IBNGR, see EY/IBNGR 2010). Since 2010, a governmental national strategy has been under preparation in a ministerial committee which tries to merge both proposals. At the same time, as Clark argues, transformation of universities comes from within, and is hard to be declared from the outside – which links the theme of reforms with the theme of their implementation (see Gornitzka, Kogan and Amaral 2007, Cerych and Sabatier 1986 on the "great expectations and mixed

performance”, Bardach on the “implementation game”, and Hill and Huppe 2009):

The deliberate transformation of a university requires two miracles. One is to get started, facing down the fear of failure before the beginning. Many universities will simply not try to start down the new road. It is risky: a hallowed institution may be laid low. The other miracle is sustaining a virtuous circle of successful accomplishments over a decade or more, facing down the multitude of conserving tendencies in organizations – especially universities – and among organized sponsors – especially ministries – that bring change to a halt. At the very heart of each miracle lies willful agency. It is not demands of the day in themselves that drive a university to change, we now know, but rather the many specific responses to those demands, in the form of emergent acts of will, that are summoned from within (Clark 2004a: 95).

An institutional perspective, in contrast to an instrumental perspective, assumes that constitutive rules and practices have a value in themselves and that “well-entrenched institutions reflect the historical experience of a community, that they take time to root and that they are difficult to change rapidly and radically, except under special circumstances such as widely agreed-upon performance crises” (Olsen 2007b: 27). In the last two decades, universities in Central Europe have been operating under specific conditions linked to their past: prior to 1989, they had been operating under communist regimes for almost three generations. Therefore in the region, the basic underlying ideas of the university, its rooted constitutive rules and practices, are less socially relevant than in Western systems. In Western Europe these ideas, rules, and practices have been taking roots in the last half a century, together with the emergence of the post-war Western European welfare systems in their different forms.<sup>154</sup>

---

154 As we show elsewhere in more detail (Kwiek 2012a), traditional academic rules and norms in top public universities according to which research was of key importance to the academic enterprise were gradually weakening throughout the 1990s in the expansion-related, soft academic fields. The price of this process of weakening of traditional academic rules in soft (as opposed to hard) fields for top public universities was high, though: it was the prolonged institutional (as well as individual academic) focus on the teaching mission, at the expense of the research mission which becomes crucial in a new wave of reforms. The empirical data studied include internationally visible publications across different disciplines (from a Central European comparative perspective) and research-related academic promotions in Poland in different fields, both changing over time. In the postcommunist expansion era, prestigious public research universities became much more teaching-oriented, especially in soft

In such Central European countries as Poland, Slovakia, the Czech Republic and Hungary – as opposed to, for instance, Bulgaria and Romania – neither universities themselves nor societies at large perceive universities today as undergoing “widely agreed-on performance crises” (Olsen 2007b). Radical reforms (of a big-bang type) seem therefore improbable. Support mechanisms for reform programs include reports, debates and data analyses intended to warn the public at large about the ill-performance of universities, but their social acceptance is relatively low, public interest in reforming higher education is short-term, and the overall social feelings of utter dissatisfaction, urgency for reforms, and systems being on the verge of collapse, do not seem to work as catalysts for change. The levels of overall satisfaction of students in the region are comparable, and often higher than those of their Western colleagues, as various Eurobarometer surveys seem to indicate.

## **4.2. Transnational actors and international agendas**

### *Major international and transnational players in educational, social, and welfare policy making*

In different periods following the collapse of communism different international organizations were the major players in national educational, social and welfare policy making processes, including higher education policy processes. The three international organizations of greatest influence in the region were the World Bank, the OECD and, especially in the pre-accession period of the 2000s, the European Union. Other global and

---

disciplines, than could ever be expected judging from their traditionally elite and Humboldtian character. In the coming contraction era (projected for demographic reasons to last until 2025 and beyond), with new legislation in force since 2011, the teaching-oriented segments of public universities are expected by policymakers to become much more research-intensive. Low research engagement in the past two decades in social science segments of higher education institutions may be a substantial obstacle to the implementation of current reforms, leading to institutions heavily internally differentiated by research intensity of their major components. The policy challenge today is to implement new governance and funding approaches to institutions which are internally divided by institutional cultures putting different emphases on the university research mission.

regional international organizations, such as e.g. ILO (International Labor Organization), the Council of Europe, the International Monetary Fund or various UN agencies (such as UNDP), were of much lesser importance, except for some countries (such as the Council of Europe in the post-conflict countries emergent from the former Yugoslavia). In Central Europe generally, “policy thinking and advice received differed in each country, often idiosyncratically, explaining a large part of the seemingly unsystematic differentiation in countries on more or less equivalent paths towards Europe” (Orenstein and Haas 2005: 143).

The role of the OECD in national policy debates and national reform projects in higher education in Central Europe, especially in Poland, was very important (as it is important globally: see Martens 2007, Martens and Weymann 2007, Martens and Jakobi 2010b, Martens, Rusconi and Leuze 2007). A significant part of the “global script” (Gornitzka and Maassen 2011) in higher education policy (rather than in social policies where the message has been consistently conveyed by the World Bank) in Central Europe has been conveyed by the OECD and its comparative and country reports. In Poland, interesting examples of international organizations’ discourse on the reforms of higher education include World Bank’s seminal reports. Policymakers’ expectations from both OECD and World Bank reports have been very high; this concerns especially the 2007 OECD review of Polish Tertiary Education (Fulton *et al.* 2007). This review was translated into Polish and widely used in policy debates about reforms, especially as an outsider’s (international) justification of the wave of 2008-2011 higher education reforms.

Probably the highest international influence on national policies in higher education came from the “European agenda” in higher education, though, especially in the areas most explicitly linked to the Bologna Process and its requirements in the 2000s. *Magna Charta Universitatum* of 1986 and the Bologna Declaration of 1998 were signed by most countries from the region. A new “open method of coordination” made the distribution of higher education policies in Central Europe much more effective (Gornitzka 2007, Dale 2009a, Dale and Robertson 2009). Generally, initial enthusiasm of Central European countries (and high ranks in the implementation charts provided in subsequent *Trends* reports) gave way to current implementation problems in several areas (leading first to self-declared “red lights” in the 2009 *Bologna Stocktaking Report* implementation charts; see also the *Trends 2010 report* on Central Europe generally). In contrast, in terms of

preparations to the UE accession in the first half of the 2000s in economic policies and not in higher education policies, it was the World Bank that was setting the agenda for Central European countries:

The World Bank tended to dominate the agenda, coordinating with the EU on issues of preparation for accession. Indeed, the World Bank conducted major reviews of east-central European countries' economic policies in preparation for accession that included extensive analysis of social welfare systems and state administration in addition to macroeconomic policy, financial sector regulation, and other economic policy areas that were central to the early transition agenda. As a result, east-central European countries found themselves part of a social policy discourse that primarily included their governments, the EU, and the World Bank, with the latter doing much to set the agenda for these discussions (Orenstein and Haas 2005: 146).<sup>155</sup>

Between 1994 and 2004, as Orenstein reminds, eleven postcommunist countries partially privatized their pension systems – and the case of pension reforms shows that “transnational actors had a fundamental influence on the social-policy agenda in postcommunist countries after the mid-1990s. They exercised this influence in many other areas as well, setting standards for health reform and reshaping unemployment-benefit systems and many other programs” (Orenstein 2008b: 86-87). Higher education in the 1990s and until mid-2000s was one of those social areas in which this influence was marginal, except for Hungary where the influence of the World Bank, on and off, was higher than anywhere else in the region.

---

155 See also Orenstein, Bloom and Lindstrom (2008: 1-18) on “transnational actors in Central and East European transitions” and the “fourth”, until recently largely ignored, dimension of transition: “the integration of new or newly independent nation-states into an international system marked by complex interdependence”. Between 1994 and 2004, as Orenstein (2008: 86-87) shows elsewhere, eleven postcommunist countries partially privatized their pension systems – and the case of pension reforms shows that “transnational actors had a fundamental influence on the social-policy agenda in postcommunist countries after the mid-1990s. They exercised this influence in many other areas as well, setting standards for health reform and reshaping unemployment-benefit systems and many other programs” (see also: Esping-Andersen 1990, 1996; Fenger 2007). The World Bank was heavily involved in the introduction of a multi-pillar pension system in 1999, and it was involved in the assessment of Polish higher education and research in 2004 and, recently, in 2011. See the Europe 2020 Poland project, and its two volumes on *Fuelling Growth and Competitiveness in Poland through Employment, Skills and Innovation* published in 2011, and Kwiek and Arnhold 2011.

### *Higher education in the transition period*

Leszek Balcerowicz, the founding father of Polish economic reforms leading Poland from command-driven to market economy through a shock therapy, never used the word “higher education” in any context whatsoever in his seminal book *Socialism, Capitalism, Transformation* (1996).<sup>156</sup> Not surprisingly, also Jeffrey Sachs in his *Poland’s Jump to Market Economy* (1994) never used it. In the transition period of the 1990s, there was generally very limited interest in universities and their performance, or in university reforms leading to their better performance: higher education and research and development systems were somehow missing from the general picture of Polish transformations. Most prominent figures involved in Polish economic reforms hardly mention reforms of both systems at all. Poland was not an exception: the lack of higher education reforms in the early 1990s was prevalent in Central Europe, perhaps partly to overwhelming Western views that communist educational systems did not need any substantial transformations, in contrast to economic systems and political systems which needed fast and deep changes. It needs to be added, by way of justification, though, that the 1990s in the region meant creating capitalism “from scratch”, creating “the very fundamentals of capitalism”; not surprisingly, “in Eastern Europe, both markets and private enterprises were virtually non-existent for about 40 years” (Elster, Offe and Preuss 1998: 157; see also Ekiert and Hanson 2003, Frye 2010: 213-228, Orenstein 2001: 25-60, Haggard and Kaufman 2008: 181-220). As Feigenbaum *et al.* (1998: 173) noted in their *Shrinking the State. The Political Underpinnings of Privatization*, “among the three types of privatization [pragmatic, tactical and systemic], only systemic privatization entails a fundamental attempt to shrink state. But, with the exception of Britain and New Zealand, and the difficult case of Eastern Europe, systemic privatization at this point remains

---

156 As Orenstein (2008: 25) reminds, “shock therapy was intended to produce a rapid and painful adjustment to a market economy while dismantling many of the institutions of communism. Central elements of the shock therapy strategy were speed and simultaneity in enacting these changes. As Sachs put it, ‘you can’t cross a chasm in two jumps’. See “political consequences of economic reforms” in Przeworski (1991: 187) and his warnings that with weakened democracy, reforms may become politically destabilizing: “authoritarian temptations are inevitable” and “doubts, oppositions, insistence on procedures appear to be symptoms of irrationality” (see also Nelson 1990: 3-32 on the “politics of adjustment in the Third World”, published at about the same time, Nelson 1994, and Krueger 1993).

of a vision than an accomplishment". In postcommunist Central European economies, perhaps most of all in Poland (together with the Czech Republic, a "trailblazer" in postcommunist democratization processes, Dryzek and Holmes 2002: 223-251), privatization in several social areas is no longer a vision, we can add after a decade and a half (for "internal" and "external" privatization in higher education, see Kwiek 2010a, Kwiek 2009d).

And in the meantime – in the 1990s – higher education landscape in Western Europe was undergoing profound transformations, most often according to governmental plans and national strategies (Gornitzka 1999, Maassen *et al.* 2011). Systems in both parts of Europe were dramatically changing in the 1990s but transformations in Central Europe were often unplanned, chaotic, uncoordinated, profit-driven, intuitive, and fragmentary; transformations in Western Europe in the 1990s consisted much more of government-coordinated changes, resulting from government-designed national strategies and emergent revised national policies.

### *More market, diminished "Welfare State Model": the European Commission and the World Bank*

The role of the European Commission in shaping higher education policies in Poland was relatively unimportant throughout the 1990s when Poland was only vaguely considered as a future member state and when the "modernization agenda for universities" was still to emerge in Europe. The Commission's role became very important in all social areas, including higher education, at least at a declarative level, in the 2000s, especially prior to the EU Enlargement in 2004 (from a European perspective, see: Gornitzka 2005, Gornitzka 2007, Maassen and Olsen 2007, Olsen 2007b, Maassen 2007, and Maassen and Musselin 2009). Poland in the 2000s was joining the emerging European research and higher education areas and was among the signatory countries of the Bologna Declaration in 1999. The role of the EU accession conditionalities for changes in all public services became of critical importance in the early 2000s: they were used, in general, as supporting a neo-liberal social model rather than the so-called "European Social Model", in its different variants (including what Gornitzka and Maassen (2011) termed "The Nordic Model"). As the Hungarian sociologist and economist Zsuzsa Ferge stressed repeatedly in the last decade, the welfare state in Central Europe was powerfully pushed in the 1990s in the direction of Americanization rather than Europeanization:

Supranational monetary agencies (e.g. the IMF, World Bank, WTO) have had a major role in shaping post-socialist societies, particularly where the countries have been indebted. The main elements on their social-policy agenda were the strengthening of individual responsibility and the weakening of public responsibility in social matters; the promotion of privatization and marketization in all spheres; ... In short, a leaner state in general, and a diminished welfare state in particular (Ferge 2008: 150; see also Ferge and Juhasz 2004, Berend 2007, Bohle and Greskovits 2007, Cain *et al.* 2005, Kovacs 2002, Kwiek 2007c).<sup>157</sup>

In the early 2000s, the EU accession countries, Poland included, were much more praised by the European Commission for their social reforms leading to neoliberal solutions than for reforms potentially leading to any traditional Western European social arrangements (see Kovacs 2002, Ferge 1997, 2004; see also Polish annual reports to the EC prior to 2004). While most public sector services were becoming more marketized, including pensions and healthcare, public higher education was using market forces in one dimension only: more fee-paying part-time students bringing more non-core non-state income. This was one side of the privatization process, the other being the growth of fee-based private higher education. Market-like solutions in university governance or public research funding, university links with the economy or the commercialization of research were not introduced until the reforms of 2008-2011.<sup>158</sup>

---

157 Various policy reforms in various CEE countries in the 1990s are examples of what Simmons, Dobbin and Garrett (2008: 7) term “international policy diffusion”: it occurs “when government policy decisions in a given country are systematically conditioned by prior policy choices made in other countries (sometimes mediated by the behavior of international organizations or private actors and organizations”. Policy diffusion in educational policies, see Martens and Jakobi 2010a, Jakobi 2010, Martens, Nagel, Windzio and Weymann 2010, and Martens, Rusconi and Leuze 2007.

158 There is an emergent typology of private higher education: the dominant typology has been elite/religious and demand-absorbing (Levy 1986b and Geiger 1986). Recent two decades of phenomenal global growth may require what Levy calls a “reconfiguration”. The emergent categories summarized recently (Levy 2008: 26 ff., Levy 2009: 15 ff.) include elite/semi-elite, religious/cultural (or identity) and non-elite/demand-absorbing. Effectively, the Polish case includes predominantly institutions of the third type (non-elite/demand-absorbing), with a potential for the development of a very limited number of semi-elite institutions. Elite private institutions are an almost fully US phenomenon, semi-elite institutions in several can compete with second-tier public institutions. Compared with other European countries where (OECD’s) state-subsidized “government-dependent private sector” exists, the

International and supranational agendas in higher education reforms mattered in Poland, in different periods to different degrees. Apart from the OECD, important international influence on national policies in higher education was exerted by the European agenda, especially in teaching-related areas linked first and foremost to the Bologna Process and its expectations throughout the 2000s.<sup>159</sup> The initial enthusiasm for and high ranks in the scores of the implementation of the Bologna Process gradually gave way to implementation problems.<sup>160</sup> There were, for example, several self-declared Polish red lights in the 2009 *Bologna Stocktaking Report* (see also in general the *Trends 2010 report* on Central Europe). In research funded by the European Commission, Poland is markedly lagging behind major EU-15 systems. For example, of the first 2500 grants from the European Research Council for

---

extent to which “traditional boundaries and understandings of the public and private spheres in higher education have become blurred” (Enders and Jongbloed 2007: 9) is very limited in Poland. While in Europe generally the public/private split is becoming increasingly complicated (and it is increasingly more complicated what “privateness” and “publicness” of higher education means from the perspectives of ownership, financing, and governance), in Poland so far the split is clear-cut.

- 159 The bachelor level of studies and degrees are good examples. The acceptance of the bachelor level of studies as a “valuable degree leading to suitable jobs in the labor market” on the part of students differs in Europe substantially but overall almost 40 percent of students do not agree with that statement (39 percent in 2009, EC 2009). Also the evaluation of the bachelor studies on the part of academics differs substantially between European countries. So not only students’ attitudes toward the bachelor/master degree split are mixed; equally mixed are attitudes of academics in Europe (and if academics themselves are not convinced about the value of the bachelor degree in the labor market, they can hardly transfer the conviction to their students and the labor market). As Harald Schomburg concluded in a recent (2011: 271) study on European bachelor graduates which showed that the transition rate from bachelors to masters studies among university bachelor graduates is about three quarters: “certainly, a mix of warnings by university professors about the incompleteness of Bachelor study at universities, half-hearted curricular reforms, cautious views by employers and uncertainties and high aspirations by students has led to such high rates of further studies”.
- 160 Remembering that from the organizational theory perspective, “in recent studies of ‘putting theory into practice’ that are framed by organization theory, the investigation has focused not merely on the implementation of higher education policy or reform; rather, implementation is seen as a case of organizational change in higher education. ... The recognition that organizations are dependent on their environment is the main factor behind this development” (Gornitzka, Kyvik, and Stensaker 2007: 49, see studies in a long organizational ecology line of research, especially Aldrich 2008, Aldrich and Ruef 2006, Hannan and Freeman 1989, Hannan, Pólos and Carroll 2007).

“frontier research” (May 2012) researchers working in Poland received only 11 grants, compared with the “leading countries”: the UK 540 grants; Germany 336 grants; France 321 grants, the Netherlands 199 grants and Switzerland 186<sup>161</sup>. In the 7<sup>th</sup> Framework Programme for Research (“Cooperation programme”), in the 2007-2011 period, Poland was coordinating 144 (out of 11,411, or 1.26 percent) research projects and was participating in 1,267 (out of 60,149, or 2.10 percent) research projects, compared with the leaders: the United Kingdom 2,374 and 8,700, respectively, Germany 1,616 and 9,398, respectively, and France 1,433 and 6,784, respectively (KPK 2012).<sup>162</sup>

Nonetheless, throughout the 1990s and the early 2000s, higher education was one of those public sector areas where the World Bank’s influence in Central Europe was marginal (except for Hungary, see Barr 1994, 2005). The OECD report on Poland (Fulton *et al.* 2007), very critical to both governance and funding of higher education and research, and to both public and private sectors, was translated into Polish and was highly instrumental in lending support to the governmental reform package of 2009-2011. In particular, the report criticized Polish higher education as inward-looking and academically-driven and stressed weak links between the educational offer and labor market needs:

it is not clear how far the current offerings do in fact respond to actual labor market needs. ... the whole tertiary education system, and not only the academic sector, is academically driven. The effect is a set of institutions that are typically – though not always – strongly inward-looking in focus, rather than facing outward toward the wider society, including working life (Fulton *et al.* 2007: 77).

---

161 These data were derived from Cordis: <http://cordis.europa.eu>.

162 From a regional Central European comparative perspective, Poland is lagging behind some of its regional competitor countries, as the data need to be controlled for the size of national higher education and research systems. With respect to the ERC, from the first 2,500 grants, Hungary received 2.5 times more grants (27), the Czech Republic slightly less (7), and Bulgaria (3), Estonia (2), and Slovenia (1) considerably less. No researchers in other CEE countries than the ones mentioned have received an ERC grant up till now. In the EU 7th Framework Programme, Hungary was coordinating only slightly less research projects than Poland (119) and was participating in 915 research projects. For the Czech Republic the numbers were 66 and 798, respectively, and for Bulgaria 34 and 444, respectively. In terms of the total number of researchers, in all sectors of performance, full time equivalent, in Poland in 2009 there were about 98.200 researchers. Compared to Poland, there were about three times less researchers in Hungary (35.300), five times less in Slovakia (21.800) and almost two and a half times less in the Czech Republic (43.100) (Eurostat 2012).

A World Bank report published three years earlier did not differ much in its critical conclusions about Polish universities' links to the economy:

The combination of academic traditions with an autonomous legal and financial framework has encouraged a relatively inward looking and independent academic culture, which tends to show little interest in either the labor market or the business and innovation environment. Most higher education institutions lack a clear focus on the needs of high technology companies or societal needs in general (World Bank/EIB 2004: ix).

Recently, the notions of the knowledge economy, the university-enterprises cooperation and the economic competitiveness were often invoked in arguments supporting Polish reforms (from a wider perspective, see Maassen and Stensaker, 2010; OECD 2008).

### **4.3. The institutional change and the stylized visions of the university**

Transformations of Polish universities as institutions in the 1990s followed in general Robert Goodin's models of social change. Goodin (1996: 24-25) sees three basic ways in which social institutions might arise and change over time: by accident: "what happens just happens", by evolution: the survival of the "better fitted" to their environments, and by intentional intervention: "the change might be the product of the deliberate interventions of purposive, goal-seeking agents". His conclusions fit perfectly with the Polish case: "any actual instance of social or institutional change is almost certain to involve a combination of all three of these elements". Indeed, in the face of massive social, political and economic transformations of an unprecedented scale in the postwar history of Europe, universities were changing by accident, evolution, and intention, with the emphasis on the first two models: accident and evolution. Intentional interventions in higher education policy, on the part of national governments, were rare, and there was a set of overarching principles guiding transformations in the university sector: institutional democracy, institutional autonomy, and academic freedom, all regained after the period of communism. These can be regarded as "desirable principles of institutional design" and "principles with deeper moral resonance" (Goodin 1996: 39). But behind general guiding principles no further elaborate

institutional design followed. The state seemed to have no clear ideas about how to deal with disintegrating higher education institutions, characterized by radically decreasing academic salaries, brain drain of both academics and top graduates, collapsing system of research funding, etc. There were other social and economic concerns, of critical importance. Suffice to say here that the inflation rate in the early 1990s in Poland was in the range of a few hundred percent per year.

### *The same challenges in different (economic) contexts*

Higher education systems in Central European countries have faced generally the same challenges as those in other OECD countries, but in the double unfriendly context of the need to radically change the structure (and focus) of their former educational systems while operating in tough fiscal and economic environments (Barr 2005). The massification of higher education in Central Europe occurred with a delay compared with Western European systems, but it took place in a specific context of public underfunding for old public institutions and the emergence of new private institutions opening their doors to hundreds of thousands of new students, with mostly non-traditional socio-economic backgrounds.<sup>163</sup> So higher education challenges in the region have been generally the same as in Western Europe, but the economic context of massification processes was different. The growth of the higher education sector was somehow self-financed by students: it was only in 2006, after 16 years of the existence of the private sector in Poland, that the private funds going to public institutions through fees from part-time students were smaller than the private funds going to private institutions, which shows how important private funding was for the growth of both public and private higher education sectors (and how important was the “internal privatization” of

---

163 As Nicholas Barr put it, in EU accession countries, the governments were caught between conflicting imperatives: “the constraints of the Stability and Growth Pact, and the demands of other parts of the public sector – unemployment benefits, active labor market policies, poverty relief, and policies to address social exclusion, pensions, healthcare, and school education. The resources to finance mass, high-quality higher education from taxation were simply not there” (Barr 2005: 243). One of the implications of the above determining factor was huge demand-absorbing growth of the private sector in several transition systems, including Polish, Bulgarian, Romanian, Lithuanian, as well as Russian and Ukrainian (Kwiek 2011b).

higher education, see Kwiek 2011b).<sup>164</sup> It needs to be stressed, following Daniel C. Levy (2008: 13), that “it is impossible to understand contemporary expansion, including its size and contours and policy dimensions, without knowledge about both [public and private] sectors. It is also important to analyze dynamics between the sectors. What effects does a kind of access through one sector have on the other sector”.

### *Internal and exogenous pressures on universities*

In thinking about reforms, there is a useful distinction drawn by institutional studies between “changes within fairly stable institutional and normative frameworks” and “change in the frameworks themselves” (March and Olsen 2006a: 14). Central European transformations in higher education in the early 1990s clearly belong to the radical, latter, while transformations in the 2000s are more of the incremental, former type. But in the Polish case the most recent wave of reforms could have a potential of changing again “the frameworks themselves”. It is too early to have solid empirical evidence, though; regulations accompanying the amended law are still in the making. Additionally, as in all reforms (Brunsson 2009: 9), “the impact of reformers on reforms is more limited than appears from the reformers’ descriptions of reforms. The content of a reform is determined more by societal institutions

---

164 Levy provides a list of four factors relevant to the expansion/decline of the private sector on the political side; these are generally: hostile government, regulation, public higher education expansion, and privatization within the public sector. “Perhaps the most dramatic (and threatening) is public partial privatization in the opening of second ‘modules’. Tuition charging and market oriented, these programs allow public universities to take in more students than otherwise and in other ways compete right on the private universities’ turf” (Levy 2010: 11). In the Polish case, the former two factor do not play any role; successive governments in the last two decades were friendly or very friendly to the private sector, and in the last few years this attitude remained in place. Also no substantial changes in regulations directed specifically to the private sector occurred in the last few years. Indeed, the *laissez-faire* policy continued, despite attempts to tighten regulations in the sector, especially regarding the requirements concerning full-time staff employed. Discussions about multi-employment patterns (that is, academics employed full-time in the public sector being also employed full-time in the private sector) continued in the last few years, accompanying the 2008-2011 governmental reform initiatives – but the ministerial consent allowing academics to be simultaneously employed full-time in both sectors was finally (in March 2011) extended for another 3 years.

and public discourse than by local ‘actors’, whether individuals or organizations”. But we can refer here to processes of constructing new institutional norms and new academic codes of behavior, clearly intended to replace formerly predominant ones.

The level of public dissatisfaction with universities in Central Europe is high but not critical. The media and the governments tend to present universities in dark colors and radical policy changes are suggested (rather than, so far, radical reforms are actually implemented). Public trust in higher education has been eroding for a long time, and policymakers are seeking new governing rules in response to this public dissatisfaction and in view of transformations changing higher education funding and governance throughout Western Europe. This is clearly the case confirming that

Institutions require continuously renewed collective confirmation and validation of their constitutive rules, meanings and resources. Yet all institutions experience challenges, and some turn out to be fragile and unable to reproduce themselves. The basic assumptions on which an institution is constituted and its prescribed behavioral rules are never fully accepted by the entire society. ... Institutions may recede into oblivion because trust is eroded and rules are not obeyed (Olsen 2008: 9).

Unlike at the beginning of the 19<sup>th</sup> century, universities are not threatened with falling into oblivion (Rothblatt and Wittrock 1993, Wittrock 1993, Delanty 2001, Kwiek 2006a) – but they are viewed in recent higher education strategies throughout Central Europe, echoing their harsh criticism in European-level documents, as in need of radical reforms. The alarming tone of governmental statements about Polish universities is not different from the alarming tone of European Commission’s communications about European universities in general – but the former is clearly much more justified.<sup>165</sup>

Transformations of postcommunist universities in Central Europe can be viewed as resulting from several powerful, interrelated, internal and exogenous, pressures. First, there were internal pressures to continue with rules and organized practices inherited from the communist period, second,

---

165 The alarming tone is global, and all governments seem to like to use it in describing their higher education sector. In the US – the system in most explicit competition with European higher education, and viewed as an inspiring model to the European Commission in general – the tone is not different at all: the Spellings report stated in its preamble that American higher education needs to improve “in dramatic ways”, it requires “urgent reform” and it argues that “change is overdue”.

there were internal pressures to survive in the turmoil of economic “shock therapies” of the beginning of the 1990s and beyond and in the midst of fundamental financial austerity (incomparable with the situation in the 1970s and the 1980s under communism. This is where the resource dependence perspective could be useful: as Pfeffer and Salancik argue, “the key to organizational survival is the ability to acquire and maintain resources”, and this is what was key in the 1990s (Pfeffer and Salancik 2003: 2). And, third, there were internal and exogenous pressures to design and employ new rules and organized practices, responding to the three guiding principles of the reforms in the early 1990s: academic democracy, academic freedom and institutional autonomy. Transformations of universities in the 1990s were specific in kind, and distant from those designed and ongoing in Western Europe.

### *Universities in a temporary social and cultural vacuum*

Like other hitherto stable social and economic institutions, also postcommunist universities in the early transition period found themselves in a temporary social and cultural vacuum and were unable to either easily return to their “business as usual” course from the communist period, or to adapt to new “Western” ways of functioning (under different governance and funding modes). As a consequence, they are still, after two decades, under largely intuitive construction. The very understanding of what “Western” meant was unclear, the only publicly shared assumption being that “catching up with the West” was somehow inherently good as a direction of changes generally, but not necessarily so in the area of higher education. Suddenly, and to an extent unexpectedly, a “relatively stable collection of rules and practices” embedded in structures of meaning and structures of resources – that is, academic institutions in March and Olsen’s definition (March and Olsen 2006b: 691) – faced huge organizational and financial challenges and had no elaborate guidance on how to handle these in the form of clear national policies or clear national strategies. Inherited academic identities, rules and habits, patterns of thinking and acting, routines and practices, academic norms, culture, and ethos were useful in institutional survival strategies only to some extent. In Poland, for instance, rule-following (traditional rules), for a time lasting from between a few years and a decade, did not work, as rules inherited from communism were deemed obsolete, authoritarian, anti-democratic, and new rules were still in the making, although quickly shared. External shocks related to “postcommunist transition”

in economy and the financial austerity prevalent throughout the 1990s (see Frye 2010: 1-20 on “the political logic of economic and institutional reform”, Ekiert and Hanson 2003 on patterns of postcommunist transitions, and Orenstein 2001 on “building capitalism and democracy in postcommunist Europe”) were driving the dynamics of institutional change. Academic institutions (and academics) were responding to mostly economic shocks in the way a resource dependence theory expected them: seeking how to manage to survive, in close relationships with the changing environment.

### *Reforms as “the rationalization of universities as organizations”*

The recent wave of reforms, in more theoretical terms taken from the studies of organizations, brings to Polish universities what can be referred to as processes leading to “the rationalization of universities as organizations” (Ramirez 2006): as other organizations, they are increasingly expected to have goals and plans for attaining them, to have institutional strategies, and are becoming more formally organized. As Ramirez notes, “the idea that an entity should be influenced by the ‘best practices’ of other similar entities is more likely to take place if the entities are imagined as formal organizations rather than as historically rooted social institutions” (Ramirez 2006: 240-241). Universities are in the process of being “turned into organizational actors” and are on their way of “achieving full organizational actorhood” (Krücken and Meier 2006: 253). They are being “turned into organizations” (Brunsson and Sahlin-Andersson 2000). They are required in the new law to have elaborate institutional strategies, and in draft national strategies – they are expected to present their missions and visions, to be accepted by their newly created (still not obligatory) boards of trustees.

### *The four stylized visions of university organization and governance*

Olsen (2007) suggested four “stylized visions” of university organization and governance: the first portrays the university as “a rule-governed community of scholars”, the second as “an instrument for national political agendas”, the third as “a representative democracy”, and the fourth as “a service enterprise embedded in competitive markets” (Olsen 2007b: 28-33; each vision was developed in more detail, respectively, by Nybom,

Gornitzka and Maassen, de Boer and Stensaker, and Salerno, in Maassen and Olsen 2007: 55-134). The four visions of the university generally coexist in time, being “enduring aspects of university organization and governance. The mix of visions varies over time and across political and cultural systems”. As Olsen notes, “if support is conditional and a question of degree and the four visions are both competing and supplementing each other, there will in some periods and contexts be a balance among the different visions. In other periods and contexts one vision may generate reform efforts, while others constrain what are legitimate and viable solutions” (Olsen 2007b: 36-37).

There are several defining features of the first and the second visions as presented by Olsen. In the first vision, university operations and dynamics are governed by internal factors, while in the second vision, university operations and dynamics are governed by environmental factors. The university’s constitutive logic is identity based on free inquiry, truth finding, rationality and expertise, while in the second vision it is administrative: implementing predetermined political objectives; criteria of assessment are scientific quality in the first vision and effective and efficient achievement of national purposes in the second; reasons for autonomy mean that authority to the best qualified is the constitutive principle of the University as an institution in the first vision and means that they are delegated and based on relative efficiency in the second vision. And finally, change is driven by the internal dynamics of science, it is slow reinterpretation of institutional identity, and rapid and radical change occurs only with performance crises in the first vision; and change means political decisions, priorities, designs as a function of elections, coalition formation and breakdowns and changing political leadership in the second vision (Olsen 2007b: 30, Table. 1). (Clearly the 2008 change in political power in Poland, following the elections, meant the abrupt ending to one reform program, and beginning of preparations of a different reform program, now in the implementation period). Olsen’s stylized vision of the university as an instrument for shifting national political agendas is the following:

The University is a rational tool for implementing the purposes and policies of democratically elected leaders. It is an instrument for achieving national priorities, as defined by the government of the day. The University cannot base its activity on a long-term pact based on constitutive academic values and principles and a commitment to a vision of civilized society and cultural development. Instead research and education is a factor of production and a source of wealth or welfare.

The University's purposes and direction of growth depend on shifting political priorities and funds more than on scholarly dynamics. A key issue is applicability and utility of research for practical problem-solving, such as defense, industrial-technological competition, health and education. ... Autonomy is delegated and support and funding depend on how the University is assessed on the basis of its effectiveness and efficiency in achieving political purposes, relative to other available instruments. Change in the University is closely linked to political decisions and change (Olsen 2007b: 31).

Public trust in educational institutions is needed if further public subsidization of higher education is expected, especially but not exclusively in the Central European countries. As Carlo Salerno summarizes the essence of how economists view higher education, while developing Olsen's vision of the university as a service enterprise embedded in competitive markets,

In essence the basic framework is developed around the idea that society values what the University produces *relative* to how those resources could be used elsewhere; it helps to explain *why* resources ought to be allocated to such organizations in the first place. The pursuit of free inquiry or the inculcation of democracy are noble objectives in their own rights but the nonetheless constitute activities that demand resources that can be used just as well for meeting other social objectives. The "marketization" of these objectives (including education) produces a set of relative prices for each that reveals, in monetary terms, just how important these activities are when compared to issues such as healthcare, crime, social security or any other goods/service that is funded by the public purse. It does nothing to reduce universities' roles as bastions of free inquiry or their promotion of democratic ideals; it only recasts the problem in terms of the resources available to achieve them (Salerno 2007: 121)

Economists' view is especially strong in economies which have experienced prolonged periods of financial austerity: the countries of Central and Eastern Europe in particular. But fully-fledged national debates on the price of social objectives met via national higher education systems in the context of other national priorities in public spending have not taken place so far. The reason of the absence of the application of strongly marketized way of thinking about higher education, *vis-à-vis* other social and infrastructural priorities, seems strongly rooted in the social acceptance of the traditional vision of the university, still prevalent, and only slowly beginning to erode. Expenditures in higher education and research in higher education are not viewed by the society at large as directly competing with expenditures in other priority areas – which may not last long, though. In particular, intergenerational conflicts about the resources can be expected, with higher education (about half of students paying fees in 2011) opposed to pensions and healthcare.

Polish higher education is still operating according to traditional, Humboldtian, and, to a large extent, communist, rules of the game, i.e. the rules of the university as a “rule-governed community of scholars” (Olsen 2007b: 29-31), as an institution based on academic values, to an extent unparalleled in EU-15 higher education systems. While in Western European systems the co-existence of different models (the traditional model and three instrumental models in which the university is a tool) is prevalent, in Poland reform attempts are intended to replace a ruling traditional model, transformed only marginally in the last 20 years, with Olsen’s model of the university as an “instrument for national political agendas”. A shift in policy thinking about the university (and, partly, in new legislation already in force) has a clear direction: away from the Humboldtian Ivory Tower, faculty-centered model, towards the model in which the university’s role is to consistently follow national political agendas.

Again, while Western European systems, in their move away from the Humboldtian “community of scholars” vision, seem to be increasingly combining the second (as above) and the third, market-oriented, visions (the university as a “service enterprise embedded in competitive markets”) with the traditional, first vision – in Poland the move in educational policy is strongly against the traditional vision and in favor of the second, shifting-national-agendas view of the university. The Western European coexistence of mostly three visions, and reforms leading to both the second and the third vision has a parallel transformation towards only the second vision in Poland, and possibly in the region. Surprisingly, especially in the context of changes in other public sector services, the move towards the (public) university as a “service enterprise embedded in competitive markets” is of marginal importance (the growth of the private sector did not lead to the emergence of competitive markets: it is almost fully dependent on public sector academics and infrastructure, does not compete directly or indirectly, except for a handful of institutions, with the public sector, and to a large extent caters for students from lower socioeconomic strata). This incompatibility between Western European and Polish (potentially Central European) transformations requires further analysis as potentially divergent ways of rethinking the university are accompanied by potentially divergent governance and funding regimes. Olsen’s view is that while the four visions of the university are not mutually exclusive, the “main trend during the last decades has been that the dominant legitimating idea of the University has

changed towards the vision of a service enterprise embedded in competitive markets” (Olsen 2007b: 35). Which makes the main trends in Western Europe and in Poland (possibly in Central Europe) divergent rather than isomorphic.

*Polish reforms: a new tool for national political agendas?*

Strikingly, while all other public sector services are increasingly being reconceptualized towards market orientation and market-like models, public higher education seems to be reconceptualized as a new tool for national political agendas, with surprisingly limited encouragement to be more market-oriented. The role of market mechanisms in new legislation (as well as in the two strategies for the development of higher education until 2020) seems much more modest than could be expected. Consequently, while the welfare policies generally are increasingly under pressures to become more marketized, higher education policies generally are under pressures to be ever more closely linked to the needs of the national economy and national economic priorities. The strong market-oriented vision in Olsen’s typology seems present at the level of governmental rhetoric but not at the level of new national strategies or new national legislation. It is too early to discuss actual reform implementation as most measures will come into force in the next two years, though. Polish reform programs and accompanying public debates, as in other European countries, are driven by an instrumental view of the university. In this view, the university is involved in a “set of contracts”. The logic of Polish reforms is clearly instrumental – while, as discussed above, the logic of the Polish academic profession is traditional and institutional. The instrumental/institutional divide makes the two discourses generally incompatible. And this is where tensions related to new reform initiatives have their roots.<sup>166</sup>

---

166 A brief analysis of research-based academic promotions in clearly demonstrates that there is a powerful disciplinary divide within Polish higher education, especially within prestigious universities which provide the vast majority of internationally visible publications and where the vast majority of full professors are employed. The devalorization of the research mission in research universities refers directly to those fields in which teaching expanded in both sectors. Both global and Central European comparisons in research production in 1995-2010 and inter-disciplinary comparisons of academic degrees awarded in Poland in 1999-2010 clearly show the soft academic fields as those in which the traditional academic norms ruling in prestigious

## 4.4. The demand-absorbing growth and the demography-driven decline?

### *How to maintain resources in hard times?*

The past expansion in Poland in both public and private sectors in the 1990-2005 period was demand-driven: students and their families demanded more access to higher education following the collapse of communism, and their demand was being increasingly met (Duczmal and Jongbloed 2007, Kwiek 2011b). Higher education was no longer strictly rationed by the state, and the processes of massification were fueled by both sectors and both modes of studies. External shocks related to the “postcommunist transition” in economy and the financial austerity prevalent throughout the 1990s were driving the dynamics of institutional change. Universities were driven by expansion-related phenomena and academic institutions (and academics themselves) were responding in the way a resource dependence perspective used in organizational studies expects them: seeking how to manage to survive, in the mutual processes of interaction between organizations and their environments (Pfeffer and Salancik 2003: 258-262, see also van Vught 2009), at both micro-level of individuals and meso-level of institutions. Specifically, “the key to organizational survival is the ability to acquire and maintain resources” (Pfeffer and Salancik 2003: 2): In the Polish context of the 1990s, maintaining resources meant additional private expenditures

---

universities failed. Thus public universities in the postcommunist period have been increasingly becoming divided institutions, following different rules and engaging in different university missions. The taken-for-granted academic norms prevailing in research universities were suspended in several major academic fields (in soft disciplines) in the transition period of between a decade and a decade and a half. The traditional “logic of appropriateness” (March and Olsen 2006b) in research universities was weak and unable to stop the turning of huge individual and institutional energy into additionally paid teaching, especially in profit-driven, although nominally non-profit, private sector. All sorts of public justifications for and rationales of holding multiple academic posts were created throughout the expansion period. The massive involvement of academics in the development of private higher education led to the gradual devaluing of the research mission of public research universities where they kept their primary employment (see details in Kwiek 2012a).

borne by students (in both public and private sectors) and additional per-student public funding from the state (public sector only).<sup>167</sup>

### *Changing demographics as a new policy parameter*

A new parameter for public policy is the fall in enrollment levels in the next decade in Poland, projected to be one of the highest in Europe, and comparable only with other postcommunist countries: Bulgaria, Romania, Slovakia, Estonia, Lithuania, and Latvia. According to several consistent enrollment scenarios based on national statistical data (such as e.g. Vincent-Lancrin 2008: 45, Socrates Institute 2011: 10-14, IBE 2011: 110-11, Ernst and Young 2010: 20) enrollments in Poland in 2025 are expected to fall to 55-65 percent of the 2005 levels (or dwindle by about 0.9 million students). In Western Europe, only Spain and Germany can expect numerical decreases of more than 200.000 students by 2025 (Vincent-Lancrin 2008: 49-51). Certainly, as Easterlin (1989: 138) confirmed in the US context, there is an “inverse association between college enrollment rates and the size of the college-age population” (and what Frances terms “the cohort effect”, Frances 1989: 143): “enrollment rates, in fact, partly depend on the

---

167 Processes of the deinstitutionalization of traditional academic norms, habits and codes of behavior in large (soft) segments of the public sector are closely linked to the mostly monetary opportunities provided to the academic community by the expansion era: the dramatic growth of private higher education and of fee-based part-time teaching in the public sector (see Kwiek 2011b). We argue that traditional rules of higher education (authoritarian, communist, ideological but still very much Humboldtian in Poland) were weakening throughout the 1990s and a sort of academic normative vacuum (Olsen’s “uncertainty, disorientation, and conflict”) appeared in the higher education sector. In this normative vacuum, all sorts of codes of academic behaviors and rules and norms of academic conduct, unthinkable a few years earlier, suddenly became academically acceptable. In the expansion period, those academics in prestigious universities who were abandoning the research university mission, changing their working habits and refocusing on external, additionally-paid teaching did not risk the exclusion from the academic community. Clearly, what had been prestigious about top public universities was gradually getting lost, and the international research visibility of Polish academics in arts and humanities, social sciences, economics, business and finances was dramatically decreasing. By contrast, hard academic fields continued performing well or very well, despite financial austerity prevalent in public universities. Recent reforms tend to reestablish the research focus of top public universities, and within them, to decrease the knowledge production gap between hard and soft disciplines that have emerged in the expansion era.

size of the college-age population – other things remaining constant, at the aggregate level a larger college-age population makes for lower enrollment rates, while a smaller college-age population makes for higher rates” (Easterlin 1989: 137). Demographic factors need to be combined with social, economic, and public-policy related factors in any meaningful projections for the future.

Higher education systems in the OECD area in general is expected to continue to expand (Altbach *et al.* 2010); as Attewell and Newman in their global study of educational inequality around the world put it, “so far, the growth in demand for more years of education seems to have no limit. ... Each new generation exceeds its parents in terms of average years of schooling completed (Attewell and Newman 2010: 1).<sup>168</sup> Therefore implications of educational contraction for equitable access, institutional selectivity, and admissions criteria in Polish higher education (as well as higher education in other postcommunist European countries mentioned above) are important research areas. The institutional will to survive the demographic decline is overwhelming, but the logics governing access to publicly-funded vacancies in the past expansion era may differ from the logics governing them in the expected contraction era.<sup>169</sup> As the European Commission highlights (EC 2011b: 3),

---

168 For the European Commission, further expansion of higher education in Europe is of paramount importance and there is twofold rationale behind it: the “social justice argument” and the “human capital argument”. The policy context is given in a recent (EC 2011b) communication: “in the context of the Bologna Process in 2007, ministers responsible for higher education agreed the specific objective that the student body entering, participating in and completing higher education at all levels ‘should reflect the diversity of our populations’. The underlying rationale for this commitment was broadly twofold. Firstly, there is what can be termed the ‘social justice argument’, which emphasizes the need to ensure equity in access to higher education as part of fostering a balanced, socially cohesive society. Secondly, there is the more pragmatic ‘human capital argument’, which stresses the need to maximise the development of talent as a means to meet increasing skills demand from the labour market. Both these arguments are fundamentally consistent with the EU’s Europe 2020 goals of smart, sustainable and inclusive growth”.

169 Decline is a new policy and research theme, for the first time discussed by Levy: “many types of private higher education do decline and for various reason. Yet, private higher education grows significantly despite all the negative factors identified. The overall private higher education decrease almost always refers to public- and private-sectors shares, not absolute enrollments. Even proportional decline in the private sector applies only to a minority of countries. The most vulnerable private higher

The European population is getting older. Not only are Europeans living longer than ever before, but with falling birth rates, the number of young people in the European Union has declined steadily in the last two decades. In the EU between 1990 and 2009, the population aged 10-19 fell by 15.4% and the population aged 20-29 by 10%. Although migration and increased birth rates in some EU countries mean the population decline has now been reversed at EU level in the youngest age cohorts (the number of 0-4 olds in the EU increased by 3.7% between 2000 and 2010), many EU Member States – particularly in Central and Eastern Europe will continue to see their younger population shrink in the coming decades. As well as their implications for economic development and the sustainability of social security systems, these demographic trends naturally have an impact on education and training systems, including higher education. The increased higher education participation rates across the EU in the last decade discussed above have hitherto masked the impact of declining younger age cohorts on higher education institutions, as student numbers have continued to increase. However, current EU population projections show a significant decline in the typical age cohort for higher education students (20-24) over the next 40 years in a majority of Member States.

### *From a unified to a diversified system, with increasing hierarchical differentiation*

While the communist-period higher education in 1970-1990 in Poland could be termed unified, following Meek, Goedegebuure, Kivinen and Rinne (Meek *et al.* 1996b: 206-236) and Shavit, Arum, and Gamoran (Shavit *et al.* 2007: 5-6), the last two decades of its expansion show a transformation from a unified to a diversified system. Unified systems, as under communism in Poland, “are controlled by professional elites who are not inclined to encourage expansion, either of their own universities or through the formation of new ones” (Shavit *et al.* 2007: 5). Higher education in Poland was highly research-focused, in a Humboldtian manner; as Szczepański (1978: 4) stressed in the 1970s in a national report to the (American)

---

education is the demand-absorbing type, which underscores that all parts of the sector do not face constant vulnerability” (Levy 2010: 11-12). Poland is exceptional: public and private shares in enrollments have been changing; but also absolute enrollments in the private sector have been decreasing. Private higher education sector every year, year in, year out, is expected to have fewer students. For a system in which there are 325 private institutions it is an enormous challenge. The expected demographic shift creates a major institutional challenge to public institutions; but the demographic shift for private institutions creates a life or death, or survival of the fittest, challenge.

International Council for Educational Development, “the distinctive mark of higher education in Poland is the predominance of research and the teaching of research methods” (see also Szczepański 1974 and Sadlak 1991). The number of students in the two decades of 1970-1990 was strictly controlled and, in general, was not increasing (but rather fluctuating between 300.000 and 470.000), and the strict *numerus clausus* policy was the rule in all Central European countries. While Western European systems were already experiencing the processes of massification in the 1980s, higher education in Central Europe was as elitist in 1990 as it was in the decades past (for Western Europe, see especially Scott 1995, Palfreyman and Tapper 2009a, Mc Nay 2006). One of the major reasons of the phenomenal growth of private higher education following the collapse of communism in 1989 in (some) Central European countries, and in Poland in particular, was heavily restricted access to public higher education under communism combined with newly opened private sector employment. Increasing salaries in the emergent private sector gradually pushed young people into higher education. Consistently with Geiger’s findings (1986: 107), the private sector in Poland was forced to operate “around the periphery of the state system of higher education”.<sup>170</sup>

---

170 Following 1989, during the expansion, the *numerus clausus* policy has been maintained only in the (also growing) public sector. In the emergent private sector, there has been the “open door” policy. The expansion has been controlled in the tax-based public sector, indirectly controlled in fee-based part-time tracks in the public sector (the ceiling of enrollments was put at one third of all enrollments in any give public institution) and has not been controlled at all in the booming private sector. In contrast to Portugal, the only comparator country in Western Europe, the level of enrollments in the private sector depended exclusively on demand. In Portugal, in contrast, students apply to enter higher education through a national competition. In the application process, they apply for study programs and institutions and present their order of preference. In general, “public universities are clearly the first choice of students, followed far behind by public polytechnics which present a slight advantage over private institutions” (Correia *et al.* 2002: 468). In Portugal and Poland, initially (after 1974, after 1989) there was a similar picture: “the main objective of many candidates was to enter a higher education institution, at any price and in any available study programme, and this means that market regulation was inefficient or even impossible. The private sector was allowed to develop almost without any control and without due attention being paid either to quality or to labour market needs” (Correia *et al.* 2002: 468-469). After the democratic revolution in Portugal in 1974, the pressures for expansion grew substantially and the surge of the private sector slowly began. As Teixeira *et al.* comment, “at that time, most policy makers considered that

The expansion in the 1990-2010 period was accompanied by hierarchical differentiation of the system (see Huisman and van Vught 2009, Meek *et al.* 1996, and Goedegebuure *et al.* 1996): much of the growth was absorbed by public and private second-tier institutions and by first-tier public institutions in their academically less demanding and less selective part-time studies. The expansion also took place in specific fields of study, in particular such as social sciences, economics and law (in 2000, the share of enrollments in this field of study, lumped together in higher education statistical data, was 37 percent in the public sector and 72 percent in the private sector, and a decade later in 2010 it was still 32.8 percent and 52.6 percent, respectively, GUS 2011: 58). When, as in the Polish case, quantitative equality is reached at the level of higher education, qualitative differentiation becomes increasingly important: “qualitative differentiation enables education systems to reduce inequalities along the quantitative dimension because qualitative differences replace quantitative ones as the basis for educational selection” (Shavit *et al.* 2007: 44). Qualitative differentiation means different types of institutions and different types of study programs. As Shavit *et al.* claim, “expansion can be implemented in different ways. It is reasonable to assume that the effect of the expansion of higher education on inequality in enrollments depends on the characteristics of the new institutions” (Shavit *et al.* 2007: 44). The new institutions in the Polish case would be both new public regional universities, new private institutions, as well as metropolitan elite public universities in their fee-based part-time, academically much less demanding, mode of studies.

---

the government had neither the time nor the means to achieve the *promised* goal of raising the *numerus clausus* to a level capable of meeting the growing demand for higher education services. This created a golden opportunity for the development of private institutions that gave the private sector a decisive role in the process of expansion of higher education (Teixeira *et al.* 2008: 244). The 2001 assessment of private higher education (PHE) in Portugal fits perfectly the Polish case and follows global assessments of a demand-absorbing subsector of : PHE institutions “focused predominantly on teaching, have undertaken little, or no, research, and appear to be of lower quality than the older institutions. The private sub-sector is characterized mostly by its low-risk behaviour, and a concentration on low-cost and/or safer initiatives” (Teixeira and Amaral 2001: 359; see a most recent panorama in Neave and Amaral 2012 collection on Portuguese higher education in 1974-2009).

### *Demand-absorbing growth*

Consistently with findings in global private higher education literature, in Polish private higher education, the largest growth occurred through the non-elite, mostly demand-absorbing, types of institutions (Levy 2009, Geiger 1986). As elsewhere in rapidly expanding systems, most students were “not choosing their institutions over other institutions as much as choosing them over nothing” (Levy 2009: 18). As in other countries, demand-absorbing private subsector tended to be both the largest private subsector and the fastest growing one. Now this is the most vulnerable subsector in the setting of declining demographics. The growth of private higher education did not necessarily mean “better” services, or “different” services: it meant most of all “more” higher education (Geiger 1986: 10, Enders and Jongbloed 2007: 20). Consistently with Geiger’s findings about “peripheral private sectors” in higher education (as opposed to “parallel public and private sectors”, 1986: 107ff.), the university component of higher education was monopolized by public institution and nonuniversity, postsecondary component by private institutions. “Market segmentation” rather than open competition with the dominant public sector, operating in “special niches” (Geiger 1986: 158), was the general characteristic throughout the last two decades.

Recent policy proposals about the public subsidization of the private sector and the introduction of universal fees in the public sector (2011) seem to indicate a possible change in policy patterns in financing higher education. Following Levy’s typology of public/private mixes in higher education systems, it is analytically useful to view Poland as fitting the fourth pattern (dual, distinctive higher education sectors: smaller sector funded privately, larger sector funded publicly, Levy 1986a: 199, 205ff.). Private-public blends involve a number of important questions: single sector or dual, if single sector – statist or public-autonomous, if dual sectors, homogenized or distinctive, if distinctive, minority private or majority private? (Levy 1986a: 198). The fourth pattern of financial policy identified by Levy fits Poland: there exist dual and distinctive sectors (public and private), private sector has more than 10% but less than 50% of total enrolments, private sector relies mostly on private finance, public sector relies mostly on public finance. The move from the fourth to the third pattern would mean: there exist dual and homogenized sectors, two sectors are funded differently, evolution toward mostly public funding, sectoral

dualism and distinctiveness now depends less on finance than on tradition and possibly governance and function (Levy 1986a: 211). Levy's typology was used by Salerno (2004) in his study on funding channels for public funding for private providers. Recent proposals (two strategies from 2010: one by the Polish Rectors Foundation and the other by Ernst and Young/IBNGR) may mean the beginning of an evolution. They may seem to indicate willingness to change policy patterns in financing higher education: from fourth pattern (dual, distinctive, minority private) to third pattern (dual, homogenized, minority private: similar funding for each sector). The homogenization pattern seems to be strongly supported by KRASP, rectors of public universities – under a general theme of the “convergence of the two sectors” (popularized by Jerzy Woznicki, former KRASP president). The policy debates about private-public financing emergent in Poland today are not historically or geographically unique. Levy identified three major policy debates in his fourth pattern of financing: the first concerns the very growth of private institutions; the second concerns whether new private sectors should receive public funds; and the third policy debate concerns tuition in the public sector. While in the expansion period of the 1990s, the debate about growth dominated in Poland, the contraction period of the 2010s can be expected to be dominated by fees and public subsidies debates.

### *Changing inequality in access to higher education under educational demography-driven contraction?*

The question of inequality in access to higher education, usually asked in the context of educational expansion, could also be asked in the context of educational contraction: “the key question about educational expansion is whether it reduces inequality by providing more opportunities for persons from disadvantaged strata, or magnifies inequality, by expanding opportunities disproportionately for those who are already privileged” (Arum *et al.* 2007: 1). In the Polish case, the question can be referred to the (past) expansion and the (expected) contraction of the system. Contraction seems unexpected in the context of knowledge-economy policy discourse which refers to ever-increasing need for better educated workforce (see e.g. Santiago *et al.* 2008, EC 2011 and education attainment benchmarks in the UE *Europe 2020* strategy for growth and jobs). This policy discourse in Europe largely ignores sharply falling demographics in major postcommunist European countries, with Poland in the forefront.

What is important in the context of the changing access to higher education is the fact that the past distribution of increase in enrollments (by age, gender, sector, and status) in the period of educational expansion is highly relevant for the possible future distribution of decrease in enrollments in the contraction period, as well as for national policies under the conditions of educational contraction. Patterns of expansion may determine patterns of contraction. For instance, one evident way to combat the contraction, is to increase the participation rate of male students, both in the traditional 19-24 age bracket and older. Other traditional tools for increasing student numbers may fail: these include lowering the rate of early school-leavers, increasing the transition rate from secondary to tertiary education, increasing the graduation rate from higher education, and increasing enrollment rates (for a more detailed account, see Kwiek forthcoming).

Dramatically changing demographics in Poland, possibly leading to decreases in enrollments from about 1.84 million students in 2010 to about 1.2-1.3 million students in 2025, introduces new dilemmas related to public funding and admissions criteria in both public and private sectors. Public policy for higher education in the times of expansion can be expected to be fundamentally different from public policy in the times of contraction. The era of contraction seems unexpected in knowledge-economy policy discourse (which values what Williams termed “economically valuable codified knowledge”, 2011: 34) which generally ignores the option of sharply falling demographics, relevant for higher education systems in only several European countries and only several OECD economies, Poland included (see Santiago *et al.* 2008, Rooney, Hearn and Ninan 2005, Weber and Duderstadt 2006, Geiger and Sá 2008, Jones, McCarney and Skolnik 2005). Educational contraction in a Polish highly diversified and strongly market-oriented system may continue the trend of inequality reduction if national policies adequately respond to changing demographics combined with new social and economic determinants. There are several countries in the European Union – all postcommunist new member states – in which similar demographic shifts lead to shrinking student populations to a comparable degree. Poland has the biggest higher education system and provides an inspiring case study, relevant for those countries in which the changing public/private dynamics is combined with falling demographics. Powerful demographic shifts may change the structure of the system, and the options of the remonopolization of the system by the public sector and the gradual (spread over the next decade) decline of the private sector cannot

be excluded (but market-driven private sectors have also been highly resilient and easily adaptable to changing environments in its history). The processes of inter-sectoral differentiation of the expansion era may be replaced with the processes of the inter-sectoral de-differentiation (or homogenization) of the contraction era.

*Expansion and the graduate labor market: positional goods and social congestion?*

The links between higher education expansion and the economic future of higher education graduates is far from non-controversial. There is a strong line of criticism of the higher education expansion/knowledge economy link, fervently voiced over the years by, for instance, Phillip Brown and Hugh Lauder who conclude in their “Globalization, Knowledge, and the Myth of the Magnet Economy” that “vast numbers of highly-skilled are available in developing economies, the global expansion of tertiary education has outstripped the demand for high-skilled workers, creating downward pressure on the incomes of skilled workers in developed countries along with some upward pressure on those in emerging economies” (Brown and Lauder 2006, see also Lauder 2006, Brown and Hesketh 2004, Brown and Lauder 2001, Brown and Lauder 2008; the strongest arguments about the growth of the “high-skill, low-wage workforce” in Western economies and the “broken promises of education, jobs, and income” come from Brown, Lauder and Ashton 2011). Polish empirical data seem to support both arguments: Poland is an emergent economy with very high, and increasing in the last twenty years, wage premium on higher education. There seem to be no downward pressure on the incomes of highly skilled professionals, and gaining higher education credentials still seems to be the best individual strategy against unemployment, as national statistical data indicate.

In the overall majority of higher education systems and labor market systems in Europe, higher educational credentials lead to “better jobs” (see Holzer *et al.* 2011 on “where are all the good jobs going” in the US) and better life chances. Nevertheless, from a theoretical perspective of “positional goods”, developed for the first time in the 1970s by a British economist, Fred Hirsch (1976), there is always “social congestion”: the number of good jobs (for instance, prestigious white-collar jobs leading to high incomes, or to stable middle-class lifestyles) in a labor market system is always limited, and top jobs in a given system will always be limited, no

matter how well-educated the workforce is. The division of economy in particular EU member states into major sectors (e.g. manufacturing, services, agriculture in OECD categories, or into major nine occupations, and “professionals” and all others in a UN terminology in particular) and its changes over time should be an important point of references in all “new skills for new jobs” (EC 2009) theoretical exercises linking growth in jobs requiring high skills with growth in students numbers. Educational expansion in labor markets already saturated with higher education graduates has certainly different consequences than educational expansion in labor market which are still far away from a state of saturation (the best example being monetary rewards from higher education in such clusters of countries as Central Europe on the one hand and the Nordic countries on the other. On average, CEE countries have considerably less educated labor force, so – one can assume – rewards from higher education are higher. Non-monetary rewards in the labor market include, for instance, low levels of unemployment for higher education graduates, and relatively faster transitions from unemployment to employment.

Also any research should be cognizant of the potential limit to individual benefits from higher education attainment level as an individual shield against unemployment, or an individual life strategy inevitably leading to traditional middle-class lifestyles. From the theoretical perspective in which higher education credentials are “positional goods”, while collective, or public, benefits from educational expansion are increasing (as reported e.g. by the OECD indicators), individual, or private, benefits from educational expansion, as viewed e.g. through the proxy of wage premium on higher education, do not have to be increasing. In some European systems, as reported by OECD (2011), the wage premium has been consistently high, and increasing, on a global scale, in the last decade. These are postcommunist Central European economies, such as Poland, the Czech Republic, Slovakia and Hungary. In other systems, where educational expansion has started (much) earlier, the wage premium is much lower, and stable or decreasing (for instance, in the Nordic countries). There are several interrelated explanations but one of them is the “positional goods” argument according to which the advantage of higher education credentials in the labor market is relative, or positional: if collective efforts of ever-increasing numbers of young people are focused in the same direction, individual gains from individually rational life strategies do not lead to expected results (Brown and Lauder 1994, Brown, Lauder and Ashton 2011; Hirsch 1976).

The “positional goods” perspective needs to be born in mind in any cross-country research into benefits from higher education. As Offer (2006: 233) argues in his path-breaking study on affluence along similar lines:

Doing better improves the chances of well-being. Higher up the social ladder there are more opportunities, more choice, more satisfying work, better health, longer life. But if everyone is improving *equally*, no one gets ahead. ... There is no limit to the growth of affluence, but social ranking is capped: room at the top is scarce, whatever the level of affluence. The winners’ prizes in social competition are known as “positional goods”. Their supply does not increase with affluence. For society as a whole, therefore, there might be seen to be little benefit in the pursuit of status.

And as Hirsch highlighted more than three decades before the current level of educational expansion was reached globally, across all major developed economies:

What is possible for the single individual is not possible for all individuals – and would not be possible even if they all possessed equal talent. Individuals, whether shopping for educational advance in the market place or pushing for educational advance through political demands, do not see the break between individual and social opportunity; that is, they do not see that opportunities open to each person separately are not open to all. Consumers, taken together, get a product they did not order; collectively, this result involves potential social waste (Hirsch 1976: 6; see a bunch of books by Robert H. Frank referring directly to ideas of “social scarcity” and “social congestion”, Frank 1985, Frank 1999, Frank and Cook 1995 and, recently, Frank 2007).

Consequently, “learning” is “earning” to a higher degree in Central and Eastern European economies, on average, than in their often more educated Western European (and especially Scandinavian) counterparts, again on average (Cipollone 1995: 145, Tachibanaki 1995). This is not exactly so for any degrees, in any study fields, though, as European comparative research is beginning to show (to which we return further in this chapter).

## **4.5. Knowledge production in Central European universities**

### *Global rankings and global business indexes*

As a consequence of at least a decade of neglect (the 1990s) of reforming higher education and severe underfunding of university research, Central

European knowledge production seems low from a European comparative perspective. There is continuing absence of Central European universities in global (and especially European) university rankings. In 2010, only five universities from the region were present in the Academic Ranking of World Universities: one in the third hundred (Charles University in Prague, the Czech Republic, rank 201-300) and four in the fourth hundred (Warsaw University and Jagiellonian University in Poland, Eotvos Lorand University and University of Szeged in Hungary, ranks 301-400). No university from the Slovak Republic (as well as from Romania and Bulgaria) was ranked in top 500 world universities. No university in Central Europe is located in top 100 world universities either in subjects (like chemistry) or fields (like social sciences). The ranking is dominated by American universities: in the top 10, there are only two European universities (Cambridge ranked 5<sup>th</sup> and Oxford ranked 10<sup>th</sup>), and in top 20 there is only one more non-American university, University of Tokyo (ranked 20<sup>th</sup>). In top 200 world universities published by *The Times Higher Education* in 2010, there are no institutions from Central Europe. And among the top 100 European universities, there are none from the region. This absence does not support the main argument of the paper – that comparatively low economic competitiveness of Central European economies is linked mostly not to their uncompetitive higher education, training and innovation sectors but to their lagging behind in many other areas, including infrastructure and regulatory environment – but illustrates how universities in the region compare with Western European universities. There are different objections to university rankings and their methodologies (see e.g. Teichler 2011a and Hazelkorn 2011a, Hazelkorn 2011b) but Central European universities are not once but permanently absent from these rankings.

Generally, in a world in which the economic dimension is viewed by policymakers as increasingly important in assessing countries in general and their higher education systems in particular (compared with the traditional social dimension), rankings of economic competitiveness based *inter alia* on assessments of higher education and research and innovation systems can hardly be ignored. Especially, they should not be ignored in postcommunist countries aggressively seeking foreign direct investments. Both national economies and universities themselves are increasingly ranked and assessed according to standardized global measures. Universities are increasingly constructed as organizations (rather than merely institutions, what Ramirez called their “rationalization”, Ramirez 2006, see Brunsson and Sahlin-

Andersson 2000 and Krücken and Meier on “universities on their way on achieving full organizational actorhood”, 2006: 253), internationally compared and ranked. As Meyer et al. stress, the modern university in a globalized and rationalized world is a “purposive actor”:

In this world of imagined homogeneity, standardized dimensions of ranking, certification, and accreditation make sense. Universities around the world can be compared and rated on standard scales. And if they are effectively and purposively managed organizations, perhaps they can improve their rankings vis-à-vis all the other universities in the world (Meyer *et al.* 2007: 206).

A study of indicators provided by global indexes – such as, for instance, the *Global Competitiveness Index* or *Doing Business* index – can be viewed as an alternative to a more standard study of international data (such as those provided by UNESCO or OECD). The reason is that global indexes are appealing to the business community, the media and the public at large, despite their relative simplicity. Higher education and innovation sectors became substantial parts of the global business or competitiveness ranking exercises and, potentially, in the knowledge economy discourse, became part of the solution to current economic problems (as a commentator noted, “an expert system of measurement was institutionalized, constructing a social reality for governments and others establishing a potential to act *as if* nations compete”. Pedersen 2010: 635).

What is important in our context of Central European knowledge production is that higher education and innovation systems in Western European countries – as opposed to Central European countries – function in very competitive economies and companies, including companies involved in research, development, and innovation, operate in relatively friendly legal and regulatory environments. Which brings us back to two ideas: first, expectations from higher education (and innovation) systems should not be exaggerated in globally less competitive economies (such as Central European economies), as opposed to more competitive economies in which all other components of competitiveness are in place. And, second, the role of higher education (and innovation) systems in Central Europe and in Western Europe differs strongly due to a multitude of factors exogenous to higher education systems. The necessary (and measurable) need of “catching up with the West” in such areas as infrastructure, technology or business sophistication may be viewed as more important, and consequently public funding may be directed more easily towards these areas than towards higher education or research and development in public higher education.

And, assessing the level of public funding for university research in almost all new EU member states, this is exactly what has been the case in the last two decades. Which comes close to recent Aghion and Howitt's claim from their *Economics of Growth* that, generally, the closer a country to the productivity frontier, the more it becomes urgent to invest in higher education to foster innovation (and therefore in the US, growth will be enhanced by investing more in research education instead of two-year colleges, Aghion and Howitt 2009: 312). Central European countries are not at the productivity frontier, as shown in the research sector by both low publications intensity and low patents intensity.

The fiscal constraints in which higher education in Central Europe operates are high and there are high levels of inter-sectoral competition for (scarce) public funding. To give a dramatic illustration of the point: Poland in the global competitiveness index consistently ranks dramatically low in the last few years in one of the publicly most expensive categories – infrastructure: quality of overall infrastructure is ranked 108<sup>th</sup> out of 139 economies, quality of roads ranked 131<sup>st</sup>, quality of port infrastructure is ranked 114<sup>th</sup> and quality of air transport infrastructure ranked 108<sup>th</sup> (Schwab 2010: 278). The three other countries are also generally ranked very low in all above sub-indices of infrastructure, with the exception of railroad infrastructure in the Czech and Slovak Republics.

### *Geography of knowledge production in European regions*

Apart from countries as units of analysis in knowledge-production assessment, in recent years also regions in European countries (referred to as the NUTS 2 level) are increasingly becoming the focus of attention of both researchers and policy makers (see EC 2009, Hanell and Neubauer 2006, Arbo and Benneworth 2006, Goddard 2000, OECD 2007d). A report on *Europe's Regional Research Systems: Current Trends and Structures* published by the European Commission presents a new typology of regions which is very relevant for the assessment of knowledge production in Central Europe.

There are six leading research and development performers in Europe (three regions in Germany and one in the Netherlands, Finland and Sweden each). All other regions in the EU are classified into four types: Type 1 regions are R&D-driven regions (a high publishing and a very high patenting intensity, business sector contributes an above average share to

regional GERD, Gross Domestic Expenditure on Research and Development), Type 2 regions are public-sector-centered, R&D supported regions (with a very high publishing intensity in contrast to an only slightly above average patenting intensity; gross expenditures for R&D per GDP are slightly above average, mostly accounted for by either universities or public research institutions; the contribution of the business sector is below average). Type 3 regions are broadly-based, R&D supported regions (with an average publishing and patenting intensity; unlike Type 1 or Type 2 regions, they are not home to outstanding centers of excellence in either public sector or business research). And, finally, Type 4 regions comprise the remaining regions in which R&D plays a small role (with a far below average publishing intensity, a very low patenting intensity and an amount of investment in R&D “that can only be described as complementary to the region’s main drivers of growth”, EC 2009: 40). With an exception of merely two regions (the Praha region in the Czech Republic and the *Bratislavsky kraj* region in the Slovak Republic), all regions in Central Europe (as well as, presumably, in Romania and Bulgaria, for which data are not available in a comparable format) are classified as either Type 3 or Type 4 regions, the vast majority of them being classified as Type 4 regions. Central European regions are weakest in research intensity and the least research-driven in the European Union. A number of countries – including the four in Central Europe studied here – consist of Type 3 and Type 4 regions only (with the two above exceptions). The EC report concludes: “it is likely that within their national context they lack sources of knowledge to which an enlarged ERA network could provide access” (EC 2009: 44). A report on *Geographies of Knowledge Production in Europe* published by NORDREGIO (Nordic Center for Spatial Development) stresses in its conclusions “a clear core-periphery pattern” in the structure of knowledge intensity in Europe. “The East-West divide in Europe” is “still clearly discernable” (Hanell and Neubauer 2006: 28). Consequently, knowledge production in Central Europe, at a regional level, is performed in regions which are not R&D-driven: in the vast majority of regions R&D plays a supportive role or R&D is merely complementary to the local economy.

Universities function in multi-level, interdependent environments, and their regional engagement is closely linked to the characteristics of the economies in which they function. But the relationship between universities and the economic competitiveness of nations and regions is complicated and there is no easy one-way passage from systems of better developed

universities to more competitive regional economies. Growth, wealth and competitiveness are produced, first of all, at the level of companies, and if universities fit better into patterns of effective university-enterprise cooperation, regional economies have a chance to be more competitive. Macroeconomic, political, legal and social circumstances underpin a successful economy, but these are not the only essential conditions for success since “wealth is actually created in an economy at the microeconomic level – in the ability of firms to create valuable goods and services using efficient methods. Only firms can create wealth, not government or other societal institutions” (Porter *et al.* 2008: 53). So economic competitiveness and productivity ultimately depend on the microeconomic capabilities of the economy.

#### **4.6. The regional mission of the university. The case of transition economies**

European models of regional development tend to be currently changing to the ones in which regions are becoming increasingly reliant on themselves and can rely less and less on traditional, compensatory state functions (and compensatory state funds). Regions (as well as cities – see Richard Florida, *Who's Your City? How the Creative Economy is Making Where to Live the Most Important Decision of Your Life*, Florida 2008 or earlier, *The Rise of the Creative Class*, Florida, 2002) must increasingly compete with each other and in this sense, their knowledge capital becomes crucial to their economic futures (Pinheiro, Benneworth and Jones 2012a, Benneworth 2012, Pinheiro, Jones and Benneworth 2012).

##### *Third mission activities: the university regional engagement*

Higher education institutions in Western Europe (and in the OECD countries generally) are becoming increasingly linked to their regions (Pinheiro, Benneworth, and Jones 2012, Zomer and Benneworth 2011, Arbo and Benneworth 2006, as well as OECD 2007d, OECD 1999).<sup>171</sup> Apart from the

---

171 Etkowitz and Leydesdorff (2000: 117) stressed a decade ago in the American context that “the potential of science to contribute to economic development has become a source of regional and international competition at the turn of the millennium. Until recently, the location of research was of little concern. ... Less research-intensive

two traditional missions (research and teaching), there emerges the third mission of the university which includes the regional commitment (as well as other dimensions, such as civic and community engagement, leading to “engaged universities” Watson 2007, Watson and Temple 2009, Watson, Hollister and Babcock 2011; Arthur and Bohlin 2005, Jacoby and Associates 2009, Harding, Scott, Laske and Burtscher 2007, Weber and Bergan 2005, Kezar, Chambers and Burkhardt 2005a, Kezar, Chambers and Burkhardt 2005b, Trani and Holsworth 2010).<sup>172</sup> Entrepreneurial universities analyzed in Europe are heavily involved in their regional mission. This new mission is crucial from the standpoint of the functioning of educational institutions and their funding, as well as from the point of view of students and graduates of the vast majority of educational institutions. It also testifies to a substantial change in attitude of universities toward their external stakeholders: national authorities, local authorities and local government, local businesses and industry and finally, students and their parents (for a stakeholder theory, see Freeman 2010 and Freeman, Harrison, Wicks, Parmar and de Colle 2010). Today, there is a spread of clearly formulated and relatively new belief that the university should serve the economic (and social and cultural) development of its region and that there should be a direct relationship between the educational services provided by universities and the local and regional labor market needs.

---

regions are by now well aware that science, applied to local resources, is the basis of much of their future potential for economic and social development. In the USA, it is no longer acceptable for research funds to primarily go to the east and west coasts with a few places in between in the Midwest. The reason why funding is awarded on bases other than the peer review system, is that all regions want a share of research funding”. It is not the case today, at least in the European context of funding for what the European Commission termed “frontier research”: about 50 percent of 2.500 research grants from the European Research Council (until mid-2012) were allocated to 50 institutions, and the remaining 50 percent went to the remaining 450 institutions. Neither geography, nor politics is believed to matter in ERC grant allocations which follow the logic of excellence rather than any compensatory logic, still operative in EU framework programs and, especially, in its structural funding.

172 See OECD studies and analyses of the years, such as, for instance, “Supporting the Contribution of Higher Education Institutions to Regional Development. The OECD Programme on Institutional Management in Higher Education” (website of the project conducted for several years by the OECD/IMHE). See also *The Response of Higher Education Institutions to Regional Needs* (1999), *Higher Education and Regions: Globally Competitive, Locally Engaged* (2007), and a series *OECD Regions at a Glance*.

Therefore, there is a new social expectation from higher education – the direct contribution of educational institutions to the development of their regions. It is expected today, as local and regional development strategies in OECD countries show, that educational institutions will play an active role in economic, social and cultural development of their immediate surroundings (Jones, McCarney and Skolnik 2005, Arbo and Benneworth 2006, Wolfe 2005, Zomer and Benneworth 2011, OECD 2007d, Goddard 2000, and OECD 1999)

There is an important question of whether universities get engaged in third mission activities mainly to generate new revenues, which in turn are used to contribute to better teaching and better research, or whether these activities become a fully legitimate university mission, part of all “third mission activities” which include also “service to the society”, “democratic engagement”, “civic engagement”, etc (see Trani and Holsworth 2010: 1-46, Jacoby and Associates 2009: 227-248, Kezar, Chambers, Burkhardt and Associates 2005: 1-54, Weber and Bergan 2005, Harding, Scott, Laske and Burtscher 2007, Pinheiro, Benneworth and Jones 2012). Is the regional engagement a new university role or a new way to get funded its two traditional roles of teaching and research? Universities themselves are ambivalent about this issue (Williams 2009: 24). If it is indeed a new role, as Williams and Kitaev (2005) note, third mission activities would, in turn, have the full right to receive state funding, like the two traditional missions. As they formulate the dilemma:

Government policies on such matters are often opaque. Are universities encouraged to generate income from private sources in order to relieve government from some of the costs of teaching and research – in which case the work is worth doing by a university only if it generates a surplus over and above the full costs of doing it. Or are third mission tasks genuine new roles for the university arising from the pervasiveness of “knowledge” as an economic and social good? In this case these activities can claim as much right to be financed from public funds as conventional teaching and research and universities should not be expected to make a profit from them (Williams and Kitaev 2005: 128).

The very idea of the regional mission of the university is relatively new, and the research literature on the subject in the regional development research is no older than a decade now (Arbo and Benneworth 2006). The idea appeared together with the change of thinking within a broadly understood regional policy. In turn, wide recognition of knowledge and its production, transmission and dissemination as a key condition for economic

development has started only in last twenty years, together with further advances in research on human capital started in the 1960s (knowledge-based economy is a term coined by the OECD in the mid-1990s, OECD 1996; see also Lee 1970, Checci 2006, Keeley 2007, Groot and van den Brink 2007, Hartog and van den Brink 2007, and Keeley 2007) and as a condition for the material prosperity of cities, regions and countries. There appeared a belief that the economic future of individuals, companies, regions and countries largely depends on their ability to absorb knowledge and skills and on their adaptation to new conditions based on new knowledge and new skills. While postwar regional policy in the EU countries was based on the idea of the equalization of opportunities for different regions within the country and attempts to make up the deficiencies of certain areas through various compensatory mechanisms, today it is more and more often assumed at the EU policy level that certain regions will engage in a common race for the most competitive and attractive positions in European or global markets (see measurements of the competitiveness of regions of the OECD area in OECD series *Regions at a Glance*, e.g. OECD 2007e).<sup>173</sup> In this new perspectives on the regional development, each region takes full responsibility for itself and the national policy is rather to support the development of regional diversity and regional competitiveness. In most OECD countries, the role of national policies regarding the regions (including financial role) is smaller than the role of the regional policy itself. The functioning of regions depends on a number of objective factors (such as geographical location, size, natural resources available, climate, etc.), but the most important question is whether regions use their potential to the best of their abilities, regardless of how that original potential looks compared to other regions or metropolitan areas of the country.

---

173 From research performed in the GOODUEP project, in its section focusing on investments in science and technology parks throughout Europe, a conclusion can be drawn that higher education is also closely related to another factor of investment attractiveness of regions – regional social infrastructure (not only higher education but also the availability of good healthcare, cultural institutions, entertainment and recreation facilities which contribute to good living conditions). The number of cultural institutions and the level of development of tourist and related infrastructures plays an important role in the success or failure of individual investment decisions in science and technology parks open to new companies. These factors of attractiveness are of particular importance for the development of the high technology business sector.

It is widely acknowledged that every region and every city has some strong qualities and national policies must recognize regional diversities. The reformulation of the mission of the university in Western Europe, leading to the appearance of various third mission activities, including the regional mission, was accompanied by a detailed sociological research, based on systematic (central and regional) statistical data collection and analysis, and local quantitative and qualitative research about the relationships between the labor market and the currently available educational offer. Analyses were intended to study the relationships between the wage premium for higher education and the fields of studies (as well as their level and mode, e.g. full-time and part-time in Central Europe), employment opportunities for graduates in various industries, including industries considered as crucial for a region, and the possible trajectories of further careers of graduates on the labor market after several years from the moment of graduation and entering the labor market. Wage premiums for higher education tend to differ both across fields of study, degree levels, and across regions within countries.<sup>174</sup>

---

174 The differences between regions and countries in Europe are striking. The wage premium for higher education in Poland, for instance, is especially high for men in the private sector (199 percent and 162 percent, master's and bachelor's level), and especially low for women in the public sector (117 percent and 100 percent) – which reflects somehow the dominating gender structure of economically active population combined with levels of education (GUS 2009). There seems to be no “credential inflation” (Collins 1979), no “diploma disease” (Dore 1976) and no signs of “overeducation” (Freeman 1976) in Poland at the moment, the specters of which have been haunting higher education since the 1970s. This is shown by both salaries and per hour payments. There is also strong “seniority” in salaries and wages which needs to be stressed: the real difference in average salary comes with the age – most strikingly in the 55-59 and 60-64 age brackets, in both public and private sectors. This may mean that the wage premium for higher education may be available mostly for older workers and not for younger, so it does not have to be available immediately after graduation. Precise differences in wages between recent bachelor and master graduates could only be shown through various types of large-scale graduate surveys which are still relatively rare in Europe and so far has been mostly academics-driven (Teichler 2011b; see also a comprehensive conceptual framework to study higher education and work in Brennan, Kogan and Teichler 1996: 1-24, and links between higher education “and the world of work” in Teichler 2009). A recent report on Poland (Grotkowska 2011: 225) does not focus on income differentials of graduates but still indicates that the income of bachelor graduates is only slightly lower than that of masters (according to the 2007 survey of about 20,000 graduates she refers to, the net hourly wage

### *Economic benefits from higher education: the case of the bachelor degree*

Economic benefits from higher education differ markedly between European countries and regions. What is striking, and goes against conventional knowledge of the economic benefits from higher education in Poland, is that the bachelors-level higher education seems to be already well recognized in the labor market, and well rewarded by the labor market, leading to 133.9 percent of salaries for bachelor degree holders generally, and to 149.3 percent in case of males. Which is in line with the traditional human capital theory according to which the relationship between earnings and schooling is “simple to state: more educated people enjoy a higher level of earnings than people with a lower level of education. However, people with the same level of education do have different earnings depending on their race, gender, ethnicity, ability, and social background” (Cipollone 1995: 145). The economic benefit for men with the bachelor degree is higher (149.3 percent) than the economic benefit for women with the master degree (135 percent, GUS 2009). Men are much higher rewarded for their higher education, regardless of the type (bachelor or master) – by 25-30 percentage points. The wage premium for higher education is also strongly related to the sector of employment: in the public sector, it is substantially lower than in the private sector of employment. While in the public sector for the master degree it is 121.2 percent for men and 117 percent for women, in the private sector it is almost 200 percent (199.1 percent) for men and almost 170 percent (169.4 percent) for women. The difference between rewards given to higher education in both sectors are related to the type of

---

differential is only 7 percent). What the report shows and what cannot be shown through labor market statistics, is the lower quality of work for recent bachelor graduates: they more often work on shifts (36 percent as opposed to 27 percent among master graduates, much more often work at night (18 percent and 12 percent, respectively), during the weekends (58 percent and 44 percent, respectively, Grotkowska 2011: 225; another recent study based on about 20,250 face-to-face interviews conducted within the Polish School Leavers Survey of 2007 shows the differentiation of labor market outcomes among graduates within higher education, especially between masters graduates and others, Baranowska 2011: 239). The Polish data are not strikingly different from other European countries surveyed as the picture is far from homogeneous: the bachelor graduates in France and Hungary earn about 30 percent less while in Italy and the Netherlands they earn as much or even more on average than masters graduates (Schomburg 2011: 269).

occupations prevalent in both sectors: the public sector in 47 percent consists of professionals, mostly in (public) education and health sectors in which higher education is much more a standard requirement – than an advantage.<sup>175</sup>

Private returns to higher education in Poland, from a European comparative perspective, are very high; studying is still very much financially rewarded, and working with higher education credentials, especially in the private sector of the economy, is rewarded unexpectedly high. The standard OECD statistics (OECD 2011c) does not make a distinction between returns to higher education at master's and bachelor's levels. But generally returns in Poland are among highest in the OECD area (no matter which OECD methodology is used). As the OECD context section about the earning premium from education points out:

high and rising premiums can indicate that more highly educated individuals are in short supply; the opposite is true for low and falling premiums, important indicators of the match between the education system and the labour market (OECD 2011c: 138).

Young people from lower socio-economic strata in Poland, as in other Central and Eastern European economies, tend to choose bachelor's level studies, with a stronger labor market orientation, in less demanding academic fields, as pointed out in a recent large-scale comparative study on education and labor market entry in the region (Kogan, Noelke and Gebel 2011: 336).

---

175 The European Commission in the last few years has been supporting strongly further expansion of higher education across Europe. It highlights the strong link between higher education and employment and points out that “evidence from across the world illustrates the positive impact of higher education attainment on employment outcomes, at both individual and societal level. European higher education graduates, in common with their counterparts in other developed economies, have significantly higher rates of employment than those with less advanced levels of qualification. Projections of skills requirements in the European economy in the coming decade highlight increasing demand for the skills types provided by both higher education and high-quality vocational education and training. Education and training systems must thus cater to the needs of the economy as a whole” (EC 2011b).

### *Graduate incomes and the fields of study*

One dimension missing from the general picture currently available in research literature (as well as from various European graduate surveys in general) is a substantial differentiation in graduate incomes across fields of studies.<sup>176</sup> One future research direction is linking higher education with labor market trajectories through academic fields of study, with additional lifetime earnings different for different academic degrees viewed horizontally rather than vertically. The difference between following labor market trajectories by educational levels and by fields of study within the same educational level (e.g. at the bachelors and masters levels in different fields of study) is significant. The national average wage premium for higher education, or private “internal rate of return” (IRR) in higher education, or other related indicators measured over the years by the OECD, do not show the difference between fields of studies. So far, this dimension has not been systematically explored, mostly due to the lack of European data in a common, comparable format. And average additional lifetime earnings are substantially different for different degrees, as various national or global labor market studies show (e.g. PriceWaterhouseCoopers global study on salaries related to fields of studies, 2007). While overall average additional lifetime earnings seem substantial in most countries, it is marginal or almost zero for graduates in such fields of study as the arts or the humanities in many European systems.

Researching labor market consequences of studying different fields seems fundamental to linking higher education to the labor market successes and failures (changing employment status and changing occupational status over time, based on, for instance, EU Income and Living Condition Survey, or EU-SILC, available from Eurostat) both in individual EU member states

---

176 Importantly, the European Commission, supporting further expansion of higher education, notes the differences in higher earnings for graduates across various fields of studies. As it summarizes its brief analysis of income differentials for graduates across different fields, “the highest income premiums for tertiary graduates, compared to those with only upper secondary qualifications are found in Central and Eastern Europe, Portugal and Greece and the lowest in the Nordic countries, Austria, the Netherlands and Belgium. These aggregate figures naturally hide variations in the earning outcomes of graduates from different disciplines. While *on average* a higher education qualification is likely to allow an individual to achieve higher earnings than someone with a lower level of qualification, this is naturally not always the case (EC 2011b).

and in Europe. The research literature analyzing the impact of the specific field of study (and its importance for social stratification studies) on occupational prestige, job mismatches, employment status and income has been growing. As Reimer and Noelke (2008: 234) argue about the future, “with increasing numbers of university graduates in the labor market, the signal value of a university degree from less-academically challenging and less selective fields like the humanities and social sciences will deteriorate”. This is an important additional dimension of studies linking higher education to labor markets and labor market trajectories, and studies linking levels of educational attainment by field of study with wage premium for higher education by field of study (see Ortiz and Kucel 2008) which so far has not been explored with reference to either Poland or Central and Eastern Europe.

### *“Learning” is “earning”?*

One general reservation needs to be made, though, following the above statistical data on Poland: “learning” does not have to be “earning”; as Brown, Lauder, and Ashton (2011: 60) stress from the perspective of what they term the “Global Auction Model”:

however, a graduate premium on its own tells us nothing about the demand for graduate workers in relation to concepts of the knowledge economy or of technology. It may well be that the premium is created by a decline in the wages of non-graduate labour, if graduates were then being employed to undertake work previously done by non-graduates.

We discussed briefly above the dynamics of bachelor and masters graduates earnings, and focus on the high rewards from the bachelor degree compared with those from the master degree – rather than on incomes and wages in general across all education levels (a recent statement of the model, see their book on “the broken promises of education, jobs, and income”, Brown *et al.* 2011: 1-28, 113-146, and on credentials, jobs and income as increasingly “positional goods” and education as a “signaling device”, see Hirsch 1976, Spence 1974, Collins 1979 and Blaug 1987). As Fred Hirsch warned in his “economics of scarcity”, with direct reference to educational achievements of individuals as “filters”:

It is a case of everyone in the crowd standing on tiptoe and no one getting a better view. Yet at the start of the process some individuals gain a better view by standing on tiptoe, and others are forced to follow if they are to keep their

position. If all do follow, whether in the sightseeing crowd or among the job-seeking students, everyone expends more resources and ends up with the same position (Hirsch 1976: 49).

In empirical terms, though, the relationships between schooling and income are the same in both the human capital interpretation of education and in the signaling or screening interpretation of education (as Tachibanaki 1995: 152 stressed almost two decades ago, “it is nearly impossible to identify which interpretation is more appropriate to explain empirical evidence of the relationship between education and earnings”). Also, what is troubling in the context of the human capital theory is the growing income inequality across OECD nations, or a distribution of wages across individuals which does not seem to be fully determined by the distribution of human capital, see OECD 2008 and Blair 2011: 65). As Emmenegger *et al.* summarized their recent study (2012b: 3), “poverty, inequality, and social exclusion are back on the political agenda in many affluent democracies of Western Europe and North America” (see recent conclusions in Atkinson 2008 and Attewell and Newman 2010) and the links between higher education expansion and decrease in social inequality are as important as ever before (for the first theory-driven and empirically based global panorama of case studies, see Shavit, Arum, and Gamoran 2007).

### *Universities and regional labor markets*

The regional mission of the university links it close to the regional labor market and its transformations over time. In many countries, detailed studies based on regional statistical data are being made publicly available, primarily in concise versions to be easily absorbed by policymakers, employers, students and their families. Knowledge produced about regional graduate labor markets becomes an easily available public good, and enjoys public interest (especially in the local media). Changes that have been taking place for several years at British universities transformed British research on regional graduate labor markets which today seems exemplary for Europe.<sup>177</sup> Research on graduate labor markets in the USA, at the state level,

---

177 See the analyses of additional life time earnings focused on the completed course of study in the UK which show that higher education graduates will earn, compared with secondary education graduates, over 300.000 GBP more only in medicine, over 200.000 GBP more in three other fields of studies (mathematics and computer sciences, physical sciences and environmental engineering), over 150.000 GBP more

is equally useful for regional purposes and contributes to making informed choices by students and their families regarding fields of studies and educational institutions. The success of regional policies results from the political will at the national level, opportunities (including financial ones) at the local level, the media attention, and the availability of centrally coordinated statistical research which allow to “locate” individual regions in relation to one another (HEFCE 2003). It seems possible to carry out a systematic, detailed quantitative analysis (with objective quantitative indicators) of the current regional involvement of particular educational institutions (or the lack of this engagement), including involvement in meeting the local labor market needs, which can contribute to inter-institutional comparisons of engagement in the university’s regional mission.

A redefinition of regional policies and a powerful increase in their significance across Europe have serious implications for higher education institutions (and for social and economic expectations from them). Universities are not only becoming sources of innovation in the fields of high technologies but also they are being increasingly recognized from broader perspectives which cover the whole (regional) social fabric in which they operate.<sup>178</sup>

---

in the next four fields of studies (architecture, business and finance, social sciences and fields related to medicine). Their additional earning, on a comparative scale, will be zero in the arts and humanities (where the wage premium for education, in principle, almost does not exist). In each case, women gain significantly more than men – in the case of the humanities, men earn less than high school graduates (PriceWaterhouseCoopers 2007: 5). Such types of detailed analyses do not often find their way to popular public awareness, even though they can be carried out on the basis of national labor force surveys (or their modules) or the EU Labour Force Survey.

- 178 The links between Polish universities and their regional social and economic environments are weak (with technical universities having strongest relationships). In recent years, all international reports about Polish higher education emphasize its exceptionally “academic” character and its orientation towards its own problems – rather than problems of the economy or society. This inward orientation is increasingly criticized at the European level, especially within the initiative “New Skills for New Jobs” and the *Europe 2020* strategy. The association of educational offer with the labor market needs is relatively weak in Poland, as criticized strongly by both the OECD and the World Bank reports on Polish higher education (Fulton *et al.* 2007, World Bank/EIB 2004).

In the vast majority of OECD countries, the regional mission of educational institutions is today acknowledged as natural.<sup>179</sup> Also, in most cases, the change in orientation in educational institutions from traditional (nation-wide, loosely linked to local and regional graduate labor market) to the regional (closely linked to local and regional labor market needs) was a long process which required strong governmental incentives. It also required a change in the attitude of the national and local media and information campaigns targeted to both employers and to potential and current students. Overcoming the informational asymmetry between the higher education sector and the labor market was considered a key to success in many countries studied (OECD 2008). The knowledge of the overall contours of labor market and its possible trajectories in the future, and the awareness of the job trajectories of graduates from local universities, the awareness of jobs in demand, salary expectations of students, graduates (and employers) is supposed to be gradually becoming publicly available knowledge.<sup>180</sup> This

---

179 Clearly, different places bring about different outcomes. As Jon Potter from the OECD (2008: 316) notes, “although a wide range of higher education institutions can engage with entrepreneurialism, the outcomes of such efforts are likely to vary with the nature of the higher education institutions and the local economy in which it is embedded. The entrepreneurialism experiences of some high profile universities and their regions are commonly used as inspiration for other areas, such as Boston, California and Ontario in North America, or Cambridge, Grenoble, Copenhagen and Vienna in Europe. However, the same results cannot be expected from places with weaker universities and local innovation systems”.

180 In Poland, there are no complex surveys of graduates’ satisfaction. There are no widely available annual results from surveys of students of their final years of studies which, in many countries, help the potential students to choose the place and the course of study and help to improve the functioning of institutions that are participating in the study. In Poland, there is still not only an information asymmetry between the institutions and prospective students, deciding on the choice of the university – there is lack of such information whatsoever because it is not gathered on the national scale and is not made publicly available. (Example include the British NSS program, The National Student Survey, with more than sixty percent of the return rate in its recent years of operation, based on online surveys and covering all publicly funded English universities; be the American NSSE survey, the National Student Engagement Survey, covering 1200 institutions; the Canadian National Graduates Survey, as well as an Australian program: Graduate Destination Survey, Course Experience Questionnaire and the Australasian Survey of Student Engagement, see Ewell 2010). The new law on higher education of March 2011 introduces new mechanisms obliging institutions to collect data on their students’ and graduates’ satisfaction.

knowledge is expected to be gradually contributing to informed educational choices leading to professional choices by prospective students and graduates.

## 4.7. Conclusions

### *Universities and economic growth: tensions and contradictions*

Poland is a good example of tensions inherent in regional roles of universities and the complicated nature of relationships between universities and economic growth. Universities in Poland contribute to economic development but numerous other features that are known to contribute to economic growth are non-existent, and numerous inhibitors of economic growth, already addressed in knowledge-intensive economies, are still in force. Two decades of social and economic transformations (often referred to as “catching up with the West”, or “postcommunist transition” and “EU accession” periods) are not long enough to bridge the gap between two parts of Europe, and convergence processes between Poland and Western European economies may last much longer than initially assumed following the collapse of communism in 1989 (Barr 1994; Goodin 1996a, 1996b; Elster, Offe and Preuss 1998).

While the policy discourse in Poland already stresses the fundamental role of universities’ regional engagement in research, it is hard to assess how long it will take for development of strong links between universities and their regions to emerge. The strongest links are clearly seen in the teaching dimension of regional engagement, especially in the private sector competition for students from lower socioeconomic strata who are traditionally focused on more labor-market related areas of study. Regional engagement in research is a much more distant goal, and more public resources invested in joint programs for universities and companies, and major changes in the current individual and institutional research assessment formulas and academic promotion requirements are needed. But the major complexity is that regional engagement in research requires research-intensive regional economies as components of a more research-intensive national economy, changes that will take years to emerge. Simplified comparisons of the level of universities’ regional engagement between

countries and regions do not take into account the significant difference between knowledge-driven economies and economies which still aspire to become knowledge-driven. In the case of Poland, many other factors, external to universities, have a substantially greater impact on regional and national competitiveness than the factors linked directly to higher education and innovation systems.

The fundamental role of knowledge production in the economic growth of knowledge-driven economies puts universities and the outcomes of their teaching and research increasingly in the public spotlight (see Martin 2003 on “the changing social contract for science”, Etzkowitz 2008 on the “triple helix”; Foray 2006 and Leydesdorff 2006 on the new “economics of knowledge”, Etzkowitz and Webster 1998 on “the second academic revolution”, and Etzkowitz, Webster, and Healey 1998b of “new intersections of industry and academia”). Universities are increasingly measured, compared and ranked both internationally and nationally; rankings and comparisons are publicly debated (King 2009, Hazelkorn 2011b). The “economic relevance” of universities is linking, directly or indirectly, university activities with innovations in the private sector of the economy (Geiger and Sà 2011). Links between higher education and the economy are tightening throughout Europe. There are increasing policy pressures, accompanied by new national and European-level funding mechanisms, to link university missions much closer to the economy (Maassen and Olsen 2007). Teaching is expected to be linked more closely to labor market needs, avoiding the mismatch between higher education offerings and labor market needs, and research is expected to be more easily commercialized; the third mission in general, and regional engagement in particular, is expected to create new revenue streams for educational institutions. The economic competitiveness of nations and regions is increasingly linked to national and regional knowledge production, including knowledge production in universities.

A high level of regional engagement of higher education institutions is taken for granted in knowledge-driven economies, and the graduate labor market is analyzed in detail in many European higher education systems. Systematic quantitative analyses of regional engagement (or the lack thereof) of higher education institutions, including their contribution to the local labor market, are routinely performed. Methodologies and good practices for assessing the impact of particular educational institutions and regional educational systems on particular regions are available. There are

standard approaches to comparing the performance of educational institutions in regions and for regions, based on benchmarks and good practices. Internal institutional management and governance mechanisms as well as external pressures and financial incentives play important roles in supporting this regional mission.

Overall, the level of university responsiveness to labor market needs is low in Poland. The level of cooperation with the business sector is also low. As a ministerial report on the barriers of cooperation between research centers and companies explained, Polish companies need to be made more aware of the possibilities associated with cooperating with universities; approximately 20 percent of companies did not know that that it was possible to cooperate with the academic community, and 40 percent of companies had never tried to get in touch with universities. Also 40 percent of surveyed companies did not know how to reach research centers potentially interested in the commercialization of research. At the same time, surprisingly, almost half of the companies surveyed that actually got in touch with scientists (45 percent) reported that the initiative for cooperation came from the scientists. Companies involved in partnerships with universities were generally satisfied; the effects of cooperation with scientists was rated as rather positive by 51 percent and definitely positive by 17 percent of respondents. Only 3 percent of surveyed companies provided a “rather negative” or “definitely negative” assessment of a university partnership (MNISW 2006: 4-10). The linkages between Polish universities and their social and economic environments, from an international comparative perspective, are weak, and international reports on Polish higher education released in the last few years stress the exceptional academic (inward-looking) character of Polish universities, and their engagement with their own (academic) issues rather than issues of interest to, or relevant for, the society and the economy (Fulton *et al.* 77, World Bank/EIB 2004: ix). Such academic ethos is prevalent throughout the system, and Poland does not seem to be an exception in Central Europe. Ralf Dahrendorf (2000: 15) summarized this ethos of “defensive isolationism” stating that in postcommunist countries “outreach to the society around, and more particularly to business and the political world, is almost taboos; such relations are seen as soiling the new-found purity of universities. ... How can they be persuaded to welcome the modern world so that they themselves can be welcome to the modern world?”.

*National policy vs. institutional practice*

The tension between national policy, as reflected in policy documents produced in the last three years, and the institutional practice is clearly discernable. At the policy level, which uses a set of standard assumptions about universities' role in the knowledge economy, the links between academic knowledge production and national (or regional) economic performance are clear. But these assumptions are problematic in the policy context, at least at the moment. Poland does not seem to fit the picture of a "knowledge economy", and, consequently, the policy discourse prevalent in Polish public debates and policy documents does not fit Polish universities as centers of knowledge production, including knowledge production for regional development. This is an important tension; while the regional dimension of university knowledge production is heavily emphasized at the national policy level, in practice, for example the number of projects involving universities and corporate partners, the share of income in university budgets from company-contracted research or the role of enterprises in shaping the educational offers of regionally-oriented universities, this role is still quite marginal.

There are clear tensions in Poland between the ideal roles of universities in generating economic growth as presented in national policy documents which draw heavily from the European knowledge economy discourse (as well as roles of universities in increasing the economic competitiveness of the regions where they are located), and the practical level of internationally measurable knowledge production and research intensity in Polish universities. Unrealistic expectations of Polish universities are combined with harsh criticisms of their research underperformance, of the mismatch between higher education and the labor market, and of their low level of regional engagement.

There are a range of complex factors underscoring this tension. Major Western European economies are highly competitive. They are knowledge economies not only because they have well-performing universities; they are knowledge economies because their well-performing universities function (to refer to Porter's twelve pillars of competitiveness) in strong institutional environments supporting growth and competitiveness that includes: high-quality infrastructure, high macroeconomic stability, a workforce that is healthy and well-educated at the basic education level, and healthy domestic and foreign market competition. Other important characteristics of these

supportive environments are labor markets that are efficient and flexible, financial markets that are sophisticated and make capital easily available for private-sector investment, a readiness to adopt existing technologies, sizeable markets, a high level of business sophistication and companies that are innovative. As Porter points out, the pillars of competitiveness are not only “related to each other, but they tend to reinforce each other” (Porter *et al.* 2008: 6).

Polish universities function in Polish economic, political, social, and legal environments; they function in regions embedded in national economic, political, social, and legal environments. Universities do not function in isolation from other institutions and organizations and are powerfully embedded in this national context. Thus, returning to the popular criticism of universities by policy makers, universities in Poland indeed underperform in all aspects of their regional engagement (as shown by both hard data and soft data, international comparative statistics, global rankings, as well as numerous national case studies). Their academic entrepreneurialism is low (Kwiek 2008b; for a conceptual framework, see Shattock 2009a and the next two chapters), partnerships with enterprises are relatively rare, their scientific and technological parks are small, with underdeveloped links to the business community (Mora *et al.* 2010), their non-core non-state research income is low (although their non-core non-state income from teaching, through fees, is well-established, Kwiek 2011b), their regional mission in research is underdeveloped (the regional teaching mission of private higher education institutions is better grounded than the same mission in public higher education institutions) and their role in national innovation systems is low. This is all true.

But all of these assessments, based on international comparative data and analyses, need to be viewed in the context of the very different economic, political, legal, and social environments in which Polish universities operate today. They have their own history of almost five decades of operating under the communist regime and two decades of post-communist transformations. The knowledge economy has not yet arrived in Poland. The regional engagement of universities in Western European knowledge economies is radically different from the experience of universities in the countries that were until recently called “transition” and “accession” economies. Any analysis of these systems needs to focus on their possible *modi operandi*, under changing legal, social, and financial circumstances only slowly leading in the direction of knowledge economies.

The low research output of Polish universities, measured internationally, leads to low levels of regional research engagement. The regional research dimension is determined by the national research dimension.

### *Different drivers of economic growth and the long “arm of the past”*

Discussions of knowledge production and regional engagement of universities in post-communist Europe cannot ignore a fundamental distinction between efficiency-driven growth in such European countries as Albania or Bulgaria, almost innovation-driven growth (in transition between the second and the third stage of economic development in this classification) in Poland, Hungary, Slovakia and Romania, and, finally, innovation-driven growth in the Czech Republic. Of the twelve pillars of competitiveness (Schwab 2010), two are of special interest: “higher education and training” and “innovation”. While most major OECD economies are ranked in the top twenty countries on the index, Poland is ranked 39<sup>th</sup>. Expectations from higher education are similar in Poland and in Western Europe (and derive from both the knowledge economy discourse and from OECD and EC documents and reports) but there are many other equally important factors – exogenous to educational efforts and even exogenous to government efforts – which are specifically Polish. These exogenous factors make a comparative analysis of higher education roles in promoting economic growth difficult but also create considerable tensions between the “knowledge economy” discourse used at the policy level in Poland and actual environments in which Polish universities function.

In the areas most important for knowledge production in the global competitiveness index, Central European economies such as Poland, Slovakia and Hungary are ranked generally low, and in some specific cases, very low. But even if they were ranked high or very high in these areas, their overall economic competitiveness would be still low given their rankings in other standardized and measurable pillars of competitiveness, not related to higher education and innovation systems. The Polish economy is not globally competitive not only because it lags behind in higher education and innovation pillars of economic competitiveness, as policy makers and reformers in higher education tend to stress. In the global competitiveness index Poland consistently ranks very low in one of the most expensive categories of public expenditure, the pillar of infrastructure: the quality of

overall infrastructure is ranked 108<sup>th</sup> out of 139 economies; the quality of roads is ranked 131<sup>st</sup>; the quality of port infrastructure is ranked 114<sup>th</sup> and quality of air transport infrastructure is ranked 108<sup>th</sup> (Schwab 2010: 111-299). Hungary, Slovakia and the Czech Republic are also generally ranked very low in all of the sub-indices of infrastructure, in the 50-80 range, with the exception of railroad infrastructure in the Czech Republic and Slovakia.

Highly competitive economies have excellent universities operating in increasing symbiosis with the business sector, and both universities and the business sector are operating in friendly legal and regulatory environments. Globally competitive universities in Europe operate in globally competitive regions and economies. This is not the case of Poland which increasingly refers to knowledge economy principles and uses the knowledge economy discourse in legitimizing new national higher education strategies, but Poland lags behind not only in its higher education and innovation systems but also in other factors that are known to directly impact economic competitiveness. Higher education and innovation systems are located in and influenced by their national social and economic contexts; they belong to national settings, are funded through national taxes, cooperate with regional companies, and produce graduates with the skills necessary for national economies. The national context is both a burden and a challenge for the higher education and innovation systems. The major tension in Poland is between policy objectives to become a globally competitive, knowledge-driven economy, and institutional realities, including economic, legal and infrastructural environments in which Polish universities and Polish companies function. The “arm of the past” (communist and post-communist transformation periods in Poland) is long (Elster, Offe and Preuss 1998; see Campbell and Pedersen 1996a, Campbell and Pedersen 1996c, Cerami and Vanhuysse 2009).<sup>181</sup> The tension between basic assumptions about the role of universities in knowledge economies, valid for most affluent OECD economies, and post-communist realities of university knowledge production in Poland is still substantial. Convergence processes take much more time than initially assumed.

---

181 As commentators note about changes in public services in general in the region (and which can be applied to higher education), they will take years to be effective: “social transformation, including the adoption of a new value system and social behavioral pattern, is not a process of one or two decades. It takes generations. Based on the economic and political transformation, gradual social adjustment may follow. History, however, remains part of the present for a long time” (Berend 2007: 279).



## PART II

# **TOWARDS EMPIRICAL EVIDENCE: ACADEMIC ENTREPRENEURIALISM AND KNOWLEDGE EXCHANGE IN EUROPEAN UNIVERSITIES**



## Chapter 5

# Academic Entrepreneurialism vs. Changing Governance and Institutional Management Structures in European Universities

### 5.1. Introduction

In this chapter we will discuss a historically relatively new phenomenon in European higher education systems, emergent in various geographical locations across the continent: academic entrepreneurialism – especially with regard to governance and management (entrepreneurialism viewed, following Shattock, as “a drive to identify and sustain a distinctive institutional agenda which is institutionally determined not one [which is] effectively a product of a state funding formula”, 2009b: 3). Entrepreneurial universities seem to be increasingly important points of reference for international and European-level policy discussions about the future of higher education.<sup>182</sup>

The term “entrepreneurial” in relation to universities is not of critical importance; in research literature, entrepreneurial universities, from various perspectives and with emphases focused on different aspects of their functioning, can also be termed “successful universities” or “self-reliant universities” (Michael Shattock), “enterprise universities” (Simon Marginson and Mark Considine), “enterprising universities” (Gareth Williams), “innovative universities” (Burton Clark), “adaptive universities” (Barbara Sporn), “responsive universities” (William G. Tierney), or, in the American context, they can be considered as academic institutions involved in the academic capitalism in the emergent “capitalist academic knowledge/learning regime” (Sheila Slaughter, Gary Rhodes, and Larry L. Leslie; see Shattock Shattock 2003a, Shattock 2006, Shattock 2009a, Marginson and Considine 2000, Williams 2004, Sporn 1999, Tierney 1998,

---

182 See, for instance, contributions to annual University-Business Forums in the last few years and two recent projects: an EC-funded “Entrepreneurial Universities – a Guiding Framework for Europe”, and an OECD project “LEED Forum on Partnerships and Local Governance”.

Clark 1998a, Clark 2004a, Slaughter and Leslie 1997, Slaughter and Rhoades 2004). The term does not matter much – although it certainly captures both public and academic attention. What matters is rather novel ways of functioning of certain educational institutions in Europe which increasingly differ from the functioning of their neighboring traditional educational institutions in the same national systems. The league of entrepreneurial universities is relatively small. In recent years, though, the term has been widely popularized in research and policy literature in higher education, with a bulk of books and papers referring often to Burton Clark and Henry Etzkowitz, both working in different traditions (Clark 1998a and Clark 2004a on the one hand, and Etzkowitz 2001, Etzkowitz 2002, Etzkowitz 2008, Etzkowitz and Webster 1998, Etzkowitz, Schuler and Gulbrandsen 2000, Etzkowitz and Zhou 2008, Etzkowitz, Ranga, Benner *et al.* 2008 on the other). The papers on “entrepreneurial universities” and “academic entrepreneurship” are being published in top academic higher education journals (such as *Higher Education, Educational Philosophy and Theory, Higher Education Management and Policy* or *Higher Education Quarterly*) on the one side, and top science policy, public policy, and technology transfer journals (such as *Science and Public Policy, Research Policy, Journal of Technology Transfer, Industrial and Corporate Change* or *Technovation*) on the other side.<sup>183</sup>

Entrepreneurial institutions, functionally similar although variously termed, currently seem to be an almost natural reference points in both national discussions on reforming higher education systems, and especially a shift in its financing towards more financial self-reliance, as well as in EU-level discussions on how to secure the sustainable development of public universities in increasingly hostile financial environment and increasingly powerful intersectoral competition for public subsidies of higher education with other state-funded public services (the current economic crisis in Europe makes the competition more tough, and makes seeking new

---

183 See especially Soares and Amaral 1999, Guerrero, Kirby and Urbano 2006, Nelles and Vorley 2010a, Duberley, Cohen and Leeson 2007, Meyer 2003, O’Shea, Allen, Morse, O’Gorman and Roche 2007, Liesner 2006, Gjerding, Wilderom, Cameron, Taylor and Scheunert 2006, Nelles and Vorley 2010b, Siegel, Wright and Lockett 2007, Martinelli, Meyer and Tunzelmann 2008, Todorovic, McNaughton and Guild 2011, Pilegaard, Moroz and Neergaard 2010, Philpott, Dooley, O’Reilly and Lupton 2011, Kristensen 1999, Jacob, Lundqvist and Hellsmark 2003, Svensson, Klofsten and Etzkowitz 2012, and Kirby, Guerrero and Urbano 2011.

arguments for new levels and new modes of public subsidies more relevant than ever before in the last two decades).

An important point of reference of this chapter is the future role of universities from the perspective presented and promoted for more or less a decade (throughout the 2000s and beyond) by the European Commission, especially in the context of the transformation of university management and university governance. The second part of the chapter presents changes as suggested by the European Commission (in the framework of broad discussions on the emergent European Higher Education Area and the European Research Area, or EHEA and ERA, and on the Bologna Process and the Lisbon Strategy). Next we analyze academic entrepreneurialism, as emerging from recent European comparative (theoretical and empirical) studies in this area, especially a three-year international research project EUERЕК (“European Universities for Entrepreneurship: Their Role in the Europe of Knowledge”).<sup>184</sup> In the third part, academic entrepreneurialism is

---

184 The EUERЕК case studies included 27 universities from seven European countries (Spain, the United Kingdom, Finland, Sweden Poland, Moldova, and Russia) and they were prepared within the project “European Universities for Entrepreneurship – Their Role in the Europe of Knowledge”, funded through the 6th Framework Programme of the European Union (2004-2007), coordinated by the Institute of Education, University of London (Michael Shattock, Gareth Williams, and Paul Temple). The twenty-seven case study institutions were the following: Helsinki School of Economics, University of Lapland, and University of Tampere in Finland; Balti State University, Academy of Economic Studies of Moldova, Moldova State University and Trade Cooperative University of Moldova in Moldova; Adam Mickiewicz University in Poznań, Academy of Hotel Management and Catering Industry in Poznań, and Poznań University of Economics in Poland; Baikal Institute of Business and International Management of Irkutsk University, Higher School of Economics, Moscow, and Institute of Programming Systems of the Russian Academy of Sciences, University of Pereslavl in Russia; Cardenal Herrera University, Miguel Hernandez University, Technical University of Valencia, University of Alicante, University Jaume I of Castellon, and University of Valencia in Spain; Lund University, Jönköping University, Umea University, and Royal Institute of Technology in Sweden; London School of Hygiene and Tropical Medicine, University of Buckingham, University of Nottingham, and University of Plymouth in the United Kingdom. The authors of case studies were: Jenni Koivula for Finland, Petru Gaugash and Stefan Tiron for Moldova, Marek Kwiek for Poland, Stefan Filonovich for Russia, the Valencia CEGES team led by José-Ginés Mora for Spain, Bruce H. Lambert, Aljona Sandgren, and Gorel Stromquist for Sweden, and Gareth Williams, Michael Shattock, Rosa Becker and Paul Temple for the United Kingdom. The case studies are publicly available from [www.euerек.info](http://www.euerек.info). The author would like to express his

linked to risk management at European universities and legal and institutional conditions that favor its formation are studied. Increased risk is associated with an increase in uncertainty currently experienced by the vast majority of European education systems. In the fourth part, we study a clash of traditional academic values with managerial values in the functioning of academic institutions, and we address the issue of academic entrepreneurialism in the context of traditional academic collegiality, various ways of minimization of tensions in the management of educational institutions. And in its sixth part, we pass on to the discussion of complex relationships between academic entrepreneurialism and centralization and decentralization of the university power. In the seventh part, we discuss the location of academic entrepreneurialism in different parts of educational institutions. Conclusions come back to a wider vision of higher education as it appears in the documents of the European Commission and shows their convergences and divergences with academic entrepreneurialism as studied through empirical material throughout the chapter.

## **5.2. University governance and the European Commission on the role of universities in the knowledge economy**

*The public policy perspective, or why the voice of the EC matters*

In recent discussions about the future of public universities in Europe, the issue of their governance and management structures figures prominently (e.g. Bleiklie and Henkel 2005, Paradeise, Reale, Bleiklie and Ferle 2009, and Amaral, Neave, Musselin and Maassen 2009). It is especially interesting to take into account the ongoing discussions on the “modernization agenda” of European universities prepared and modified over the years by the European Commission (for a recent position, see EC 2011a, EC 2011b and its Europe-wide discussions in a recent collective volume, Kwiek and Kurkiewicz 2012). From an academic perspective – that is, from the perspective of higher education research *per se* – this is not a particularly

---

gratitude to the whole international EUEREK research team; the responsibility for all limitations and mistakes of this and the next chapter rests entirely with him.

inspiring or innovative agenda; the agenda's major shortcoming from an academic perspective is that it is based on strong beliefs rather than systematic research in the area (as stressed by Maassen and Olsen 2007). But from the perspective of public policy, the voice of the Commission in the discussions about the future of the institution of the university in Europe cannot be ignored as the Commission, on an international plane, is one of the major ideological players providing arguments used in national-level discussions throughout Europe, and especially in new postcommunist EU member states. There are several reasons to focus here briefly on the modernization agenda in its subsequent versions.

Firstly, together with the far-reaching integration of higher education and research in Europe, the future of European universities is indirectly dependent on discussions at the European level (Maassen and Olsen 2007, Maassen and Musselin 2009, Amaral, Neave, Musselin and Maassen 2009; and historically, Corbett 2005): the gradual Europeanization of higher education, changing the image of higher education in Europe, is accompanied by the increasing Europeanization of the discourse on higher education (Dale 2007, Dale 2008a, and Dale 2009a). While the form, underlying concepts and working vocabulary of this discourse have no direct impact on individual institutions and individual academics embedded in their national systems (and have little influence on directions of further research, even in such academic sub-fields as higher education research), European-level discussions can have a huge impact on national educational policies emerging today in different EU countries (and far beyond the European Union – under the Bologna Process, see Zgaga 2007). They can also have a powerful impact, perhaps above all, on the modes of thinking about a whole range of wider issues related to the functioning of universities (changing funding, management, and governance modes, changing teaching structures, changing curricula and research priorities, links between universities and the industry, higher education credentials as public or private goods, priority teaching areas, common spending patterns on higher education according to their level, etc.) on the part of policymakers. European integration as a political and economic project embraces universities to an ever higher degree (Maassen and Olsen 2007).<sup>185</sup>

---

185 As a recent “European Commission Staff Working Document: Supporting Growth and Jobs: an Agenda for the Modernisation of Europe's Higher Education Systems” highlighted, “clear advantages in working together” in higher education in Europe

Secondly, the subsequent statements (mostly “communications” but also numerous accompanying documents, see especially EC 2003, EC 2005, EC 2006, and most recently, EC 2011a and EC 2011b) of the European Commission are important from a policy perspective because they fit perfectly the global and transnational modes of thinking about the future of universities and express similar ideas to those promoted by, for example, the OECD in relation to the most developed countries and the World Bank – in relation to developing countries (both are “agenda-setters” in global education policy, as Ougard 2010 terms the role; see in particular OECD’s role in Henry, Lingard, Rizvi and Taylor 2001, Jakobi and Martens 2010, Jakobi 2009, Martens 2007, Martens, Rusconi and Leuze 2007, and Martens and Weymann 2007). They are an important driving force behind the creation of a higher education discourse common to major global and European players in the policy of higher education reforms, often (as in less mature systems, in need of deeper structural changes) in conjunction with mechanisms of financial and technical assistance and expertise. This is especially the case in the context of the third reason, commonly expressed by these institutions and, to a relatively large extent, by the social sciences: the current paradigmatic shift to knowledge-based societies and knowledge-driven economies (Etzkowitz 2008, Etzkowitz, Webster and Healey 1998, and Etzkowitz and Leydesdorff 2001). Under the new paradigm, the role of universities in both society and economy is critical because they are recognized as tools of technological progress (through knowledge transfer and technology transfer) and driving forces of economic growth and development (through research, development and innovation). These three reasons (and their catalogue is much longer) – the role of the European integration, an emergent common global discourse on the future of

---

provide a mandate to the European Commission to be involved in its “modernization agenda” of European universities: “higher education plays an essential role in Europe’s collective well-being, creating new knowledge, transmitting it to students and fostering innovation. Within Europe, national and regional governments are responsible for education and training systems and individual higher education institutions have considerable, albeit variable, autonomy in organising their own activities. However, many challenges facing higher education are similar across the EU and there are clear advantages in working together. The role of the European Commission is thus to support the efforts of public authorities and institutions themselves to modernise Europe’s higher education systems to respond to today’s social and economic challenges” (EC 2011b).

universities, and new ideas of knowledge-based societies and knowledge-driven economies – provide the rationale to discuss briefly here the European Commission’s stance about the future of universities in Europe presented over the last ten years. Following this section, we shall return to “academic entrepreneurialism”, to see the links in conclusions to the chapter.

### *A profound change in relationships needed?*

The overall picture on reading recent EU official documents, publicly available reports, working papers and programmatic communications (the latter often translated in all official EU languages) is that the relationships between governments and universities are in need of a profound change. The two documents, “Mobilising the Brainpower of Europe: Enabling Universities to Make Their Full Contribution to the Lisbon Strategy” (EC 2005b) and “Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation” (EC 2006a) (and a number of accompanying documents, see EC 2006b, 2005b, 2005c, 2003a, 2003b, 2003c) make clear that radical transformations of university governance are expected by the European Commission to make possible their full contribution to the “more jobs/more growth” component of the Lisbon Strategy (and today, to the Europe 2020 strategy). Also a recent communication about “an agenda for the modernization of Europe’s higher education systems” indicates that the role of universities and broadly defined research (however, primarily research performed outside of universities and in the corporate sector, or research performed in partnerships between universities and the private sector) will increase dramatically (EC 2011a, EC 2011b, see Kwiek and Kurkiewicz 2012 for detailed academic discussions organized in the context of the 2011 Polish Presidency of the European Union) As the 2011 Communication shows the overall picture of European higher education, there are numerous “drawbacks” in it. The potential of universities remains “underexploited”, and despite the expansion, the European workforce is still undereducated in view of future needs of the economy; there are also too few researchers (especially in the corporate sector) and graduates do not seem to show the right mix of features sought by European employers:

the potential of European higher education institutions to fulfill their role in society and contribute to Europe's prosperity remains underexploited; Europe is

no longer setting the pace in the global race for knowledge and talent, while emerging economies are rapidly increasing their investment in higher education. While 35% of all jobs in the EU will require high-level qualifications by 2020, only 26% of the workforce currently has a higher education qualification. The EU still lags behind in the share of researchers in the total labour force: 6 per 100, compared to 9 in the US and 11 in Japan. The knowledge economy needs people with the right mix of skills: transversal competences, e-skills for the digital era, creativity and flexibility and a solid understanding of their chosen field (such as in Science, Technology, Engineering and Maths). But public and private employers, including in research intensive sectors, increasingly report mismatches and difficulties in finding the right people for their evolving needs. At the same time the potential of European higher education institutions to fulfill their role time, higher education institutions too often seek to compete in too many areas, while comparatively few have the capacity to excel across the board (EC 2011a: 2).

Universities are urged to consider fundamentally new arrangements (new “contracts”) with societies and governments are urged to consider establishing new partnerships with universities, with a shift from state control to accountability to society (EC 2005b: 9). As explained clearly in an EU issue-paper on university governance:

Universities operate in a fast changing context. ... Consequently, universities are becoming more complex and difficult to manage, internally and in relation with the state. Coordinated change is required both in systems regulation and in institutional governance in order to mobilise the enormous potential of knowledge and energy of European universities to adapt to new missions (EC 2006b: 1).

### *Key reform areas*

Following the launch of the Europe 2020 strategy, reforms are needed in several key areas, as a most recent communication shows:

In order to maximise the contribution of Europe's higher education systems to smart, sustainable and inclusive growth, reforms are needed in key areas: to increase the quantity of higher education graduates at all levels; to enhance the quality and relevance of human capital development in higher education; to create effective governance and funding mechanisms in support of excellence; and to strengthen the knowledge triangle between education, research and business. Moreover, the international mobility of students, researchers and staff, as well as the growing internationalisation of higher education, have a strong impact on quality and affect each of these key areas (EC 2011: 2)

In particular, changes in governance are needed, according to the Commission: according to new university/government contracts envisaged by the Commission, universities will be responsible and accountable for their programs, staff and resources, while the state will be responsible for the “strategic orientation” of the system as a whole – through a framework of general rules, policy objectives, funding mechanisms and incentives (EC 2006a: 5). Or as the policy is laid down *expressis verbis*, “less *ex ante* checks and greater *ex post* accountability of universities” is needed, with full autonomy as a pre-condition for universities (EC 2005b: 7). In general terms, institutional governance issues seem more crucial than any other factors discussed in connection with the current role of universities in knowledge-based economies, including their public funding:<sup>186</sup>

Institutional governance is of the utmost importance in a competitive and global context, because it is the main factor in reinforcing leadership and accountability in European Universities. It may be considered that other factors, namely public financing of universities and research activities, are *important* for the future of

---

186 It is difficult to agree with this position, especially in regard to Central and Eastern European EU member states; we tend to think that changes in public universities should be taking place simultaneously in the two key areas – namely in university management and governance and in university funding. The reforms in the region that change management and organization of universities and do not introduce fundamental changes in their funding modes (and, in most cases, their funding levels) are, we believe, doomed to failure. For many years, there have been public and academic disputes on this issue in higher education research in Europe: whether it is more fruitful to analyze university funding modes (e.g. Gareth Williams, starting from his volume for the OECD, OECD 1990, Williams 1992) or university governance structures (e.g. two classic volumes, Maurice Kogan, Mary Henkel and Steve Hanney, *Government and Research. Thirty Years of Evolution*, 2006, and *Transforming Higher Education. A Comparative Study*, 2006, and two recent works devoted to Kogan’s and Henkel’s ideas: *From Governance to Identity. A Festschrift to Mary Henkel*, Amaral, Bleiklie and Musselin 2008, and Paradeise, Reale, Bleiklie and Ferlie, *University Governance. Western European Comparative Perspectives*, 2009). European higher education research tends to focus more on university governance, and less on university funding. In American higher education research, the proportions between the two perspectives seem more balanced. At the same time, however, we have to agree with Michael Shattock (Shattock 2003a: ix) who argues in the opening lines of his *Managing Successful Universities* that “successful universities are successful primarily because of their teaching and research, not because of their management, but good management can over time provide the conditions in which teaching and research can flourish, just as, more usually, poor management can undermine teaching and research and precipitate institutional decline”.

European universities, but the choices made by universities concerning governing bodies and decision making processes are *vital* in their consolidation (EC 2005c: 38, emphasis mine).

In the above context, out of the three dimensions of university governance (governing bodies, executive bodies and external quality assurance bodies, see EC 2005c: 39), the present chapter focuses on the first two, and especially on the “strengthened steering core”, the first of five elements of the entrepreneurial university, the university’s “administrative backbone” stretching from central university bodies to its major faculties, departments, and institutes (in Burton Clark’s classic formulation in *Creating Entrepreneurial Universities*, the remaining four elements are an expanded developmental periphery, a diversified funding base, a stimulated academic heartland, and an integrated academic culture, Clark 1998a: 5, as we will discuss in detail in the next chapter; see also Clark 2004a and Clark 2004b). Here we will leave aside the pertinent issue of the future of national (and potentially – European-wide) quality assurance systems (see Dill and Beerkens 2010; or a new Europe-focused line of research in van Vught 2009b, van Vught and Ziegele 2012, and van Vught, Westerheijden, and Ziegele 2012).

A more general issue (reaching beyond university governance and management) raised frequently by the European Commission in the last few years is the following: are the transformations facing European universities radical – and if so, why? As a communication on “Investing Efficiently in Education and Training: an Imperative for Europe” argues, the challenge in education and training is likely to be bigger than envisaged in Lisbon in 2000: “simply maintaining the status quo or changing slowly would clearly be hugely inadequate in the face of such a massive challenge” (EC 2003d: 11). Quick actions are needed then.<sup>187</sup>

---

187 The Commission’s conviction about the need to carry out radical reforms of European universities remains largely an (ideological) conviction, as Peter Maassen and Johan P. Olsen commented briefly: “strong convictions, weak evidence” (Maassen and Olsen 2007: 13), or in other words – the universities in Europe are still “under-researched, over-debated”.

### *The role of universities in the Europe of Knowledge: to adapt and to adjust?*

How does the Commission see the role of universities? The European Union today needs “a healthy and flourishing university world”; it needs more “excellence” in its universities. At present, though, just as the situation of research is “worrying”, the situation of universities is “bad” because universities are not “globally competitive ... even though they produce high quality scientific publications” (EC 2003b: 2). European universities generally have less to offer than their main competitors, the communication goes on to argue. Following the criticism of the first communication about the common European research area regarding the mission of universities, the European Commission wanted to be as careful as possible about the role of universities, stating, *inter alia*, that universities still “hold the key to the knowledge economy and society” (EC 2003b: 5); universities are also “at the heart of the Europe of Knowledge” (EC 2003b: 4). At the same time, the stakes are very high and universities in the form in which they are functioning now are not acceptable in the Commission’s view. Its largely economic (and sometimes economistic) perspective is quite clear and the idea is conveyed in many passages of the communication in fairly strong formulations.

European universities have “enormous potential” but this potential “is not fully harnessed and put to work effectively to underpin Europe’s drive for more growth and more jobs”. Research is no longer isolated activity and emphasis in research is shifting from individual researchers to “teams and global networks” (EC 2006a: 3). Therefore universities need autonomy and accountability; and full institutional autonomy to society at large requires new internal governance systems, based on strategic priorities, professional management of human resources, investment and administrative procedures (EC 2006a: 5). From a larger perspective, as the title of another EU communication put it, the implementation of the Lisbon Strategy requires “fostering entrepreneurial mindsets through education and learning” (EC 2006c), from primary to secondary to higher education. With reference to the latter, the document promotes the commercialization of ideas and development of new technologies by students and researchers (EC 2006c: 9).

Consequently, universities face an imperative need to “adapt and adjust” to a series of profound changes Europe has been undergoing (EC 2003b: 6). They must rise to a number of challenges. They can only release

their potential by undergoing “the radical changes needed to make the European system a genuine world reference” (EC 2003b: 11). They have to increase and diversify their income in the face of the worsening underfunding. The great golden age of universities’ Ivory Tower ideal (not mentioned in the communication by name, though) is over:

[A]fter remaining a comparatively isolated universe for a long period, both in relation to society and to the rest of the world, with funding guaranteed and a status protected by respect for their autonomy, European universities have gone through the second half of the 20<sup>th</sup> century without really calling into question the role or the nature of what they should be contributing to society (EC 2003b: 22).

The fundamental question about European universities today is the following: “Can the European universities, *as they are and are organised now*, hope in the future to retain their place, in society and in the world?” (EC 2003b: 22, emphasis in original). It is a purely rhetorical question in the context of the whole communication on the “role of universities in the Europe of Knowledge”: the universities in Europe – as they are and as they are organized today – will *not* be able to retain their place. Restructuring is necessary, and a much wider idea of European social, economic and political integration applied to the higher education sector, expressed in the ideals of a common European higher education area, comes in handy. Let us recall the goal of the common research area in another formulation (from “Strategy for a Real Research Policy in Europe”) to see how far away it is from traditional views on the social role of the university: the university’s goal is the creation of an area for research where scientific resources are used “to create jobs and increase Europe’s competitiveness” (EC 2000a: 1). Universities today are increasingly responsible to their stakeholders, especially to students and their parents, employers, and (largely) the state; university training does not only affect those who benefit directly from it, the inefficient use of resources by public universities affects society at large. Thus the objective, the European Commission goes on to argue, is to “maximise the social return of the investment” or “to optimise the social return on the investment represented by the studies it [i.e. society] pays for” (EC 2003d: 14).

It comes as no surprise that what provides the perspective for looking at higher education is the “relevance of education/training to the Lisbon goal” rather than relevance to anything more general (EC 2003a: 6), which in other chapters of this book we have called culture (Anglo-Saxon) or *Bildung* (German), both in national, as well as individual, aspects. Making Europe a

leading knowledge economy would be possible “only if education and training functioned as factors of economic growth, research and innovation, competitiveness, sustainable employment and social inclusion and active citizenship” (EC 2003a: 6). Thus what is needed today is a “new investment paradigm” in education and training – what is going to change is not only the variables of the investment model but also the underlying parameters (EC 2003a: 9). The communication mentions briefly the Bologna Process (and the Bruges-Copenhagen process in the European integration of vocational training) as examples of moves in the right direction, but hastens to add that “the pace of change does not yet match the pace of globalization, and we risk falling behind our competitors if it is not increased” (EC 2003a: 10).

In terms of funding, generally, in several recent communications the issue of private investment in both research and higher education was raised. The increase in research and development investments in the EU (from the current 1.9 percent to 3 percent of GDP by 2010) was expected to come largely from private rather than public funds. The communication on “Investing Efficiently in Education and Training” reminds that

it is very important to realize that the largest share of this deficit stems from the low level of private investment in higher education and research and development in the EU compared with the USA. At the same time, private returns on investment in tertiary education remain high in most EU countries (EC 2003d: 13).

Consequently, if we take together the low *private* investment levels in higher education (low private share in the costs of studying) and the high *private* returns on university education (higher professional status combined with the higher salaries of graduates from European universities), the answer given is to add to public funding by “increasing and diversifying” investment in higher education (EC 2003d: 13). But as Henry and colleagues described the apparent paradox a decade ago, “though education is now deemed more important than ever for the competitive advantage of nations, the commitment and capacity of governments to fund it have weakened considerably” (Henry *et al.* 2001: 30-31).

The European Commission in its paper on “Mobilizing the Brainpower of Europe” enumerates several “bottlenecks” to university reforms: uniformity in programs and methods, insularity from the industry, over-regulation by the state, under-funding and dependency on state funding (EC 2005b: 3-4). The university modernization agenda includes the three aspects: attractiveness of European higher education systems, their funding,

and their governance and institutional management issues, and funding. The Commission continuously urges the EU member countries to encourage universities to seek additional private sources of funding (from companies – for research, and increasingly, from individuals through tuition – for teaching). And finally, in its communication on the modernization agenda of the university from 2006, “Delivering on the Modernisation Agenda for Universities: Education, Research, and Innovation”), the Commission described clearly recommended, future financial strategies for the European universities:

Universities should be funded more for what they do than for what they are, by focusing funding on relevant outputs rather than on inputs, and by adapting funding to the diversity of institutional profiles. Universities should take greater responsibility for their own long-term financial sustainability, particularly for research: this implies pro-active diversification of their research funding portfolios through collaboration with enterprises (including in the form of cross-border consortia), foundations and other private sources. Each country should therefore strike the right balance between core, competitive and outcome-based funding (underpinned by robust quality assurance) for higher education and university-based research (EC 2006a: 5)

As underlined in the CEGES report on private rates of return from higher education and on European models of its financing, “not only more resources are needed, the way of allocating public funds and the ability for obtaining private funds are also key aspects for the modernisation of European higher education” (CEGES 2007: 12). The Commission defines several key policy issues for both EU member states and for individual higher education institutions. They include the following:

Stimulate the development of entrepreneurial, creative and innovation skills in all disciplines and in all three cycles, and promote innovation in higher education through more interactive learning environments and strengthened knowledge transfer infrastructure. Strengthen the knowledge-transfer infrastructure of higher education institutions and enhance their capacity to engage in start-ups and spin-offs. Encourage partnership and cooperation with business as a core activity of higher education institutions, through reward structures, incentives for multidisciplinary and cross-organisational cooperation, and the reduction of regulatory and administrative barriers to partnerships between institutions and other public and private actors. Promote the systematic involvement of higher education institutions in the development of integrated local and regional development plans, and target regional support towards higher education-business cooperation particularly for the creation of regional hubs of excellence and specialisation (EC 2011a: 11).

In this chapter, we are focusing on governance and management issues in the context of entrepreneurial universities studied within the EUERЕК project. There seems to be a complementarity between what the Commission, largely intuitively and without much reference to empirical studies on European universities, highlights about them and what empirical case studies actually show as the current reality in a small segment of European entrepreneurially-focused institutions. In other words, what is highlighted in European-level policy documents, as discussed above, to a sometimes astonishingly high extent, is already occurring in (segments of) higher education systems across Europe, as discussed below.

### **5.3. Academic entrepreneurialism and risk management**

In the above context of the recent EU-level emphasis on the necessary radical changes in governance structures in European universities, let us focus on the meso-level of particular institutions: what changes can be observed there, and what trends the changes may be implicating. The question could be to what extent what the Commission highlights in a long sequence of its policy documents about European universities (widely promoted as their “modernization agenda”, Kwiek and Kurkiewicz 2012, Maassen 2012, Zgaga 2012) is supported by empirical research on universities across the continent? To what extent the “bottlenecks” of university reforms the Commission specifies are already reformed, and to what extent ongoing changes take directions described in a relatively intuitive manner in the documents promoted by the Commission? As one of the key emergent dimensions of universities in terms of the Commission is their entrepreneurship (without specific definitions, and in a rather common-sense meaning of the term), it is interesting to analyze here academic research on entrepreneurialism conducted over the past few years in Europe (and over a decade in the U.S).

#### *Academic entrepreneurialism and revenue generation*

The context for further analysis is “academic entrepreneurialism” viewed by Michael Shattock (2009b: 4) as:

Entrepreneurialism in a university setting is not simply about generating resources – although it is an important element – it is also about generating activities, which may have to be funded in innovative ways either in response to anticipated and / or particular market needs or driven by the energy and imagination of individualism, which cumulatively establish a distinctive institutional profile. Entrepreneurialism is a reflection both of institutional adaptiveness to a changing environment and of the capacity of universities to produce innovation through research and new ideas.

Academic entrepreneurialism thus but concerns the generation of activities that define and establish a clear institutional profile (although these actions may “need to be financed in an innovative way”, and that profile can be born in response to the “identifiable and specific market needs”, Shattock and Temple 2006: 1-2).<sup>188</sup> The enterprising university, as proposed by Gareth Williams (2003), is a useful generic name describing a multitude of changes occurring in the mission, management and funding that a number of European universities have been undergoing for twenty years (Williams and Kitaev 2005: 126). Williams argues for the following relationships between entrepreneurialism (including: academic entrepreneurialism), innovation, risk and financial dimension of functioning of the institution:

---

188 Entrepreneurship was defined in the OECD’s *Fostering Entrepreneurship: The OECD Jobs Strategy* in a very similar way: through the concepts of innovation, adaptability and risk (OECD 1998a: 11). “Entrepreneurs are agents of change and growth in a market economy and they can act to accelerate the generation, dissemination and application of innovative ideas. ... Entrepreneurs not only seek out and identify potentially profitable economic opportunities but are also willing to take risks to see if their hunches are right. While not all entrepreneurs succeed, a country with a lot of entrepreneurial activity is likely to be constantly generating new or improved products and services. It is also likely to be highly adaptable, so that opportunities are seized upon as soon as they emerge”. In many respects, this description can be almost directly applied to “entrepreneurial universities” analyzed in this chapter. It is worthwhile to confront emerging theories of academic entrepreneurialism with economic and sociological research on entrepreneurship treated as a field of research (see, for example, such volumes as Lundström and Stevenson, *Entrepreneurship Policy: Theory and Practice*, 2005, *Handbook of Entrepreneurship Research*, Alvarez, Agarwal and Sorenson 2005, Kirby’s *Entrepreneurship*, 2003, Lowe and Marriott’s *Enterprise: Entrepreneurship and Innovation. Concepts, Contexts and Commercialization*, 2006, and numerous works over the years by David Audretsch and Zoltan Acs, for instance their *Handbook of Entrepreneurship Research. An Interdisciplinary Survey and Introduction*, 2010. See also a line of research developed by Scott Shane within his “general theory of entrepreneurship” (Shane 2004, Shane 2005a, and Shane 2005b).

Entrepreneurialism is fundamentally about innovation and risk taking in the anticipation of subsequent benefits. Neither the innovations and risks nor the expected benefits need necessarily be financial, but it is rare for them to have no economic dimension. Finance is a key indicator and an important driver of entrepreneurial activity. The main link between entrepreneurial activity in universities and the knowledge economy is Adam Smith's 'invisible hand'. Universities are institutions that advance their reputations and their wealth by creating and disseminating knowledge. If the innovations that they make and the risks that they take accelerate useful knowledge creation and its transfer into social and economic practice, their entrepreneurialism contributes to a knowledge-based society (Williams 2009: 9; "risk-taking" became a crucial element of academic entrepreneurialism for the first time in Williams 2004).

When can academic entrepreneurialism emerge in educational institutions, what favors its emergence, formation, and stabilization, and institutionalization, and what, in turn, makes it institutionally hardly conceivable? Empirical research on European universities indicates that, in general, where funding is provided at an adequate level, academic entrepreneurialism occurs rarely: two parallel factors are conducive to it: financial shortfalls (as referred to the whole public sector services and the welfare state by Paul Pierson throughout the preceding two chapters – "permanent austerity") and financial opportunities that institutions and individuals can benefit from on a competitive basis; slight underfunding of universities but not large underfunding from basic public sources (as Williams formulated the idea: funding should be tight but not inadequate; adequate but not too generous, etc.).<sup>189</sup>

---

189 As elegantly summarized by Williams (2008: 9), "any organization with an assured income at a level that is adequate in relations to its needs and aspirations has little motivation to undertake risky innovations. In addition, if a university is not able to retain the external income it generates, there is little economic incentive to seek to supplement its core allocations from government by selling academic services. ... In contrast, when the assured income is inadequate to meet the goals of an organization and the university is able to retain any supplementary income it generates, incentives are created to seek new sources of revenue and this often means developing new ideas, and taking risk to transfer knowledge into productive activity. Financial stringency and financial opportunities have been the main drivers of entrepreneurial activity in the case study institutions". But at the same time, the engagement of a university in entrepreneurial activities is not possible in conditions of its severe underfunding, and it is best exemplified by universities from the European postcommunist transition countries. Similar conclusions on subsidizing technology transfer to those reached in the EUERЕК project were also reached in another European project, GOODUEP

### *Collegial, bureaucratic, and entrepreneurial management styles in higher education*

Let us confront European Commission's views about the necessary changes in governance and management structures in universities briefly analyzed in the preceding section of this chapter with recent ideas about the entrepreneurial university. In general terms, three basic university management structures and styles can be identified: collegial, bureaucratic and entrepreneurial (Williams 2004: 84-92, or collegial, bureaucratic, and market forms of resource allocation in universities, Williams 1992: 135-140). Collegial management means that the academic staff or their representatives take all important decisions through a process of consensual decision making – until a broad agreement about the way forward is reached. The processes of consultation are inevitably time-consuming, and decision-making process is slow. In hard times, though, it is almost impossible to reach agreement about where cuts should be made – except for a situation of a “misery for all” (see Kwiek 2012a on a “misery for all” in Polish higher education). Bureaucratic management, in turn, means a form of organization in which everyone in a management hierarchy has freedom to act within prescribed limits – decisions are taken quickly but a small number of individuals at the apex make final decisions and there is a we/they feeling of alienation in an institution. Entrepreneurial forms of management are most likely to be found when the institution needs to generate income or to enhance its reputation in a variety of different ways – in order to prosper or to survive. As a UK EUERЕК national report highlights,

Financial stringency, competition, and market responses require quick decisions and flexible implementation of them. Traditional consensual and collegial management structures were no longer considered to be effective. In a competitive environment, management needs to be geared towards performance: universities have had to streamline their decision-making processes, be more alert to income earning possibilities and be prepared to take some risks. ... The diversification of funding sources led to strengthening of financial management. Transparent models of internal resource allocation were introduced that made it clear which departments were generating financial surpluses for the university and which deficits (EUERЕК national reports: the UK).

---

(*Good Practices in University-Enterprises Partnerships*, 2007-2009) in which, among others, selected university-enterprises partnerships in Europe were studied in detail; see Chapter 6 for the analysis of some findings.

Universities or departments which are able to keep any income they earn are most likely to behave entrepreneurially. According to Williams, “the key to entrepreneurial management styles is an understanding and management of risk. Managers who take risks and are successful are rewarded. Failure and passivity are penalized” (Williams 2004: 86-87).

The role of strong core administrators – accompanied by strong strategic committees – is emphasized in many EUEREK (and other) case studies of European universities. Managing structures and decision-making processes at a small private university (University of Buckingham in the UK) are substantially different from those at bigger institutions (such as Warwick and Nottingham Universities in the UK or Twente University in the Netherlands). For example, each of the three schools at Buckingham is treated as three business divisions, and each division is responsible for maximizing its financial return (derived largely from teaching through fees). The decision process at Buckingham is quick and comprises only five people: as the Director of Finance, quoted in the case study, stresses:

Buckingham has three academic Schools, and we look at them as three business divisions. Each is responsible for making the maximum financial return and growing their business. The decision-making process at the University is quick and comprises five people: the VC [vice-chancellor], his deputy and the three Deans. We meet every week for two to three hours, so we do make good progress and good academic decisions in that sense. We get on very well. I don't think we get anywhere near as making good decisions on the administrative and operational side. I guess we need a chief operating officer who can assume the managerial aspect. But we have less constraints than you can expect in a larger organization (EUEREK case studies: University of Buckingham, the UK).<sup>190</sup>

### *The crucial role of risk-taking*

Academic entrepreneurialism involves risk-taking (Shattock 2003, Williams 2007b: 19).<sup>191</sup> In most EUEREK case studies, institutions have to deal with a high level of risks on a daily basis; in private institutions, *the* major risk

---

190 References to the case studies throughout this and the next chapter will have the following format: EUEREK case studies: the name of the institution, page number).

191 Risk-taking in general is becoming one of key terms to describe our societies: Anthony Giddens (1999: 35) argues that “active risk-taking is a core element of a dynamic economy and an innovative society. Living in a global age means coping with a diversity of new situations of risk”. We live, after all, in a global “risk society” (Beck 1999).

studied is a financial one, related to student number figures (and student fees). But as Shattock explains, in universities “risks may be academic or reputational as well as financial” (Shattock 2005: 19). The Polish case study of a medium-sized, vocationally-oriented private institution (WSHIG – Academy of Hotel Management in Poznań) explains:

WSHIG has been operating under constant risk in recent years. The major risk has been financial – will the income from student fees cover the expenditures, especially including debt installments to the banks. WSHIG has been investing heavily in its infrastructure. As other private institutions, only from its own sources, with no state subsidies. WSHIG’s rector was doing wonders to be able to pay back the bank loans in time (also using his private assets). The second risk has been student enrolments (EUEREK case studies: WSHIG, Poland, 15-16).

At Buckingham, another private institution from the twenty seven studied, in a similar vein, what is meant by risk is exactly the financial risk:

The most important risk to the University is financial. With a small research portfolio, academic risk is restricted to the student take up of degree programmes. In that sense the University is operating on a knife edge of risk (EUEREK case studies: University of Buckingham, the UK, 10).

Competition leads to financial uncertainties experienced not only by private institutions, as in the above cases. The volatility of research and student markets influences other institutions as well (public and semi-public). As an academic from LSHTM put it,

The School is very much influenced by external factors (e.g. more than half of our income comes from research grants and contracts which are short-term) and short-term fluctuations in policies. They transform your fortunes and suddenly make an area of research attractive. As the school is very research-active, it is also very dependent on research funding. The student has a fast student turnover ... If suddenly students don’t turn up, the School’s financial stability is threatened. We are very dependent on student fee income and on attracting overseas full-fee paying students, and sometimes a student influx from a certain corner of the world will dry up and you don’t know quite why (EUEREK case studies: LSHTM, the UK, 18).

There are also other forms of risks involved in the case of the EUEREK institutions: the competition in the areas of studies between public and private institutions (most often, public institutions suddenly opening the same study programs or modifying the existing ones – and running them

without charging student fees); changing state regulations, and academic prestige (or reputation).<sup>192</sup> In the Polish case, the risks included:

state regulations concerning employment relations in the private sector: who and on what terms can be employed as the core senior faculty. The solution found by the whole private sector in general – almost retired and retired professors – has always been in danger; but it has worked perfectly in all the years of operation of WSHIG. ... Another risk has been related to prestige and reputation (EUEREK case studies: WSHIG, Poland, 15).

The role of risk management in entrepreneurial universities is crucial: what is stressed is monitoring performance at individual levels by heads of departments (and at the same time members of strategic management team); risk management focuses also on outside grants. Structured risk management, with respect to both finances and reputation is used (see EUEREK case studies: LSHTM, the UK, 23).

### *Risk, uncertainty, and the road from institutions to organizations*

The risk is closely linked to uncertainty, experienced by all European educational systems in the last decade (and often two decades): for example, the transition from a relatively secure public sector institution to an increasingly autonomous institution of a foundation type, with greater financial autonomy, also means new financial risks and financial responsibilities, and indicates the structural growth of uncertainty.

---

192 As shown in detail in a typology used for an American context proposed in *In Pursuit of Prestige* (Brewer, Gates, and Goldman in their Rand study, 2002: 133-134), higher education institutions can be characterized as “prestigious”, “prestige-seeking”, and “reputation-based”. “Both reputation and prestige are positive assets for providers of higher education. Some institutions choose to invest in prestige, while others choose not to invest in prestige. Some institutions, especially those that are not pursuing prestige, invest resources in their reputations for customer service. ... Prestige seeking is a strategic choice. While many schools are pursuing prestige, other institutions have opted out of this game and achieved success by identifying and efficiently meeting the needs of students”. In a European context, except for some systems (e.g. French *grandes écoles*) and some study areas (e.g. management in business schools), institutional prestige derives from a national and/or international research status of an institution (repeatedly confirmed by the league tables). Consequently, almost all private institutions, especially in Central Europe, are either reputation-based or, rarely, prestige-seeking (or what Daniel C. Levy termed “semi-elite”, 2010) in this typology.

Transformations in viewing the university (from “institutions” to “organizations”) referred to in the organizational studies as “turning the university into an organizational actor” (Krücken and Meier 2006) or “turning public services into organizations” (Brunsson 2009, Brunsson and Sahlin-Andersson 2000, Brunsson 2009, Brunsson 2006a) also substantially increase the level of structural uncertainty among the academic profession. At the same time, as Williams and Kitaev argue (2005: 126), “uncertainty creates the climate that promotes entrepreneurship and uncertainty and the risk that accompanies it have increased nearly everywhere in the past decade”. The only real common denominator of higher education in Europe is perhaps its staying in limbo – there is no education system in Europe where in the last five or ten years a major change would not have taken place (in the governance, funding, quality assurance systems etc., see Mora *et al.* 2009: 76).<sup>193</sup>

#### **5.4. A clash of academic and managerial values?**

In the UK, changes in funding in several universities seem to point the direction of steps not only already taken by British institutions but also those (at least considered) to be taken in major Continental higher education systems. As Shattock noted, “the UK public universities were already operating in a marketised system and generating substantial non-core income in 1994, while they have mostly grown their non-core income considerably, the growth has done no more to keep pace with the growth of core income. All the other countries, starting later, have begun to move rapidly in the direction the UK followed before 1994” (Shattock 2009b: 5-6). The changes in funding, governance and management go often hand in hand, and the UK is a good example. Nottingham’s management structure is similar to that of Warwick: a strong management board is accompanied by strategic committees. Committees deal with specific issues, day to day

---

193 Or, as Williams (2004: 81-82) described a few years ago this transition in relation to the UK but what can be successfully applied to most European educational systems, “as with many other public services the state switched its support away from the suppliers of higher education and towards the consumers. ... Henceforward the universities were seen not as trusted institutions to be subsidized, but as providers of academic services, which the government bought off them according to its specifications, on behalf of students”.

management operations are done by the management board; the role of the university council is reduced but consultations are performed through committees. There is a balance between bottom-up initiatives – and top-down strategic guidance. The role of strategic committees at Nottingham University is explained below:

In 1995 a new streamlined committee and management structure was introduced. Day to day management issues at the University are the responsibility of the Management Board, which meets weekly. This group also initiates strategy. It currently comprises the Vice-Chancellor, the six Pro-Vice Chancellors, the Chief Financial Officer and the Registrar. ... The Management Board is a sub-committee of the Strategy and Planning Committee, a committee of the University Council, which is legally responsible for all the strategic decisions of the University (EUEREK case studies: University of Nottingham, the UK, 3).

Management structures at Manchester University (outside of the EUEREK case study family) are more traditional but seem equally effective, especially to the strong position of vice-chancellor and his management team. Its governance structures include the Board of Governors, to which the president and the vice-chancellor (one person) reports; the Senate is the principal academic authority and its responsibilities are limited to academic issues – it is chaired by the president and the vice-chancellor; there is also General Assembly (a rare body at entrepreneurial universities studied), with limited powers. Finally, the registrar and the secretary (one person) serves as a secretary to the board, the senate, and the general assembly – and at the same time serves as the head of administration of the university, responsible to the president and vice-chancellor for providing administrative support. Most importantly, the president and vice-chancellor is the CEO of the university and s/he is responsible for the establishment and the composition of his/her management team. In more general terms, although the Senate and the general Assembly do exist, their powers are limited and power is located in the university's core management team headed by a vice-chancellor. Interestingly, heads of schools (deans of faculties) are members of the management team as vice-presidents – which ensures that there are few hierarchical layers between academic activities in schools (departments) and senior management of the university (see Arnold *et al.* 2006: 74-75).

In general terms, (Clark's) "strengthened steering core" means the operationalized reconciliation of "new managerial values" and "older academic values". If these values are not reconciled, institutions feel tensions which require top management's (sometimes considerable)

attention. The idea (operationalized e.g. at Manchester University) that heads of schools and deans are members of a senior management team at the central level brings academic units and their representatives closer to the central management. The tensions can be smaller as it is the job of deans and heads of schools to keep explaining actions taken at the senior administrative level (in Polish public universities, deans of faculties – but not heads of departments, lower-level academic units – form often a body of all deans at a central level, cooperating closely on a weekly basis with the rectorate, university's chief management body). As in the example below, from Nottingham, it is not easy to reconcile academic and managerial values:

However, managing university staff is a notoriously difficult exercise, especially when at least some aspects of marketing and entrepreneurial activities seem to conflict with deeply held academic values. Effective power in a university is intrinsically and inevitably deeply embedded in academic staff of the institution, because only they have the expertise to make it work. The pro-vice-chancellors at Nottingham devote a considerable amount of time in proselytizing within the institution (EUEREK case studies: The University of Nottingham, the UK, 8-9).

## **5.5. Academic entrepreneurialism and collegiality**

### *Tensions: the center and the base academic units*

The available case studies of entrepreneurial universities in Europe show three methods to minimize tensions between the center and base academic units (the third being used by both the first and the second one as well). The first method is pursuing a flat management structure, eliminating intermediate units (faculties), to minimize barriers between the center and the base units (departments) – the examples are the University of Warwick, the University of Joensuu (Finland) or the vast majority of Polish private institutions (the case study of WSHIG in Poznań provides a good example: there is the rector and his small team of collaborators, strategic management team – and departments, without the intermediary level of faculties). There are no deans there; departments and research centers have direct contact with the center which consists of the vice-chancellor's office and a number of central interlocked (through some overlapping participation) committees – a perfect example of a successful flat management structure in Europe is Warwick. The second method to minimize tensions is keeping three-level

arrangements, increasing authority and responsibility of existing multiple levels (the center – faculties – departments) – the examples are Twente University in Enschede (the Netherlands) and the Chalmers University of Technology (Sweden). There is a traditional basic structure there – a small central office headed by the rector, president or vice-chancellor; faculties headed by deans; and departments chaired by heads. The difference with traditional collegial structures is stronger personal authority in line positions and, at the same time, greater collegial authority in academic committees. This is thus the combination of stronger individual authority of rectors, deans and heads, combined with stronger collegial authority of committees and higher levels of professionalization of the university central administration. The new bodies comprising the two increased authorities are “university management groups” or “university management teams”. There are dangers that too much power given to the departments may lead to the gradual disintegration of the university as a whole (the university as increasingly merely an aggregate of entrepreneurial units and entrepreneurial individual academics, as Frans van Vught, a former Twente University rector, stresses).<sup>194</sup> And the third method to minimize tensions is the increasing professionalization of administration all along the line, and particularly at the center, as shown in entrepreneurial universities in Europe which have flat structures as well as those which keep the traditional three-level arrangements.

The professionalization of administration is crucial especially for the financial aspects of functioning of the university. Multiple non-academic tasks are increasingly being performed by well-paid experts and specialists, rather than amateurs recruited from former or current academics (which leads to the development of the “diversifying workforce” and “changing academic and professional identities” (Gordon and Whitchurch 2010, Whitchurch 2010, as well as Henkel 2000, Amaral, Bleiklie and Musselin 2008, and Barnett 2008) in higher education: the units include especially

---

194 The institutional cases of budgetary decentralization are extremely interesting in this context. A good example among European entrepreneurial universities is Universiteit Twente (UT) in the Netherlands – each of its units is fully responsible for its own funding and covers the costs of all services provided by the university as a whole, from its own budget. In addition, UT has the highest proportion of researchers funded by external research grants in the Netherlands – two-thirds in 2007. UT appears as a case study institution in many authors, starting from Burton Clark in *Creating Entrepreneurial Universities* (Clark 1998a).

finances, student affairs, alumni and fundraising affairs. More and more previously unknown administrative posts are being created: in the Polish case, units for EU structural funds, units for EU research programs, units for technology transfer, and university foundations to promote the university brand etc., are being increased in size or newly created (as the EUEEK Poznań University case study shows).

### *Academic autonomy and academic collegiality*

Most case studies available, both from Europe and the USA, indicate that the issue of academic autonomy and academic collegiality in managing entrepreneurial universities cannot be forgotten in most successful cases (Clark 1998a, Clark 2004a). There are many cases of excessive centralization and examples of getting rid of (sometimes already remnants of) academic collegiality. The best examples of this trend are given in Australia and New Zealand (for instance, the Monash panoramic case study by Simon Marginson Marginson 2000; *The Enterprise University* case studies reported by Marginson and Considine 2000; case studies reported by Janice Newson and Jan Currie in *Globalization and the University*, Newson and Currie 1998; Currie 2003, and Currie, DeAngelis, de Boer, Huisman and Lacotte 2003). Certainly, the movement in general, in the overwhelming majority of public and private sector institutions, not merely entrepreneurial ones, is away from powerful senates and general assemblies and towards strengthened rector's/vice-chancellor's offices at the central level. In many countries (among transition countries, especially several Western Balkan countries should be mentioned: Bosnia and Herzegovina, Macedonia, and Kosovo – the single most visible exception in this region being Slovenia), there is a substantial – and paralyzing, dangerous to the healthy existence of academic institutions – devolution of authority down to faculties; the university in this model spread across the region is a loose federation of (almost fully) autonomous faculties. Consequently, comprehensive reforms are not possible in these countries as long as new university structures are not introduced in new laws on higher education. The idea of the “integrated university” – a strong center and weaker faculties and departments – has been promoted by international organizations in the Western Balkans for several years now, with very limited success, as new laws either have not been adopted or have not been successfully implemented.

The governance structures at Twente University, an example of an entrepreneurial *and* decentralized university, are “flat”: “Within this new organisational structure, a decision making process was introduced in which the deans and the scientific directors form the university management team, together with the Executive Board. While the Executive Board is ultimately responsible, the UMT [university management team] sets out the strategic direction of the university. The result of all the changes is a ‘flat’ organization, which can respond directly and collectively to developments in the social-cultural, political or economic environment of the university” (Arnold et al 2006: 38-39).

In small private institutions, both governance and management structures and procedures may be simplified to the extreme. These simplified structures are often reported in new private institutions in European transition countries which have sometimes appeared out of nowhere (Levy 2002a, Fried, Glass and Baumgartl 2007, Dobbins 2011, Kwiek 2011b, Kwiek 2010a, and Kwiek 2011b, Slantcheva and Levy 2007), with no international investments or public subsidies involved, and which in their first years of operation had been constantly in danger of a financial collapse (WSHIG in Poznań being a perfect example). The culture of financial survival, as reported in Spain, Russia, Moldova, and Poland, has been very strong in these institutions. The consequences for management styles and managerial practices are significant: decisions are taken by between one and five people, there is almost no spirit of collegiality and all major (and sometimes even most minor) decisions are actually taken by rectors/owners/founders of these institutions (often the same persons). These simplified management structures seem to be possible only in relatively small institutions, with no major research ambitions and those which are relatively non-competitive work places for the staff. There are virtually no research funds available to these institutions (either from private and public sources), and consequently most academic decisions are relatively non-controversial and teaching-related decisions. As in a Polish case of WSHIG:

The Academy has a very stable organizational and management structure: the founder and the owner (Professor Roman Dawid Tauber) has been its rector in the whole period. All key decisions concerning WSHIG are taken by the rector. There is no Senate as the Academy is too small – but key academic decisions are confirmed by WSHIG’s Scientific Board, meeting 3-4 times a year. ... The management team is small and very effective; it comprises rector and the three vice-rectors. All senior administrative staff, including vice-rectors, have been working for WSHIG for a decade or more. The key for the success of WSHIG is

the loyalty of its staff, both administrative and academic. ... In a small-size academic institution like WSHIG it is still possible for its rector to make all major decisions; and to make many minor decisions as well (EUEREK case studies: WSHIG, Poland, 15).

The administration of entrepreneurial institutions studied managed to fuse new managerial values with traditional academic values; in no successful cases reported, the attempts to eradicate the traditional academic values and to replace them with managerial ones succeeded (a different story are “corporate universities”, private for-profit institutions, active largely in very selected areas of studies and research, including computing, accounting, business law etc.<sup>195</sup>, see Breneman, Pusser and Turner 2006, Breneman 2006, Bleak 2005, and Kinser and Levy 2006); somehow surprisingly, this sector has been fully neglected in major case studies of entrepreneurial universities available on a European scale; they were studied separately, e.g. within the ongoing PROPHE “Program on Research of Private Higher Education” led by Daniel C. Levy at State University of New York, Albany). The reason seems to be that it is the traditional discipline-related departments where both major teaching and research is still being done. It is also expected to be so in the future.

---

195 A comparative study between the evolution of Polish private higher education (formally *non-profit*) institutions and the global evolution of *for-profit* institutions, including such well-known ones as the University of Phoenix, deVry Inc. or Strayer Education Inc. in the USA, would be enlightening. The first one is a global leader in this area, an icon of the *for-profit* university, and it has about 300,000 students, recruited mostly from working thirty-year-olds with incomes above average. It seems that the majority of medium-sized private universities in Poland, especially private universities with no academic and research ambitions, adopt the attitudes represented in the Anglo-Saxon world by for-profit organizations. Let us compare the summary of the text by David W. Breneman (2006: 83-84) on the University of Phoenix (UOP) and our knowledge on the private sector in Poland (Kwiek 2010a, Kwiek 2011b, Kwiek 2012a): “UOP has been financially successful because it focuses on a narrow range of career-oriented programs that can be provided at low cost through the use of part-time practitioner faculty following a standardized curriculum that yields substantial economies of scale. UOP avoids many of the costs that traditional colleges and universities incur for residential programs and research activities, and they concentrate on a relatively high-income population that does not require substantial student aid. Students are treated as customers, and all UOP programs are focused on maximum student convenience and rapid degree completion”. The description fits the Polish private sector surprisingly well which indicates a growing difficulty with current legal (as opposed to practical) institutional typologies.

### *Successful agents of change*

What do the agents of change/agents of transformation do – those leaders located in the strengthened managerial core of entrepreneurial universities?<sup>196</sup> They (Clark 1998a: 137-138) seek other patrons in funding, work to diversify income and enlarge the pool of discretionary money available to an institution; seek out new infrastructure units (academic and administrative alike) that reach across old university boundaries, and reach the outside world of firms and companies. They are necessary for the task of cross-subsidizing various fields and different degree levels, taxing richer programs and aiding those less fortunate (top-slicing the profits). So they seek to subsidize new activities and try to enhance old valuable programs. The steering core is responsible for keeping the right balance between rich and poor departments. Another example of successful management by a senior management group comes from Strathclyde University (called there a “university management group”). Its composition and modes of operation are described as follows: “The ‘strengthened steering core’ is essentially demonstrated through the operations of the University Management Group (UMG), as the key group through which all major decisions can be quickly processed. Like most major UK universities, Strathclyde has a Senate, which is responsible for all academic matters within the university and a Court or Governing Body, which is responsible for the management of the university’s resources. The UMG ... is the key management body that undertakes the formulation of major policy and oversees the operational management of the university on behalf of the Court and Senate. The UMG is chaired by the Principal and has a statutory membership of 10 comprising, in addition to the Principal, the Vice-Principal, the Pro-Vice-Principal, a Deputy Principal, the Secretary to the University and the five Deans of Faculty. ... The Group meets fortnightly and works to a tight, fully prepared agenda. It has its own Secretariat to prepare the business for its discussion. Decisions taken by UMG are reported to Senate and Court on a regular basis” (Sir John Arbuthnott, quoted in Clark 2004a: 25).

---

196 “Change agents” appear in a classic formulation in Lippitt, Watson, and Westley’s study on *The Dynamics of Planned Change. A Comparative Study of Principles and Techniques*, along with such useful concepts as “client system”, “change forces”, “resistance forces”, “phases of change” and “methods of change” (1958: 275-298).

## 5.6. Academic entrepreneurialism, centralization, and decentralization

### *Top-slicing procedures: revenues and prestige*

It is important to highlight the role of non-monetary dimensions of entrepreneurialism, such as the prestige (or reputation) of an institution (see Williams, Blackstone and Metcalf 1974: 235-242 on reward structures in the “academic labor market” and Lewis and Becker 1974 for early formulations in higher education research).<sup>197</sup> An entrepreneurial university will, as Williams (2004: 86-87) puts it, “reward departments and individual members of staff according to their success in bringing resources or reputation into the institution. Activities that are unable to make a net surplus, in either income or institutional reputation, are discontinued”. Again in general terms, as the case studies of entrepreneurial universities show (also the Russian cases discussed in Shattock’s volume on entrepreneurialism of Russian universities, Shattock 2004a), there is always some degree of collegiality and some bureaucracy – but the shift in managerial styles reported in Europe in the last 20 years is away both from collegiality and from bureaucracy, and towards entrepreneurial styles of management (Maassen and Olsen 2007 and Paradeise, Reale, Bleiklie, and Ferle 2009, and for the European special cases of Oxford and Cambridge, see Tapper and Palfreyman 2000: 171-206, Tapper and Salter 1992: 225-246, and Halsey 1992). In practice, the shift means e.g. that the vice-chancellor has acquired increased managerial powers; that he is now supported by a small but very powerful strategic management group that determines the strategic directions and ensures links between the vice-chancellor’s office and the university staff. Universities introduce clear Resource Allocation Models (RAMs), supervised by these teams, which allocate the income of the university

---

197 Institutions are able to attract and keep people for a variety of reasons, not only mercantile ones (the same arguments hold for technology transfer activities in universities, see a study by Lam (2011) on three types of motivations of academic scientists to engage in research commercialization, which she terms “gold”, “ribbon”, and “puzzle”; see also the original formulation in Stephan and Levin 1992). As Florida and Cohen (1999: 606) noted along similar lines, “smart people do not necessarily respond to monetary incentives alone; they want to be around other smart people. In this regards, talent tends to attract talent... A key role of the university in the knowledge economy then is as a collector of talent – a growth pole which attracts eminent scientist and engineers who attract graduate students, who in turn create spin-off companies, and eventually encourage other companies to locate nearby”.

among the university units and determine what percentage of the commercial income shall be treated as indirect costs and what are the “top-slicing” procedures. Usually, a formula basis is used – but its exact components are constantly under review (and under inter-faculty discussion).

Financial formulas based on top-slicing revenues from the richest university units always raise institutional controversies – and these units almost always feel mistreated in some way. However, the problem of the level of institutional overheads is a key problem for the integration of an institution as a whole: the lowest overheads are reported in most disintegrated institutions (for example in Europe, it is the case in most post-Yugoslav systems in which the major thrust of internationally-supported reform programs is to achieve a higher degree of institutional integration). In disintegrated institutions, the authority of rectors, that is, of the central management level, is minimal because, among other things, departments are almost completely financially independent from the university as a whole, and the financial means that the rector has at his disposal, if he wanted to merge basic functions of the university at a level higher than the level of individual independent faculties – are minimal. (One could say, simplifying to the extreme, that just as the real scope of the state power is based on tax revenues to the budget, so the scope of the real power of a rector and his management team is based on the overhead-based revenues and broadly: on all financial resources at his or her disposal. A rector is deprived of means to integrate an institution as a whole in those systems which allow faculties to be separate legal entities).<sup>198</sup>

Resource allocation models used in entrepreneurial universities studied have strategic implications for the nature of an institution: institutions become more centralized or more decentralized. Through the allocation of

---

198 To compare taxes and institutional overheads: the citizen has no right to expect special treatment in exchange for paying taxes. Taxes differ from fees, reminds Philipp Genschel (2005: 53): taxes are “compulsory and unrequited: taxpayers are legally obliged to pay taxes and cannot expect to receive any specific benefits in return, such as, for example, a piece of public property or a particular health care treatment in a public hospital. Taxes are not fees. While taxes are presumably collected for the sake of the public good, the liability of the individual taxpayer is independent of the personal utility she derives from that good”. The state is sovereign because it has tax revenues, and the level of revenues determines what the state can do and what it cannot do, what services it is able to provide to citizens and what services it is not able to provide, etc. In this sense, “the revenue of the state is the state”. A strong university rector or president – and his or her team – need financial resources at their disposal (“taxes”) to be able to cross-subsidize less financially successful (but still useful to the institution as a whole) academic units and their programs.

resources, some strategic decisions are followed to the detriment of others (and some priorities in the selection of study and research areas are followed rather than others), as Jarzabkowski (2002: 5) stresses. Hard choices between faculties, departments, centers and programs have to be made, and they are often being made using allocation models. The example of strategic decisions is the route followed by Warwick University between 1992 and 1998: “Warwick has consistently pursued goal-oriented actions related to research excellence, income-generation, capital expansion and growth of the Science Faculty” (Jarzabkowski 2002: 12). Of course, it was a strategic decision to develop science at the cost of other departments and academic disciplines (strategically selected).

### *Centralized, decentralized, overpersonalized*

Effective entrepreneurial universities are neither extremely centralized nor decentralized; they are administratively strong at the top, the middle, and the bottom. The decentralized entrepreneurial university is certainly Warwick University; the centralized one, on the other hand, is Twente University in the Netherlands (both analyzed in Clark’s and others’ case studies in the last decade and a half). They introduce professionalized clusters of change-oriented administrators at all levels – development officers, technology-transfer experts, finance officials, sophisticated staff managers – to help raise income and establish better internal cost control. Entrepreneurial universities develop a “new bureaucracy of change” as a key component of their (entrepreneurial) character, far different from old bureaucracies. As Clark explains (2003: 108):

Diversifying sources of income requires new tools of implementation in the form of new administrative offices staffed by specialised experts. Every new connection to an income source requires an office, or new part of one, to tend to the focused flow of business. Thus, they multiply: the ever busy grants and contracts office; the office of industrial relations; the alumni segment of the multi-sided development office; the technology transfer office; the continuing education office; the capital projects office – and more, all make sense, all are needed. In transforming universities, the bureaucracy grows. But it is based on a change orientation very different from the old rule-enforcing, state-mandated bureaucracy that gets left behind. The old bureaucracy looked to the prevention of error; the new bureaucracy looks for the stimulation of imitative.

It is important to avoid the conception of overpersonalized leadership, though: the European case studies of entrepreneurial universities clearly

indicate that strong and devoted leadership is not enough to introduce, or sustain for the future, structural changes. The CEO type of managers, authoritarian personalities at the top, in most cases do not endure. As Clark (2004a: 85) phrased it, based on his 14 global case studies, “enterprising universities ... are characterized by collegial entrepreneurialism”. Also none of the case studies of successful entrepreneurial universities in Europe reported the crucial role of charismatic leaders in the long run; in the medium run, they were able to start transformations towards entrepreneurialism. Consequently, the case studies available tend to indicate the crucial role of strong “university management teams” (or bodies with similar names and functions) in Europe – which interact with both governing bodies above and academic bodies (departments, schools etc.) below where the daily routine academic work, and daily transformations, occur. University management teams, or senior management teams, report to governance boards or boards of management. The pivotal role of these strong teams was stressed at e.g. the London School of Hygiene and Tropical Medicine (LSHTM) in the UK, Twente University in the Netherlands, and WSHIG in Poland. As new governance structures are described at the LSHTM below:

As the Registrar and Secretary described, the SMT [senior management team] is the major strategic driver in the School, though it consults widely. It has a separate research SMT that brings a wider spread of participation from around the School. The SMT generally works in a strongly consensual way, but the changes in departmental structure in 1997 and 2002 and the creation of the post of Dean of Studies are examples of leading from the front. Above the SMT there is a Board of Management, a lay body “which stops us becoming too introverted and instead looks at changes that might be coming up externally”. The Board is also required to be accountable to the HEFCE as the governing body of the institution. Below, there is a School Senate, a reformed body from a previous Academic Board of which all professors and readers were ex-officio members. The new Senate has 30 rather than the previous 90 members and has a wider participation from the staff (EUEREK case studies: LSHTM, the UK, 22).

Similar transformation in management structures are reported in numerous case studies of most successful institutions, both academically, reputationally, and financially. Senior management teams are reported to be *the* decision-making bodies, responsible to governing bodies. The list of senior management team members is getting longer and may include, apart of vice-chancellor, pro-vice-chancellors, registrar etc. – also research finance officers or research contracts officers. See a reflection on recent changes in governance at LSHTM below:

Key changes to the management of the School were introduced in the late 1980s by a Dean ... who operated very much in a chief executive mode. He introduced the concept of a Senior Management Team (SMT), which has continued to be the decision-making body in the School (subject of course to the constitutional powers of the governing body). This now consists of the Director, deputy Director, the three heads of departments, the Director of the Teaching Programme and the Secretary and Registrar. ... There is no doubt that the operation of the SMT, meeting weekly, lies at the heart of the successful management of the School. It conforms precisely to Clark's "strengthened steering core" mechanism, which he saw as an essential ingredient to his case studies of entrepreneurial universities (Clark 1998a); it contains academics and administrators, it consults downwards and recommends upwards, it brings together academic, financial and property strategy, and controls resource allocation. A feature of the changes in management described above has been the School's flexibility and pro-activeness in responding to a changing external environment, and at each stage strengthening the management expertise to ensure the School was able to respond effectively to external pressures. The same could be said for the changes in academic structure and organization (EUEREK case studies: LSHTM, the UK, 20).

As reported at Twente University, the decentralization of the university and its entrepreneurialization may be reaching its limits, though. As its former rector highlights, an entrepreneurial university can become too entrepreneurial and too decentralized: the discretionary funding base can become substantive enough to allow the base units to follow their own course of action, without reference to the overall institution. The base units can become self-supporting groups that can act as individual entrepreneurs. Thus the "entrepreneurial university" should not become a "university of entrepreneurs" (Clark 2004a: 40).<sup>199</sup>

### *Warwick and the "earned income" policy*

The opposite direction – centralization – was taken in making the University of Warwick a major model of European academic entrepreneurialism: the

---

199 As Clark (2004a: 40) formulated his hesitations, "in the extreme, then, an entrepreneurial university may become simply a university of entrepreneurs. Saturated with go-it-alone activity – even undergraduate students were setting up their own firms and consulting services – a rugged individualism might dominate. What then of the university as a collective body, a place of unifying values? What then of more general programs for students and a culture of service for the public good? What then of the whole university as an encompassing enterprise that could muster initiatives of its own?"

core is strong and centralized, and departments are basic units, there are no deans or faculties. It was at Warwick that Michael Shattock formulated an idea of the “earned income” and then the long-term university policy was based on it as a response to hard times of budget cuts at the British universities in the Margaret Thatcher era.<sup>200</sup> As Williams (1992: 38) noted while discussing “external income generation”, “earned income can be a source of both profit and problem. Successful management of soft money means encouraging the establishment of systems and procedures that help to realize the profit and avoid the problems”. An “Earned Income Group” became *the* instrument for entrepreneurialism, working on adding new sources of university revenues (in short: companies should not *give* us money, we want to *earn* it; or as Shattock put it: “we had to find ways to generate funding from other sources; we did not see why people or companies would simply give us money so we decided to earn it”).<sup>201</sup> The

---

200 The role of what Clark termed “the entrepreneurial belief” is crucial in university transformation. The sequence in time leads from an idea to beliefs to a culture to an identity (and sometimes to a saga). Clark (1998a: 143) argues that “an institutional *idea* that makes headway in a university has to spread among many participants and link up with other ideas. As the related ideas become expressed in numerous structures and processes, and thereby endure, we may see them as institutional *beliefs* that stress distinctive ways. Successful entrepreneurial beliefs, stressing a will to change, can in time spread to embrace much and even all of an institution, becoming a new *culture*. What may have started out as a simple or naïve idea becomes a self-asserting shared view of the world offering a unifying *identity*. A transformed culture that contains a sense of historical struggle can in time even become a *saga*, an embellished story of successful accomplishment” (see also Clark 1970: 233-262 on “the making of an organizational saga”: strong organizational sagas, or legends, are the central ingredients of “distinctive” colleges; “a saga is ... a mission made total across a system in space and time . . . deep emotional investment binds participants as comrades in a cause ... An organizational saga turns an organization into a community, even a cult”, 1970: 235).

201 Earning via technology transfer is not easy, though, as a number of recent studies show (Mowery 2001, Mowery, Nelson, Sampat and Ziedonis 2004, David and Metcalfe 2010). The belief in the power of these university revenues does not seem to be rooted in empirical research. The EU-funded GOODUEP research in Europe (referred to in more detail in Chapter 7) indicates that technology transfer offices and centers very often find it difficult to make their ends meet and, if it were not for grants and national and international subsidies, it would be very difficult for them to continue their day-to-day activities. The experience of the U.S. (except a small number of top research universities) is similar: the use of patents and licenses by universities is able to bring significant financial resources, at best, to a few top research institutions only. The financial dimension of the operation of science and technology parks turns out to be much less important than, for example, their

“earned income policy” worked in the following way: the group was “top-slicing” various incomes generated by various units, and it expected a “profit” from other units; professional managers were hired to run various academic units. Accounts were closely studied for current performance against set targets; successful performances were praised. Several accounts e.g. student residences were expected to merely break even but all the others had to operate under the dictate of earning income, according to overall “earned income” university policy. The university committees were allocating sums to departments and were controlling faculty positions. Clark describes the committee system in operation at Warwick below:

Without extensive decentralization to faculty and departmental levels, Warwick has effected collegial steering by means of these central committees in which senior officers, some lay members of the council, and faculty members share responsibilities. With faculty clearly involved, hard choices can be made in supporting new initiatives and realigning traditional allocations of resources. The core incorporates the academic heartland into the center. In this structure, a university can be entrepreneurial without the CEO (the chief executive officer), the vice-chancellor in this case, necessarily being entrepreneurial. ... The third and current V-C [vice-chancellor], Sir Brian Follett (1993-) believes he was selected not because he was an entrepreneur, nor did he seek the position to become one. With a strong academic background in chemistry and biology, and experience in national science councils and funding bodies, his personal mission emphasized the strengthening of the sciences at Warwick. In short, steering capacity has been institutionalized in a committee structure that blends lay council members, elected academic representatives, and senior administrative officers (Clark 1998a: 23).

The innovative “flat management structure” introduced at Warwick has been very successful but it would not be possible to go forward towards more entrepreneurialism without a (somehow complementary) system of powerful centralized committees. Here is another description of the flat management structure, without reference to finances:

A strengthened administrative core ... arguably is the most important of all the pathways taken to transform Warwick. In the balance between central control and departmental autonomy, this core is relatively centralized. ... The institution prides itself on a “flat structure” of center and department. Departments have remained the building blocks of the university and their chairs have a significant role. The chairs relate directly to the vice-chancellor and such senior administrative offices as the registrar and finance officer. They also do not relate to a single apex committee, a

---

regional dimension: the involvement in the promotion of innovation of the economy in the region (see Arbo and Benneworth 2006).

structure we observe later in other settings, but to a set of interrelated central committees, knitted together by overlapping membership, consisting of a small cadre of senior administrators together with a small group of professors elected by colleagues to play central roles. This web of interlocked central committees has become the heart of Warwick's capacity to steer itself (Clark 1998a: 21).

How to achieve successful management? There are several ways described on the basis of case studies of entrepreneurial institutions. One method is to strengthen the role of vice-chancellors or principals; other ways include the creation of deputy vice-chancellors as full-time, permanent or fixed-term appointments. Additionally, directors of finance and human resources are now usually key members of the senior management team. The key corporate functions of planning, estates, finances, human resources, learning and information, corporate services are likely to be represented alongside with the academic functions of teaching and learning, research and enterprise (see Middlehurst 2004: 272-273).

Managing resource allocation in entrepreneurial universities studied is most often operationalized through committees: small and medium sized (see also Sharma 2004: 112-113). An excellent example of financial management with respect to the earned income – a crucial component of the third stream of university income, perhaps most valuable to the university from the standpoint of its entrepreneurial character – is provided by the University of Warwick. The university, administered through the system of central committees, has a strong capacity to “top-slice” the profits and to “cross-subsidize” (for a variety of reasons) less financially successful departments which makes it possible to help those departments which cannot easily raise their money or to support new academic or administrative undertakings. As Shattock explains the Warwick case: “The earned-income approach at Warwick is muscled by a strong capacity to ‘top-slice and cross-subsidize’. This capacity is the backbone of the ability to come to the aid of departments (and specialties within them) that cannot readily raise money on their own, and to back completely new ventures”. The procedures related to the management of extra university income requires clarity, transparency and rationality – and they must be (re)negotiable. Otherwise it is difficult to keep the tendency of the most enterprising institutions to make full use of their abilities, which would not only be detrimental for them, but also, indirectly, for the whole university.<sup>202</sup>

---

202 Another, more fundamental, issue related to income generation was raised two decades ago (Williams 1992: 46-47): “the rationale for income generating activities at all. ... If core public funding of teaching and research is insufficient to maintain its existing size

As Shattock, the registrar at Warwick at the time, explained to European rectors in a 1994 conference, “some departments, e.g., the Business School and Engineering, are more obviously capable of generating external income than say Sociology or the History of Art but because, once the departmental share is separated off, the university’s share [the top slice] is simply pooled with government funds and allocated on academic criteria, all departments benefit. It is accepted that it is to the university’s advantage that those departments that can generate income should support those departments that are simply unable to do so [the cross-subsidy]”. Departments that regularly have monies taken away in this fashion are, of course, not always happy about it. The center then has to have the power and legitimacy to say ‘it is accepted’ because this is the way we build the university as a whole” (cited in Clark 1998a: 24; see also Shattock on the “earned income” policy in 2004b: 225-235).

## **5.7. Academic entrepreneurialism spread across institutions**

A frequent mistake made in attempts to transform universities to become more entrepreneurial is for a management team to proceed on its own, without involving faculty and their departments from the outset, Clark claims (2004b). Some departments can and will move faster than others in understanding the benefits of entrepreneurial actions, their own as well as those located elsewhere in the university. Most social science and humanities departments may underestimate the role of new peripheral supporting units, and criticize their running costs (e.g. technology transfer or contracts and grants offices). Generally, science and technology departments lead the change, enabled by sources of support directly available to them and prepared by their experience in administrating costly projects, labs, and

---

and organizational structure and institution has the choice of contracting until it is viable within its core resources, or of expanding its income from other sources. This is obvious enough. However, dilemmas occur when staff are employed specifically for income generation as, for example, as employees of academic companies. ... If contract work is treated as being equivalent to the more traditional academic work this implies a recognition that the university as it has developed over the past century at least has irrevocably changed”. And this is the point made by such different authors as Slaughter and Leslie 1997, Slaughter and Rhoades 2004, Marginson and Considine 2000, Marginson 2000, or, today almost historically, Newson and Buchbinder 1988.

equipment. Departments positioned to raise income should be encouraged to do so by other departments, and thereby to contribute to the welfare of the entire university as well as their own. It is then a second-order problem to work out who decides what share of the enhanced resources each gets. It is here that the whole complicated issue of “top-slicing” and “cross-subsidizing” appears, and may cause substantial tensions within an organization (Williams 1992). Both Clark’s case studies and the EUERЕК European case studies of entrepreneurial universities show that there is uneven spread of entrepreneurialism within institutions, with various speed of change, most often depending on external opportunities.<sup>203</sup>

### *Teaching-focus and research-focus in entrepreneurialism*

While in Western Europe and in the USA, apparently the most enterprising parts of the traditional academia (Clark’s “academic heartland”) are in the science and technology areas, in most transition countries, as confirmed by case studies available, the most entrepreneurially-minded units, departments, institutions, as well as academics, are those in “soft” areas: economics, law and business, management, marketing, sociology, political sciences, and psychology. It is, however, academic entrepreneurialism which is specifically understood: it is related to (additional and separately paid) teaching rather than, as in the classic studies of academic entrepreneurialism, to research and so-called third mission university activities (or, as in the U.S., to the “service to the society” mission, in the form of local and state expertise and contracts with the local business sector). These are the areas in which the largest part of private sector operates, and in which public sector runs its most enterprising study programs for fee-paying students (all Polish, Russian, and Moldavian EUERЕК case studies confirm this tendency). In transition economies, “soft” disciplines, including especially economics and business and social sciences, are much more easily fundable through tuition fees in the nominally free public sector, and consequently are stronger agents of (teaching-related) entrepreneurial changes in academic institutions than “hard” disciplines. (The picture has been

---

203 There is a combination of internal and external factors at work. As Williams and Kitaev (2005: 139) stress, “if individual members of staff working in universities receive little in the way of rewards for effective innovation there is no good reason for them to make any special effort in areas of activity that do not advance their own careers, and if the university receives no additional resources there is little incentive for it to set up organizational structures that promote entrepreneurial activity”.

gradually changing with the increase in competitive research funding: the bulk of “new” funding, often disbursed through newly created national research councils, leads to research-based academic entrepreneurialism in “hard” sciences; Poland with two new national grant-making councils is a good example in the region).

At the same time, this model of entrepreneurialism, paradoxically born from the symbiosis of the private and the public sector in teaching (usually in the well-known form of multiple-employment of academic staff throughout Central and Eastern Europe), in the long run leads to the paralysis of research in these areas. It is not by a coincidence that a substantial weakening (if not a collapse) of Polish international research visibility in 1995-2010 (as shown by through empirical research combined with normative institutionalist analytical framework, Kwiek 2012a) concerns not so much most expensive and potentially under-funded disciplines such as chemistry or physics, but rather those disciplines in which the possibility of multiple-employment and additional (paid) teaching in the private sector has been the biggest: arts and humanities, social sciences, and economics. Polish measurable research output is internationally visible – on a global level – in the four areas: chemistry, physics, astronomy, and mathematics (all ranked in the first twenty positions as measured by the number of scientific publications), and in none of them extensive paid part-time studies, and accompanied academic moonlighting, ever worked.

While the most important dimension of academic entrepreneurialism in Western European universities is innovative research (e.g. leading to the creation of new technologies, patents, spin-offs and spin-outs – most often through an additional, external funding), in Central Europe the public sector entrepreneurialism reminds the private sector entrepreneurialism: it is (usually quite innovative) training programs. The research dimension of academic entrepreneurialism in the region is marginal (and therefore marginal is its financial dimension, traditionally studied in academic entrepreneurialism analyses).<sup>204</sup> The division between research-oriented

---

204 In the context of the existence of the private sector alongside the public sector in Poland, what matters for their dynamics is the “parasitic” relationship between them. Let us refer here to a critique by David E. Breneman of the largest *for-profit* university in the world, University of Phoenix (UOP), which can be extended to a huge part of the Polish private sector (which nominally is not a *for-profit*, Breneman 2006: 87: “UOP could not exist were it not for the scholarly and publishing works of faculty in traditional institutions. Essentially, UOP rides on the availability of scholarly knowledge generated elsewhere, and packages that knowledge effectively for adults students. One might argue that a global

academic entrepreneurialism (Western Europe) and teaching-oriented academic entrepreneurialism (new EU member countries) in the private and the public sector is crucial for understanding the specificity of these two types of education systems. Simplifying, from the perspective of research-intensive universities in the West, Central European research- and innovation-oriented academic entrepreneurialism almost does not exist, while academic entrepreneurialism focused on (paid) teaching has no counterpart there. Western universities, along with the growing needs to seek additional revenues and along with the potential introduction of tuition fees (or the increase in their levels), may also increasingly turn in the direction of additional revenues from teaching (as in English universities, for both nationals and foreigners, with high fees especially for non-EU students, and globally as in the USA, Australia and New Zealand, see Marginson 1997b, Marginson 2000, and Marginson 2010). Shattock (2009b) does not limit academic entrepreneurialism to research activities, although links it to innovation, as well as financial and reputational academic risks (our view is more restrictive here, which allows us to show the difference between Western European and Central European higher education systems more clearly). He presents a long catalogue of entrepreneurial activities:

We should not see entrepreneurialism simply or even necessarily in relation to research, or in the exploitation of research findings. ... [E]ntrepreneurialism involving innovation and academic and financial risk can be found in regional outreach programmes, in economic regeneration activities, and in distance learning ventures, as well as in investment in spin out companies, the investment of overseas campuses and the creation of holding companies to house different sets of

---

economic analysis of UOP would have to credit traditional academia with generating an enormous externality for the benefit of UOP and its students, in that the educational materials used are derived from the scholarly works of faculty in nonprofit institutions. What this means is that an entire educational system populated only with UOP-type institutions would be intellectually barren and would not produce new knowledge. UOP thus depends critically upon the existence of the traditional sector for most of its intellectual input and for its ultimate success". Strong, passionate words. And almost every sentence above can be successfully referred to the Polish private sector. In a similar spirit, a quarter of a century ago, Daniel. C. Levy pointed out that "the public sector must respond to a broader constituency and *raison d'être*. The private sector has the luxury of relying parasitically on the public sector to do the dirty work. Private sector success depends on public sector maintenance" (Levy 1986a: 312). Personally, we have repeatedly stressed the parasitic nature of the relationships between the public sector and private sector in Poland (most recently in Kwiek 2012a and Kwiek and Maassen 2012a).

income-generating activities. For many universities, entrepreneurialism can be found in various innovative forms of teaching either to new clientele at home or embodied in programmes for internationalization (themselves often involving both financial and reputational academic risks) (Shattock 2009b: 4-5).<sup>205</sup>

## 5.8. Conclusions

The EUEREK (and other) case studies of academic entrepreneurialism in European universities confirm the pivotal role of changing governance at most entrepreneurially-oriented universities. They confirm what the European Commission highlighted in its communications about the role of transformations of management and governance structures in universities, although they do not confirm the need for immediate, profound and radical changes in their functioning (Shattock 2009a, Shattock 2010: 269): “European universities have enormous potential, much of which unfortunately goes untapped because of various rigidities and hindrances. Freeing up the substantial reservoir of knowledge, talent, and energy requires *immediate, in-depth and coordinated change*: from the way in which systems are regulated and managed, to the ways in which universities are governed” (EC 2006b: 1, emphasis in original). It seems clear from the EC communications from the 2006-2011 period that the general line of the EC thinking is that current governance and management structures in most European universities are obsolete and do not provide an adequate basis to reach the goals envisaged by the European Commission in the Lisbon Strategy (and in a new strategy, *Europe 2020*). The issue of university funding is closely linked to that of governance: as the EC communication on “Mobilising the Brainpower of Europe” notes, “investing more in the

---

205 Paul Temple (2009: 49), focusing on entrepreneurialism in teaching in the EUEREK institutions, suggests that teaching and learning often seem overlooked in considering entrepreneurial activities: “surely this is paradoxical: can a university be considered entrepreneurial if this entrepreneurialism does not extend to its dominant activity?”. Temple suggests four main external drivers (region, widening participation, professional focus, and the research-teaching nexus) which may “affect the way in which the curriculum is conceived and delivered” and proposes a theoretical framework along the quadrants created by the “teaching-led” to “research-led” axis and the “state-direction” to “market” axis. There are four options for teaching in this typology: teaching as state-mandated mission, teaching as financial necessity, teaching as meeting public needs, and teaching follows research (Temple 2009: 61-62).

current system could be perceived as unproductive, or even counter-productive” (EC 2005b: 8; on how to close the funding gap in European higher education, see policy proposals by Aghion *et al.* 2008).

The European systems are believed to need profound changes which have already been spotted in the most entrepreneurial (mostly UK) universities: more institutional accountability, funding more closely linked to academic performance (e.g. a balance between core, competitive, and performance-based funding; more competition-based funding in research and more output-related funding in teaching) and a wider use of market (or quasi-market) mechanisms in both teaching and research missions (see Temple 2006, Temple 2008). These changes require new governance and management systems, often already tested in selected European institutions. The determination of the EC to implement the “modernization agenda” of European universities (Kwiek and Maassen 2012a, Kwiek and Kurkiewicz 2012, Maassen and Olsen 2007, Maassen 2012) can be confirmed by emphatic references to other sectors where reforms have been seen, with various degrees of success, as unavoidable: the steel industry and agriculture. The European Union is now believed to face “the imperative to modernize its ‘knowledge industry’ and in particular its universities” (EC 2005b: 10).

Case studies of selected European institutions show that the modernization processes in question (in its emphasis on academic entrepreneurialism widely understood) have already been in progress in numerous institutions in different systems across Europe. Academic entrepreneurialism in Europe turns out to be not only a theoretical slogan, to be discussed in a similar theoretical manner, but the actual academic reality in many countries and in numerous universities. The theoretical (or rather ideological)<sup>206</sup> “modernization agenda” of European universities

---

206 Ideological in a sense in which often “globalization” was an ideological term. As Marsh, Smith, and Hothi (2006: 177) noted penetratingly with reference to the latter, “globalization may play a powerful role in ideational terms. If policy-makers believe in globalization, this is likely to shape their approach whether or not globalization actually exists. In other words, neo-liberal ideas might be creating neo-liberal policies. ... In this sense, globalization may be something of a self-fulfilling prophecy. By behaving as if it were a reality, policy-makers may actually be making it a reality”. In a similar manner, at both the EU and national levels, policymakers believing in the “modernization agenda” of European universities may make it a self-fulfilling prophecy (despite its poor empirical evidence, Maassen and Olsen 2007).

consistently promoted by the Commission can be already combined with selected institutional transformations in selected European institutions currently taking place. The Commission's somewhat intuitive, and commonsense-based rather than research-based understanding of the changes taking place in European universities may be quite right about the future changes in the university sector. But its most important insights as to the future changes come from broader and more economic intuitions about future environment of universities rather than from intuitions referring to the university sector itself. The convergence of intuitions about the possible evolution of universities in the future and about the possible evolution of their environments merely indicates, on a different plane, a progressive loss of exceptionality of the university as one of the most important institutions of the modern world. The university, increasingly, and globally, is under powerful pressures to turn from being an "institution" to being an "organization" (Maassen and Olsen 2007, Olsen and Maassen 2007, Krücken and Meier 2006, Brunsson 2009, Brunsson and Sahlin-Andersson 2000, and Musselin 2007a). This is a fundamental, qualitative change which may require higher education research to search its analytical tools in organizational studies. The combination of the two traditions can be highly fruitful for both areas of social inquiry.<sup>207</sup>

---

207 As Michael N. Bastedo put in the opening sentences of his "Organizing Higher Education: A Manifesto" (2012b: 3; all 15 citations removed), there is a strong historical link between the two: "Modern organization theory is built upon the study of colleges and universities. Resource dependence theory resulted from studies of power and the budgetary process at the University of Illinois. 'Old' institutional theory was built upon studies of adult education and community colleges and 'new' institutional theory on studies of college 'chartering' effects prior to extensive work in K-12 schools. Organizational culture was built in the 1980s upon studies of distinctive liberal arts colleges conducted over a decade earlier. 'Garbage can' theory was constructed entirely from a study of college presidential leadership, and 'loose coupling' was based on observations of schools and universities. The major frameworks not founded on studies of colleges—primarily organizational ecology and transaction-cost economics – are few and far between" (see especially March 2008, March and Olsen 1976, Brunsson 2009, and Brunsson and Olsen 1998a).

## Chapter 6

# Academic Entrepreneurialism and Private Higher Education in Europe

### 6.1. Introduction

*“Independent private institutions” and current conceptual frameworks*

In this chapter we will focus on basic ideas and key concepts functioning in research on academic entrepreneurialism.<sup>208</sup> The reference point here will be public institutions (the original focus of reflection both in Europe and the USA) and private institutions (under-researched from this particular analytical perspective both in Europe and in the USA). Apart from the discussion of the individual core elements of the “entrepreneurial university”, there will be discussions intended to see the difference in the sense of the term of academic entrepreneurialism related to the public and private sectors across Europe. An extended analysis will be devoted to differences in how academic entrepreneurialism operates in both sectors in practice. It seems difficult to analyze private universities in Europe (including those selected to be analyzed as the EUEREK case studies) in the context of entrepreneurialism in the form the concept has emerged in the basic research literature on the subject and based on available case studies so far. The private sector in higher education in Europe, with a few exceptions only (such as e.g. Portugal and Spain, see especially Portugal as discussed in the last decade by the CIPES researchers in Neave and Amaral 2012, Teixeira 2012, Teixeira and Amaral 2007, Teixeira, Rosa and Amaral 2008, Correia, Amaral and Magalhães 2002, Teixeira and Amaral 2001) – from the point of view of both numbers of institutions, share of enrolments in the system, and study areas offered – has been an educational phenomenon of

---

208 I wish to express my gratitude to Professor Michael Shattock for the extended comments he made on the draft of the paper (Kwiek 2009a) from which parts of this chapter draw. All limitations are my sole responsibility, however.

the transition countries.<sup>209</sup> In some countries (such as for example, Sweden, Belgium or the Netherlands), nominally private institutions are funded in practice with public money, in various forms and under different umbrellas but in this chapter we consider those private institutions which meet the definition of “independent private institutions” formulated by the OECD in its *Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications*: these are the institutions that receive less than 50 percent of their core funding from government agencies and whose staff is not paid by such agencies (OECD 2004c, Santiago *et al.* 2008).<sup>210</sup>

At the same time, the conceptual framework currently used to analyze “entrepreneurialism” in higher education seems restricted in use to public sector institutions, and rightly so. Very few scholars ever refer to private institutions in their discussions of academic entrepreneurialism. And if they do, they often mean selected top US universities (for instance, Burton Clark refers briefly to Stanford and MIT in his *Sustaining Change in Universities* – but in the context of public institutions studied such as the University of

---

209 As Levy (2010: 10) points out: “one of the key trends in international higher education, the rapid expansion of the private sector now holds one-third of all global enrollments. However, the growth is not unbroken or inexorable and sometimes stalls and even reverses”. Private higher education in postwar Europe, before its phenomenal growth in postcommunist countries after 1989, emerged first in Spain (1973), Portugal (1979) and Turkey (1981). Then the transition countries followed the example (beginning in 1989-1991). Following Levy (2002a), the difference between elite provision and access provision can be used. In Western Europe (Austria, Germany, Italy, Portugal, France, Spain, as well as Russia) private higher education sectors align with elite-providing roles; in contrast, in most postcommunist transition countries those sectors align with access-providing roles (Albania, Bulgaria, Estonia, Poland, Romania, Russia, Ukraine, as well as Portugal (Russia and Portugal are included in both categories, Fried *et al.* 2007: 645-646). In Poland, the number of (Levy’s) semi-elite private providers is marginal: in all probability, in the range of 10-20 (or in the 3-6% range).

210 Therefore we do not analyze here those private higher education institutions which the OECD terms “government-dependent private institutions”: that is, by definition, those which receive from government agencies more than 50 percent of their core funding, or those whose staff are employed and paid by these agencies. In this sense, in this chapter we are interested in “independent-private” institutions operating in Central Europe, as well as those operating in Spain, Portugal and Italy – rather than in Sweden, Finland, the Netherlands and Belgium where they are financed largely through public funds.

Michigan at Ann Arbor, UCLA, North Carolina State University, and Georgia Institute of Technology, Clark 2004a: 133-166; Clark discusses also the private Catholic University of Chile, 2004a: 110-121). Clark's classic five case studies in *Creating Entrepreneurial Universities* (1998) are all of European public universities and the only one that stands out – The Chalmers University of Technology in Sweden – had indeed “opted-out” of the Swedish public education system but has remained funded by the state. In Europe, not only is the experience of private higher education very limited – but also the emergent concepts related to entrepreneurialism have derived from analytical frameworks elaborated in the analyses of the public sector; the concepts have rarely touched on the private sector at all. Shattock and Williams (in Shattock 2004a) for the first time applied the concept of “entrepreneurialism” to (somehow alien) universities in transition countries – in Russia. But again, they were public universities. Barbara Sporn, while analyzing “adaptive universities” (2001) focused on four public (the University of Michigan at Ann Arbor, University of California at Berkeley, St. Gallen Universität in Switzerland, and Wirtschaftsuniversität Wien in Austria) and two private institutions (one in the USA and one in Europe: New York University and a vocationally-oriented Università Bocconi in Milan).

This chapter is based, in theoretical terms, on the conceptual work on “entrepreneurial”, “innovative”, “enterprising”, “self-reliant”, and “proactive” universities by Clark (1996, 1998a, 2001, 2004a, 2004b, 2005), “self-reliant” and “enterprising” – as well as, more generally, “successful” – universities by Shattock (2000, 2003, 2004a, 2004b, 2005) and Williams (2004), and Sporn's notion of “adaptive” universities (1999a, 1999b, 2001). In empirical terms, as Chapter 4, it is based on case studies of entrepreneurialism in universities drawn from the EUERЕК study on entrepreneurialism in European universities within the context of what Clark, Shattock, and Williams suggest for the study of public entrepreneurial universities.<sup>211</sup> For this reason, we need a theoretical context of academic

---

211 As Michael Shattock argued recently in his review paper (2010: 270), what Clark provided was “a starting gun for recapturing institutional self-reliance; his assertion of the importance of organisational structures and culture and the way in which they shaped academic work was original and set up a whole new collection of research questions. What he did do in a way that no one else in the field of higher education study has done was to set alight a flame of institutional independence which, perhaps for the first time in some European countries, has encouraged a serious challenge to

entrepreneurialism to analyze the institutional studies (thereby we will leave for another occasion the discussion on what “privateness” and “publicness” of academic institutions are).<sup>212</sup>

The EUERЕК case studies of private institutions included: the University of Buckingham (UK), Jönköping University (Sweden), TCUM – Trade Cooperative University of Moldova (Moldova), UCH – the Cardinal Herrera University (Spain), WSHIG – the Academy of Hotel Management and Catering Industry (Poland), and the University of Pereslavl (Russia). They are all relatively new institutions: almost all were founded in 1990s – in the UK (1976), Poland (1993), Russia (1993, transformed from a state-funded think tank founded in 1984), Sweden (1994, one of three “foundation” universities), Moldova (1993), and Spain (2000). Almost all are located outside of capital cities. The reasons for founding them varied from political/ideological (UK), an individual’s passion (Poland), political/regional considerations (Sweden, Russia) to religious interests (Spain). What seems crucial from the perspective of entrepreneurialism is that they represent, in general, a fundamental reliance on tuition fees as a source of income and a limited reliance on, and access to, external research funding (the exception is Sweden).<sup>213</sup> Small research groups seeking

---

the enveloping political and cultural traditions of the European nation state”. For a recent assessment of Clark’s most seminal works, see a recent issue of *London Review of Education* (November 2010), with contributions of Michael Shattock, William Locke, Guy Neave, Gareth Williams, John Brennan, Peter Scott, and Gareth Parry.

- 212 It is worth recalling the complex relationships between both sectors, especially in the context of (introduced or discussed) reforms in European systems for which (the idealized) American model is increasingly becoming a standard. As Levy recently argued, “the private higher education sector mostly fits broader higher education in regard to emerging trends and agendas, more than to traditional public patterns. Sometimes, private initiatives even lead the way for higher education reform. Certain salient characteristics of private higher education show tendencies that some reformers in the public sector would like to emulate, though with significant adaptations. Most of these measures are controversial. ... So the role of private institutions in the overall higher education landscape will also depend on how, and how much, the public sector changes” (Levy 2006b: 13). Combining the trajectory of public and private institutions is another dimension in the public/private dynamics in higher education today.
- 213 Throughout the chapter, and especially in its conclusions, two exceptional cases need to be born in mind: Pereslavl is not a standard teaching-oriented private university in Russia due to its historical origins in, and current affiliations with, the Russian Academy of Sciences; and Jönköping University has been a nominally non-state – foundation-based – Swedish university with equal access to public funding. Thus in

external research funding are formed in the UK and Spanish examples but no major financial impact attributable to them is actually reported. Also no endowment income is reported, and sometimes there is a strong reliance on bank loans (Poland, the UK). In almost all cases (especially in interviews), such characteristic expressions as “to survive”, “survival”, “uncertainty about the future” etc. occur. The Spanish EUERЕК case study confirms that private institutions can regard themselves as entrepreneurial but there are discrepancies between descriptions (and feelings) expressed by academic staff on the one hand and managers, rectors or deans on the other. With small exceptions, private institutions view themselves as less entrepreneurial than public ones. In Poland, Russia and Moldova, no feelings about being specifically entrepreneurial were reported – instead references to being “innovative”, “unique” etc. (especially in comparison with some old-style public institutions) were made. Another common feature of the EUERЕК private institutions is that they are very small or relatively small institutions within respective national higher education systems (of a size from a few hundred students in the UK, Russia – to a few thousand students in Moldova, Poland, Sweden, and Spain). In most of the EUERЕК case studies, they are vocationally-oriented and have small research ambitions (and, at the same time, small research funding opportunities). Often, they are born out of visions and ambitions of entrepreneurial individuals (academics and non-academics alike, as in Poland and Russia).<sup>214</sup>

---

the majority of generalizations about EUERЕК private institutions, Jönköping University does not fit; thus unless otherwise stated, the Swedish case is separate – the most important difference is that Jönköping University does not charge student fees and has full access to public research and teaching funds which, from a funding-focused comparative perspective, makes it similar to public sector institutions. It has a similar status to the Chalmers University of Technology in Sweden as analyzed by Clark: nominally a private institution, with full access to public funding on equal terms with other public universities (Clark 1998a: 84-102 and Clark 2004a: 61-70).

- 214 In this chapter (as well as in the next chapter), we are trying to combine theory and practice, or higher education analytical frameworks and empirical material drawn from empirical research. The whole international EUERЕК team seemed to have followed in the latter part of our work Burton Clark’s suggestion (stated explicitly in “Introduction” to *Sustaining Change in Universities* (2004a: 2): “I stayed away from legislators, planners, ministers, and all other who claimed that they were in the business of defining broad policy in higher education. Instead, I spent my time with those who did the work inside universities. By means of in-depth interviews, extensive document analysis, and some observation of campus life, I took the opportunity on

### *The global private sector growth*

Regarding the growth of the private sector generally, as Daniel C. Levy notes, the twentieth century norm and persisting public norm is state funding of public universities (and overwhelmingly private sources of funding for private institutions). State subsidies for private institutions are rare and the examples of India, Belgium and the Netherlands (as well as Swedish “foundation universities”) may call into question the designation of private (Levy 2006b: 10). The global demographics of private higher education is such that the major center of the sector is East Asia, with about 80 percent of all students enrolled in private universities in Japan, South Korea, Taiwan, and the Philippines; in the USA (perhaps surprisingly) – only 20 percent; in Western Europe – on average 10 percent or much less; in Latin America – over 50 percent in Brazil, Mexico, Colombia, Peru, and Venezuela, and finally in the transition countries, and some post-Soviet republics – where the most rapid growth took place after 1989 – up to 30 percent.<sup>215</sup> As Levy puts it, “where public budgets do not meet the still rapidly growing demand for higher education, students pay for alternatives” (Levy 2002: 4) – and this is what happened in several European transition countries following 1989. In most of them, both public and private higher education enrollments in general, and the share of the private sector in overall enrollments in particular, changed dramatically in the last 15 years. While Western Europe has not in general witnessed the emergence (or substantial strengthening, depending on the country) of the private sector in higher education, in several postcommunist transition countries in Europe, for a variety of reasons, the private sector emerged as a tough competitor to the most often traditional, elitist, faculty-centered and quite often inaccessible public sector. The differences between the transition countries are significant, though: while in Croatia and the Slovak Republic private institutions enroll as few as 3.0 to 4.6

---

field trips to stand beside ‘practitioners’ ... The work of higher education is highly localized: it is done in university base units ... The best way to find out how universities change the way they operate is to proceed in research from the bottom-up and the inside-out. ‘System’ analysis done top-down cannot do the job. It misses the organic flow of university internal development”. Then, certainly, the transformation “from cases to concepts” occurs (2004a: 73).

- 215 On the growth of the private sector in Europe, see especially two edited volumes: *The Rising Role and Relevance of Private Higher Education in Europe*, ed. by Wells, Sadlak and Vlasceanu, 2007, and *Private Higher Education in Post-Communist Europe. In Search of Legitimacy*, ed. by Slantcheva and Levy, 2007.

percent of the countries' student body – private sectors in Estonia, Poland, and Romania enroll almost one third of all students. Other countries such as Bulgaria, Hungary, and Russia have enrollments of about 15 percent (Slantcheva and Levy 2007: 3, OECD 2011c).<sup>216</sup>

### *The structure of the chapter*

This chapter is structured as follows: following this introduction, part two discusses the phenomenon of increasing diversification of the financial base and new sources of revenues of entrepreneurial universities, focusing on the fact that over the past two decades in OECD countries, increases in funding for higher education and research occurred in all sources other than the core, traditional and guaranteed government support (whose role has been decreasing gradually for several years now, see the data and analysis in CHEPS 2010b). Therefore, the principle of competition plays a key role in entrepreneurial educational institutions: even state funding is becoming more competitive than ever before but, most importantly, all other revenue sources are becoming almost fully competition-based. The third part examines the role of Burton Clark's "strengthened steering core" in entrepreneurial private institutions, and in the fourth part another feature of the entrepreneurial university is addressed, that is the "expanded developmental periphery" (i.e. new scientific and administrative units that attract to universities an increasing proportion of external funding). The fifth part on the "stimulated academic heartland" shows that academic entrepreneurialism can be found across all academic disciplines, while the sixth part discusses the critical role of emergent, institution-wide culture of

---

216 The public sector, to a large extent, has actually produced the private sector there (through academic faculty using parallel employment opportunities), to a large extent, at least initially, instead of reforming itself. The privatization of higher education often meant the creation of (new) private institutions by the faculty from the public sector (and Poland, Russia, and Moldova are here good EUERЕК examples, Romania and Bulgaria being other examples). Questions concerning the legitimacy of new arrivals to the educational arena have been raised from the very beginning, especially in those transition countries where private universities were born in a sort of post-1989 legal vacuum. But the common feature in most of those transition countries with substantial enrollments in the private sector is the interplay of cooperation and competition: even though private institutions themselves compete (to a limited degree, and almost never with prestigious public universities) with public ones, they most often share with their competitors the vast majority of their faculty.

entrepreneurialism. Finally, findings on the entrepreneurial nature of private institutions in the comparative context of public institutions to which the category has been traditionally referred are presented: paradoxically, the private sector in Europe (based on empirical research on Portuguese, Polish, Spanish and Italian private institutions) turns out to be far less entrepreneurial than could be expected. Conclusions are less paradoxical in the case of Central and Eastern Europe: small islands of academic entrepreneurialism – viewed by Burton Clark, Michael Shattock and Gareth Williams as institutions (or their parts) taking academic and financial risk in their research, in search of prestige and external funding – can be found almost exclusively in the public sector. The private sector, focused on teaching rather than research in an overwhelming number of institutions, funded in 90-95 percent by tuition fees paid by students, is not a sector where academic entrepreneurialism in a sense adopted so far in the research literature can be found. While traditional (research-based) academic entrepreneurialism is found across Western European systems, private institutions in Central and Eastern Europe tends to exhibit entrepreneurial features only in teaching-oriented activities (see Potter 2008).

## **6.2. The diversified funding base: possible sources of income**

### *Clark's “entrepreneurial pathways to university transformation”*

There are several ways in which the case studies can be considered: Barbara Sporn discusses five factors enhancing adaptation at specialized European universities which lead in five directions: externally focused mission, differentiated structure, collegial management, institutional autonomy, and diversified funding (Sporn 2001: 27). Michael Shattock discusses six key words highlighting the characteristics that successful universities have to demonstrate: they are competitiveness, opportunism, income generation and cost reduction, relevance, excellence, and reputation (Shattock 2000: 96-103). We could discuss the private sector represented in the EUERЕК case studies in the context of the two above sets of features. But instead, we will base our analysis on Clark's “entrepreneurial pathways to university transformation”, revisiting his classic formulations. Clark analyzed five

(entrepreneurial, innovative, enterprising) European universities in action, transforming themselves over the period of 10 to 15 years, within a common conceptual structure. In brief, according to his *Creating Entrepreneurial Universities* (1998a) and *Sustaining Change in Universities* (2004a), the entrepreneurial universities studied – universities systematically seeking to transform themselves – show five elements which differ them from others and which form an “irreducible minimum”: a strengthened steering core, an expanded developmental periphery, a diversified funding base, the stimulated academic heartland, and an integrated entrepreneurial culture (Clark 1998a: 5).<sup>217</sup> Clark’s criteria are organizational characteristics rather than definitions. The five elements, or generalized pathways of university transformations, according to Clark

rise up from the realities of particular institutions to highlight features shared across a set of universities, but at the same time they still allow for local variation. ... Four elements are highly structural: we observe them in tangible offices, budgets, outreach centers, and departments. Only the more ephemeral element of institutional idea, floating in the intangible realm of intention, belief, and culture, is hard to pin down. Emphasizing manifest structures helps greatly in explaining the development of organized social systems. ... Significant change in universities has definite organizational footing (Clark 1998a: 128).

### *Streams of income and transformations in funding in public universities*

The structure of the following sections of this chapter is based on Clark's analytical framework proposal, beginning with the diversified funding base

---

217 Earlier Clark’s theoretical approaches based on his huge European empirical material, his “work in progress”, referred to “innovative universities” and its four essential elements: “an innovative self-defining idea”, “an integrated administrative core”, “a discretionary funding base”, and “an innovative developmental periphery” (1996: 52-61). They are “an ambitious idea, or self-concept; a change-oriented and integrated administrative core; a funding base that enables new orientations and programmes; and a developmental periphery. The elements are interconnected and interactive. The self-concept provides a justification for the other three elements and urges them onward. The three structural components are key means for implementing the institutional idea, and, as an expression of it, become virtually a part of it” (Clark 1996: 60). It is fascinating to see Clark conceptual hesitations, and choices made, in the 1996-2004 period, at least until the publication of the sequel book, *Sustaining Change in Universities. Continuities to Case Studies and Concepts* (Clark 2004a).

of entrepreneurial universities. There are three streams of income: first, mainline support from government, second, funds from governmental research councils; and third, all other sources lumped together by Clark as “third-stream income” (Clark 2004a: 77).

Transformations in funding in public universities in the last twenty years have been towards the second and the third streams of income. In the specific case of European private institutions, it is crucial to underscore the role of the third stream (all other, largely non-governmental, sources of income), as most of them in Europe (in OECD’s typology: “independent private”) are either legally, or practically, or both, cut-off from major forms of governmental funding. Private institutions in Europe find it hard to be entrepreneurial, and to have entrepreneurially-minded academics in their ranks – because their faculty and academic units tend not to compete (globally and nationally) for outside research funding. And the role of competition with others – institutions and individual academics alike – is fundamental to the entrepreneurial character of an academic institution. We mean here both internal competition (for research and other development funds) and external competition for external funds. As an LSHTM case study stresses, external pressures and competition are key to its institutional success:

There was an almost universal response by the persons interviewed that external pressures were dominant and that the School was operating in a research or student market in which if it was to survive, it had to succeed. There was also a recognition of the competitive nature of this market and the extent to which competition could be beneficial. One academic interviewee said: “The competitive nature of grant funding has a very positive effect on the quality of research work. In applying for research grants you are more forced to really think about your hypothesis and possible outcomes, including possible publications that can come out of it, which is a positive thing. I think that scientific breakthroughs are going faster today partly because of the competitive nature of funding (EUERЕК case studies: LSHTM, the UK, 18).

At entrepreneurial universities, a considerable element of managerial practice is devoted to managing competing units (and managing competing academics in terms of human resources management), managing non-core external funding, and the resulting tensions between academics, academic units, the center and departments, through resource allocation which utilizes, for example, various “top-slicing” and “cross-subsidizing” techniques, as discussed in Chapter 5. With competitive research funding available in entrepreneurial universities, as most EUERЕК studies confirm, there are no

limits to academic financial expectations, and inventing and re-inventing fair and transparent funding formulas for departments and the center are critical. If procedures are non-transparent, or unfair to some academic units, management may lose a lot of time and energy in managing tensions which in other conditions should not appear.

### *Teaching-focused, “reputational-based” institutions and their limitations*

From the perspective of entrepreneurialism, a negative scenario of development of private institutions studied within the EUEREK project towards entrepreneurialism originates from their status of being teaching-focused institutions (or being neither “prestigious”, nor “prestige-seeking” – but rather “reputation-based”, to refer again to the Brewer, Gates, and Goldman’s typology, 2002; the Russian and Swedish case study institutions are exceptions to this rule as already explained). But the research dimension in the activities of the private sector should exist and be visible at least to some extent, to be able to differentiate itself from the corporate for-profit education sector<sup>218</sup> that is aggressively promoting itself in various parts of the world, or to be able to refer to the long tradition of European (research) universities, and thus try to gain additional social legitimacy. Case studies of Polish and Russian (as well as Macedonian and Ukrainian, outside of the EUEREK project) private entrepreneurially-minded universities show that the road to excellence in research and national or international research visibility is long, especially with external funding being scarce at the beginning, but the prestige and reputation of an institution accumulates when internationally visible research is being done. Today, the social prestige (and often, consequently, social legitimacy) of private universities increases when they conduct important research, especially research on an

---

218 In the last decade, several excellent books were written on the emergent for-profit higher education sector (none of them in Europe, though). These are William G. Tierney and Guilbert C. Hentschke, *New Players, Different Game. Understanding the Rise of For-Profit Colleges and Universities*, 2007, David W. Breneman, Brian E. Pusser and Sarah Turner, *Earnings from Learning. The Rise of For-Profit Universities*, 2006, and a book with broader research intentions, linking the privates for-profit sector with globalization and demographic changes: *The Future of Higher Education. Rhetoric, Reality, and the Risks of the Market* by Frank Newman, Lara Couturier and Jamie Scurry 2004. See also Kinser and Levy 2006, and Levy 2002b).

international scale, and acquire the right to confer (research-focused by their very nature in most European systems) doctoral degrees to their graduates (which in itself is part of the academic drift – i.e. academically weak institutions usually unnecessarily copying the institutional behavior of best universities, often under the influence of current laws).

Only several private institutions in Poland (out of 328 in 2011) have reached the academic level which allows them by law to confer doctoral degrees (Levy's "semi-elite" or, in Brewer, Gates, and Goldman's terms, "prestige-seeking") – but today they have the best graduates and the top PhD students (in the Polish context, these institutions are allowed to offer PhD studies in selected areas, in acknowledgement of the quality of the core staff they employ and the high national rating of their research output; the EUERЕК case study institution, WSHIG, being a vocational institution, does not have research ambitions and never intended to offer the third cycle of studies). Not surprisingly, investing in research brings more, and especially better, students to these institutions. However, when we take into account costs of research, private sector investments in research from their own funds in practice are extremely difficult to realize, and the only solution is the use of Clark's third, additional, external funding stream. The access of EUERЕК private institutions to public subsidies is very limited (3.2 percent of research funding in Poland in 2010 went to private institutions, and 96.8 percent to public ones, GUS 2011: 350) and private research and development investments in private higher education institutions are marginal (again the Swedish case is exceptional and testifies to different senses of "privateness" of higher education – at the Jönköping University, the level of public research subsidies is equal to their level at public universities; in the Russian case of Pereslavl, public research funding is provided for its research part, Institute of Programming Systems of the Russian Academy of Sciences).

In more general terms, the financial diversification of an institution is also healthy academically: the general rule is simple – as Clark put it, "it is better to have more money than less", or elsewhere: "more income is always needed: universities are expensive and good universities are very expensive" (Clark 1998a: 26; see "science" as traditionally a "growth industry" in Ziman 1994). The diversified funding base of an entrepreneurial university means a portfolio of patrons (national and international, private and public, long-and short-term) to share inevitably rising costs (Johnstone 2009, Johnstone 2012). Entrepreneurial universities aggressively seek third-stream

sources, and it has become a very powerful trend in the Netherlands, the UK, Sweden, Finland, as well as in several transition countries including Poland (see detailed data from the last 15 years in a recent report on funding reforms in Europe by CHEPS, CHEPS 2010b). Internal university reforms and restructuring, including closures and mergers of academic units, are increasingly “finance-driven” (rather than “equity-driven” or “competitiveness-driven”, to refer to Martin Carnoy’s typology of key ideas behind educational reforms, Carnoy 1999). Third stream income is becoming crucial for public institutions;<sup>219</sup> some components are also fundamental for the vitality (either development or survival) of private institutions, especially when we take into account the expected demographic scenarios for Poland, particularly a sharp decline in the number of young people aged 19-24 years, the potential candidates for studies (for implications of demographic changes, see Kwiek 2012a, Kwiek 2012b).

### *The spread of entrepreneurialism across institutions*

The case studies of the University of Warwick in the UK (outside of the EUERЕК project but crucial for understanding the phenomenon of entrepreneurialism, “earned income policy” etc.) and Twente University in the Netherlands demonstrate the crucial role of all academic units being involved in seeking external research revenues (from consulting or from fees from international students, Clark 1998a). Separate units increasingly become separate small academic and business units, “rewarded” and “punished” for their entrepreneurialism (as Williams noted, “managers who take risks and are successful are rewarded. Failure and passivity are penalized”, Williams 2004: 87). The culture of entrepreneurialism, an irreducible element of entrepreneurial organizations according to Clark, means that virtually all units are involved in entrepreneurial activities, including social sciences and the humanities (see especially two recent

---

219 In the Polish case of specific entrepreneurialism of public universities, limited – except for small “islands of entrepreneurialism” based on research – thus far mainly to paid teaching in the part-time mode of studies, revenues from tuition fees charged for part-time studies were substantial (over 20 percent) in the 1995-2005 period, then they have been gradually declining as a source of funding for public universities. In 2010, they still accounted for 13.7 percent of total operating budgets of public universities (GUS 2011: 339-344).

studies: Pilegaard, Moroz, and Neergaard 2010 and Benneworth and Jongbloed 2007). In Poland and other transition countries, by contrast, units found to be most entrepreneurial were social science departments – especially political sciences, sociology, psychology and business-related academic disciplines (but not strictly economic ones, the number of private institutions increased from 3 in 1991 to 250 in 2002, 301 in 2005 and 328 in 2010, GUS 2011: 27). Since the beginning in the 1990s, the private sector has changed the educational landscape in Poland beyond recognition: in 2010 almost one third of the 1.8 million student body (31.5 percent) were enrolled in private higher education institutions (GUS 2011: 55).<sup>220</sup>

However, the potential further expansion of the private sector in Poland must be considered in the context of at least two processes: reforms of public higher education and broad demographic changes.<sup>221</sup> (Poland, about to be hit by severe demographic shifts, and the fastest-aging society in the OECD area by 2025, needs thoughtful policy responses which might use more market mechanisms, more competition and more private funding in both public and private sectors. Depending on policy choices, different scenarios are possible. A healthy system which may emerge within a decade might be dominated by the public sector, with the private sector in gradual decay; therefore, perhaps, the balance between the two should be maintained

---

220 In Poland, both public and private sectors rely heavily on student fees; from a comparative perspective, fees in the 2000-2010 constituted between about 14 and 20 percent of the overall operating budget of the public sector institutions and between about 90 and 95 percent of the overall operating budget of the private sector institutions (90.2% in 2010, GUS 2011: 342). For the public sector, other sources of income include state subsidies for teaching, research subsidies, competitive research grants and other. Consequently, private institutions from the very beginning, and especially in the 1990s, have been almost totally dependent on student fees. In the last five years, the dependence has been decreasing, mostly due to revenues from EU structural funds (categorized as “other” revenue sources).

221 And the question of the future of private higher education in the region is much larger, and requires a longer time-span to research into; as Peter Scott notes: are higher education systems in the region “trendsetters” for Europe (providing models for other European systems), or is the significance of private institutions in this part of Europe “a passing phase attributable to the special circumstances surrounding the transition from communist to postcommunist regimes”, a response to particular political circumstances i.e. an “internal phenomenon” (Scott 2007: 309)? No final answers are possible today; both demographics and politics will play their substantial roles in the next decade. The role of demographics is predictable – but the role of politics is certainly not (Kwiek 2012a, Kwiek 2012b).

to avoid the re-monopolization of the system by public institutions in the next decade. Perhaps the dramatically shrinking demand might be accompanied by shrinking supply of vacancies in both sectors rather than ever increasing supply in the public sector only. A continuous increase of vacancies in the public sector, combined with the lack of fees charged to full-time students in it, may lead to the ultimate demise of the private sector, after a quarter of a century of its existence in Poland. Institutional “strategies for survival” (Teixeira and Amaral 2007) no longer suffice. But certainly a thorough, fair assessment of the role of the private sector in the last two decades would be necessary, see Kwiek 2012b for its role in the processes of the deinstitutionalization of the research mission in Polish universities).<sup>222</sup>

The next wave of reforms may lead to the introduction of fees for full time studies in the public sector (the 2008-2011 wave did not introduce

---

222 Major conclusions from Portuguese higher education research about the expansion of private higher education in the last decade fit perfectly the Polish private sector. Major mechanisms of the emergence, growth, and public/private dynamics, seem similar. One argument is about the cheap solution to the expansion issue in its beginnings: “expansion based on private sources has made possible an increase in enrolment rates at minor cost to public finances. As higher education systems have attained levels of enrolment no longer compatible with the financial stringency of public budgets, the private dimension has come to appear as a cheap and effective way of supporting massification and any foreseeable growth in the future” (Teixeira and Amaral 2001: 363). Another argument is about limited intersectoral competition and profit-making motives of the private sector: “the main public institutions ... compete among themselves for the best students, for research funds, and even for academic staff. ... The failure to create a serious rival to public institutions has to be blamed both on the State on the short-term perspective of most private institutions in higher education. In general, these initiatives have been designed for short-term profit making rather than as sound academic and financial projects” (Teixeira and Amaral 2001: 370). Still another argument is about the legal ambience and what we have termed elsewhere “the policy of non-policy” (Kwiek 2008b): “for the new developing private sector, resources have not been scarce because demand has largely exceeded the available provision. This has meant that private institutions could do what they liked: and this they certainly did. However, short-sighted managerial co-ordination in general has prevailed over academic co-ordination. Institutions have preferred to offer low-quality, low-cost product in order to maximize short-term profits instead of aiming at a better product that in the long run would offer them better prospects of survival” (Teixeira and Amaral 2001: 390-391). “Costly or risky activities” were left to public institutions – and this is where academic entrepreneurialism was originating in Poland. For parallel discussions of Polish private higher education, see Kwiek 2012a, Kwiek 2012b, and Kwiek 2012d.

them, despite large-scale and long-term public and academic debates on the subject); demographic processes lead to the inexorable reduction in the number of young people who can undertake studies. The Warwick lesson from its financial management shows that for Polish public and private institutions alike it is crucial in the coming hard times to look outside their walls for financial opportunities and to regard academic units (from a financial, as well as an academic perspective) as if they were small business units. Hard times may lead to new career patterns and reward structures in the systems affected.

### *New income sources and access to public research funds*

The possible new income sources for entrepreneurial universities in Europe include support from other public agencies, support from large business firms, engagement with small- and medium-sized firms, philanthropic foundations, professional associations, university endowment income, university fund-raising from alumni and willing supporters, student tuition and fees for foreign students, fees from graduate students, continuing education students, etc. In various EU countries, these sources are different, but structurally they are not much different from U.S. sources (the most important exception is the crucial share of private foundations and philanthropy in the financing of higher education and research in the United States, which are absent in Europe, see models of use of philanthropy to fund researches in Europe in EC 2008a, and very low or no fees charged to students in the majority of European systems, with a major exception of the UK and Central European systems where part-time or second-track students tend to pay fees).<sup>223</sup>

---

223 One of the major differences between the American system of financing higher education and European systems (almost everywhere, apart from Sweden and the UK) is the existence of financing research through philanthropy in the former, which leads us directly to Shattock's division of funds: "received" vs. "earned". In 2008, the work of the European Commission expert group on the use of philanthropy for research funding was published and its conclusions are not encouraging. The low level of revenues from philanthropic sources in Europe is closely linked to European institutional contexts (high taxes and a tradition of public funding for education and academic research). When the long-term viability of universities, and especially their research activities, becomes more and more a challenge, philanthropy could be one of the additional sources of funding – but its implementation in Europe (including

In the entrepreneurial framework, customers-students of the emergent private sector are more happy to pay what is required and get what they want – than to pay less and get less (see Clarke, Newman, Smith, Vidler and Westmarland 2007, Simmons, Powell and Greener 2009, as well as Molesworth, Scullion and Nixon 2011). Private institutions as providers of services seem to have a better reputation if they do not underprice and undercharge for their services, for example in renting conference centers, sports facilities etc. (which is known as the academic “low price culture” in the UK). This attitude is prevalent in most public, even entrepreneurially-minded, universities in Europe; on the other hand, many private universities charge full recovery costs plus a substantial surplus, both for teaching students and for renting their facilities to outsiders. The Polish case of 328 private universities in 2010, of which less than 10 went bankrupt in the last 15 years, which are aggressively developing their infrastructure and study offers, confirms the absence of the phenomenon of underpricing in the private sector. In Russia, as Shattock stresses, “an extremely important contribution to Russian university entrepreneurialism was the central government’s decision to allow universities to admit fee-paying students” (Shattock 2004a: 31); it is exactly the Polish case, with some differences (such as legal limitations in the number of part-time fee-paying students: up to 50 percent of all non-fee-paying regular students at a given public institution as a whole).

Other sources of new income for Clark’s entrepreneurial universities included earned income from campus operations, academically-driven research activities plus spin-offs and spin-outs (Graham 2009, Wright 2007, Wright, Clarysse, Mustar and Lockett 2007, Zomer, Jongbloed and Enders 2010), and self-financing activities and royalty income from patented and licensed inventions and intellectual property. Incentives for staff and academic units to be entrepreneurial rather than to be traditionalist are crucial – and this is confirmed by numerous examples from European case studies. Incentives do not have to be financial only; they can be reputational (individual distinction), academic career-related and time-related (e.g.

---

Central Europe) is a long way to go. The report points out that all four proposed American models of philanthropy are present in Europe but their range is small (at the one end of the spectrum there is the *Major Gift Model*, and on the other end, there is the *Alumni Model*; the *Foundation Research Model* and the *Multi-mode Model* are in the middle of the spectrum and they include traditional external grants funded by foundations and corporations, see EC 2008a: 53-66).

smaller teaching loads for those successful in research; just like motivations for technology transfer activities can be “puzzle”, “ribbon” or “gold”, or a combination of them, as Lam 2011 shows).<sup>224</sup> Certainly, too heavy top-slicing of additional external income is an inhibitor to entrepreneurialism of both academic units and academics. As Williams and Kitaev highlight, there is a balance between individual’s gains and institution’s gains, both in financial and reputational terms (Williams and Kitaev 2005: 139; reputational gains through research achievements being critical for academic careers, Altbach 2012, Altbach 2007a, Clark 1983a, Clark 1995a).

Thus, in general, the fundamental dimension of an entrepreneurial university – that is, having a diversified funding base studied in this section – does not seem to work at all in the case of the EUEREK private institutions studied. Their abilities (and opportunities) to use the “third source” of income, especially (perhaps most welcome) “research-generated” income, are very limited, as confirmed by detailed statistical data in the relevant case studies (see data for the last 10 years in Shattock 2009a: 13). Their high degree of financial dependence on a single source of income (namely, student fees) makes them easily prone to financial problems (Buckingham University differs in this respect from other private institutions studied and is closer to public universities: while its income from fees in 2004 was 70 percent, its income from research reached a substantial level of 11 percent; for Polish private institutions, the share of income from research in 2010 was merely 2.8 percent, GUS 2011: 342). At the same time, it is critical to note the dependence on fees of public institutions in transition countries as well: from among the EUEREK case study institutions, in Poland fees were between 18 percent of income for Poznań University and 41 percent for Poznań University of Economics, while in Moldova, the structure of funding of public universities make them quite similar to private institutions (and makes the very public/private distinction fundamentally blurred if funding is taken as one of the major characteristics of the distinction): the percentage of income from fees in the three public institutions in Moldova is between 71 and 83 percent. Not

---

224 See comparison of American and European universities (here: Italian) in *The Future of Europe. Reform or Decline* by Alberto Alesina and Francesco Giavazzi: “The difference lies in the structure of incentives. There is no ex ante uncertainty in Italy, and therefore there is no incentive to work hard. In the United States, on the contrary, the ex ante uncertainty is large and so are the incentives. In Italy once you are in you are in forever” (Alesina and Giavazzi 2006: 72). It has not been different in Poland so far.

surprisingly, a high or very high reliance of private institutions on fees is inversely proportional to their reliance on research funds. While they lead the list for the highest percentage of income from fees in both public and private institutions (in 2004, the share for UCH in Spain was 99 percent, for WSHIG in Poland was 94 percent, for Moldova State University was 83 percent, for AESM in Moldova was 77 percent, for Balti in Moldova was 71 percent, for Buckingham in the UK was 70 percent, and for PUE in Poland was 42 percent), they are also lowest on the list for external research income (between 0 and 1 percent for Polish private, Moldavian public and private and all other private case studies except for Buckingham with 11 percent). This income structure determines the mission of institutions studied: teaching, in real rather than declarative terms, is fundamentally more important than research (except for career ladder reasons in the public sector where all promotions are based fully on research achievements, in accordance with traditional account of the academic profession, as in Clark 1983a and Clark 1995a).<sup>225</sup>

In general, private institutions are able to compete for public or private research funds to a very limited degree; being largely teaching-focused institutions (except for the two unique cases of Jönköping and Pereslavl), even if they are legally allowed in national laws to be state-subsidized in research, they are not able in practice to compete for grants-based public research funding with public universities. Separate units in the private sector

---

225 To explain the public intra-sectoral differentiation in the Polish example: the proportion of income by source of income is highly diversified according to the type of public institution. In 2010, in public technical institutions, the proportion of income from teaching was 68.7 percent and from research – 26.2 percent, for universities it was 81.3 percent and 13.9 percent, and for universities of economics – 91.3 percent and 5.1 percent (GUS 2011: 342). Public institutions are much more deeply involved in research activities than private institutions, for which (except for several “semi-elite” institutions) research is a fully side activity, both in terms of academic mission and in terms of institutional funding. The structure of income from teaching activities (rather than from all activities) according to sources of funding shows that the main source of funding in public institutions is from the state budget (72 percent), followed by tuition fees (17.4 percent) and other sources (10.1 percent). In private institutions, the main source of income from teaching activities is tuition fees (86.6 percent). Generally, over 80 percent of all income from teaching goes to public institutions (82.2 percent); also almost all state subsidies (98.1 percent) go to public institutions and additionally, almost a half (48.1 percent) of all income from student fees go to public institutions as well (GUS 2011: 344-347).

are rarely rewarded (or punished) for their entrepreneurialism and rarely act as separate business units, as is often the case with most successful public entrepreneurial universities.

### 6.3. The strengthened steering core

The role of the “strengthened steering core” in entrepreneurialism of the private institutions studied, not surprisingly, is very important. Clark’s “notoriously weak capacity to steer themselves”, exhibited by traditional European universities (Clark 1998a: 5, see also Aghion *et al.* 2008, and Mazza, Quattrone and Riccaboni 2008) is not observable in the private sector studied. There does not seem to be the need for balancing influences across multiple levels of these institutions nor the need to keep a constant balance between particular departments through the intervention of the center. In contrast to public entrepreneurial institutions (and even more, in contrast to the whole public sector in higher education), the role of faculty participation in central councils is severely reduced (here again Buckingham is an exception). But in general, collegial management is non-existent, and relationships between academics on the one hand, and administrators/ management/ founders/ owners on the other hands are very limited. As Clark observed about ambitious universities concerned about their “marginality”, and even “survivability”, they “cannot depend on old habits of weak steering”. They need to become “quicker, more flexible, and especially more focused in reactions to expanding and changing demands”. A strengthened steering core is a necessity – and it is prevalent in the private sector. It is also becoming widespread in various parts of public higher education across Europe (as a consequence of the spread of the New Public Management ideas and public sector reforms, see conceptualization by Jan-Erik Lane, Lane 1990, Lane 1997, Lane 2000, and Ferlie, Musselin and Andresani 2009).

The university center is constantly dealing with risk, the management and understanding of which is crucial; and the risk, to be managed on a daily basis, is the financial one (as the rector in the Russian case study of the University of Pereslavl put it, “the university constantly encounters difficulties securing basic daily needs ... which demoralises staff and distracts it from its mission”, EUEREK case studies: Pereslavl, Russia, 17). The role of obtaining resources (through retaining or increasing the number

of students) seems more important than the role of building prestige or reputation for the private institutions studied. In terms of management structures, as in public entrepreneurially-minded universities, private institutions have powerful centers, strong management groups, usually comprising only a few administrators. In decision-making, the role of collegial bodies seems, in most cases, marginal (most often, even if they nominally exist, only their formal approval of decisions taken by top administrators is sought). Most private institutions do not use resource allocation procedures to make strategic choices about their future direction. Also no major impact of what Clark termed “new bureaucracy” is reported: both the number, and the role, of development officers, technology transfer officers, grant managers, fundraising officers, etc. is small. The role of strategic committees, so fundamental for managing public entrepreneurial universities studied (especially at Warwick and Nottingham), seems also minimal. In transition countries, a unique feature is that the management in the private sector is dealing, to a large extent, with academics who are also working (in a parallel manner, “moonlighting”) in the public sector (and the Russian case of the small, regional, and private University of Pereslavl is a counter-example to this trend as most academics working there are full-time professors – but this institution was born out of a former state-funded think tank of the Russian Academy of Sciences). Consequently, the fusion of managerial and academic values is both more and, at the same time, less feasible: more, because academics bring with them the traditional collegial attitudes prevalent in public institutions where they keep being employed; and less, because most of them come to the private sector not for research- or teaching-related satisfaction – but for largely financial reasons, and they can quit their additional private posts at any time. The management structures are nominally three-level arrangements (center – faculties – departments) but in practice they tend to be flat (center – departments, as at Buckingham), and in smaller institutions, even center – academics, with no intermediaries such as faculties or departments (WSHIG in Poland).

### *Simplified governance and management structures*

In small private institutions, which have sometimes appeared virtually out of nowhere (Kwiek 2011b), with no international investments or public subsidies involved, and which in their first years of operation had been constantly in danger of a financial collapse (WSHIG in Poznań being a

perfect example), both governance and management structures and procedures may be often simplified to the extreme. The “culture of financial survival”, as reported in Spain, Russia, Moldova, and Poland, has been very strong in these institutions. The implications of the culture still unknown in European public sectors for management styles and institutional managerial practices are significant: most often, decisions are taken by a small group of managers (often by one to five people), there is almost no spirit of collegiality and all major (and sometimes even most minor) decisions are actually taken by rectors/owners/founders (often the same person);<sup>226</sup> sometimes, as reported in the Russian case of Pereslavl, some collegiality is still reported, combined with what its rector calls:

The overall management ineffectiveness ... in its purest sense, to connote weakness in organization of university activities. The development of effectively operating offices is in process, while ill-prepared documents, inability to effectively process data and chaotic scheduling still chronically undermines the effectiveness of university management (EUEREK case studies: Pereslavl, Russia).

These simplified management structures in most institutions studied seem to be possible only in relatively small institutions, with limited or no research ambitions and which are relatively non-competitive work places for their staff. With research funding becoming ever more competitive across European systems (Geuna 1999a, Geuna 2001, Geuna, Salter and Steinmueller 2003, CHEPS 2010b), there are virtually no research funds practically available to these institutions (either from private and public sources), and consequently most academic decisions are relatively non-controversial and teaching-related. There is no need to ease tensions prevalent in research-oriented institutions where the procedures of top-slicing the profits of most successful academic units need to be constantly negotiated, through senates or central strategic committees. As the Polish case of WSHIG shows:

The Academy has a very stable organizational and management structure: the founder and the owner (Professor Roman Dawid Tauber) has been its rector in the whole period. All key decisions concerning WSHIG are taken by the rector.

---

226 Most private institutions in Central Europe in this respect (despite their *non-profit* character) resemble the American *for-profit* type institutions (which, of course, have nothing in common with private universities such as Harvard, Stanford or Columbia). See friendly analyses of the sector by William G. Tierney and Guilbert C. Hentschke in *New Players, Different Games* (2007).

There is no Senate as the Academy is too small – but key academic decisions are confirmed by WSHIG's Scientific Board, meeting 3-4 times a year. ... The management team is small and very effective; it comprises rector and the three vice-rectors. All senior administrative staff, including vice-rectors, has been working for WSHIG for a decade or more. The key for the success of WSHIG is the loyalty of its staff, both administrative and academic. ... In a small-size academic institution like WSHIG it is still possible for its rector to make all major decisions; and to make many minor decisions (EUEREK case studies: WSHIG, Poland).

The role of strong core administrators – accompanied by strong strategic committees – is emphasized in many EUEREK (and other) case studies of European universities. Managing structures and decision-making processes at a small private university (University of Buckingham) are substantially different from those at bigger institutions (such as Warwick and Nottingham Universities in the UK or Twente University in the Netherlands). For example, each of the three schools at Buckingham is treated as a separate business division, and each is responsible for maximizing its financial returns (derived largely from teaching). The decision-making process at Buckingham is quick but there is also considerable space for collegiality – which makes it different from other private institutions studies: as the director of finance puts it:

Buckingham has three academic Schools, and we look at them as three business divisions. Each is responsible for making the maximum financial return and growing their business. “The decision-making process at the University is quick and comprises five people: the VC, his deputy and the three Deans. We meet every week for two to three hours, so we do make good progress and good academic decisions in that sense. We get on very well (EUEREK case studies: University of Buckingham, the UK).

Academic entrepreneurialism, as discussed in the preceding chapter, involves risk-taking (Shattock 2003; Williams 2007: 19); in most of the EUEREK case studies of private institutions, institutions have to deal with a high level of risks on a daily basis. The major risk is a financial one, related to student number figures (and student fees). But as Shattock points out, in universities “risks may be academic or reputational as well as financial” (Shattock 2005: 19). The Polish case study of a small-sized, vocationally-oriented private institution (WSHIG – Academy of Hotel Management and Catering Industry in Poznań) stresses the risk factor:

WSHIG has been operating under constant risk in recent years. The major risk has been financial – will the income from student fees cover the expenditures,

especially debt installments to the banks. WSHIG has been investing heavily in its infrastructure. As other private institutions, only from its own sources, with no state subsidies. WSHIG's rector was doing wonders to be able to pay back the bank loans in time (also using his private assets). The second risk has been student enrolments (EUERЕК case studies: WSHIG, Poland).

At Buckingham, in a similar vein, what is meant by risk is exactly the financial risk:

The most important risk to the University is financial. With a small research portfolio, academic risk is restricted to the student take up of degree programmes. In that sense the University is operating on a knife edge of risk (EUERЕК case studies: University of Buckingham, the UK).

There are also other forms of risks: competition in the areas of studies with tax-based public institutions; changing state regulations, and prestige (and reputation, difficult to gain, and easy to lose). As reported in Russia, the most important risk at Pereslavl is the possible future shortage of qualified professors, followed by the possibility of losing existing public funding for its research center run by the Russian Academy of Sciences (the university itself as a whole lost its public funding in 2001). As the case study highlights, "the university is in constant talks with the local administration and enterprises for extra funding but their support normally comes in kind" (EUERЕК case studies: Pereslavl). Finally, the risk for both public and private institutions can also refer directly to annual national league tables published in influential magazines and their impact on new student intakes.

## **6.4. The extended developmental periphery**

The third element of entrepreneurial universities in Clark's formulation is their extended developmental periphery, that is units that "more readily than traditional academic departments reach across university boundaries to link up with outside organizations and groups" (Clark 1998a: 6). The presence of this element seems quite limited in scope and importance at most traditional universities. In the private sector studied, academic peripheries also play a very limited role: most case studies do not mention their existence at all.

### *Change agents supporting new academic and new administrative units*

In entrepreneurial universities generally, there emerge an increasing number of operating units that are not traditional, discipline-centered departments. These units particularly take the form of interdisciplinary and transdisciplinary research centers focused on a wide range of societal problems. The extended periphery can also be units of teaching outreach, under such labels as continuing education, lifelong education, distance education, and professional development (peripheries consist of a combination of academics and administrators, contributing further to what Gordon and Whitchurch 2010 termed an increasingly “diversifying workforce” in academia). These research and teaching instruments cross old university boundaries to bring in new students and new kinds of research. Clark (2004a) suggests that such base units have natural allies in the steering core – among agents of change located in the center. These new entrepreneurial units may fundamentally change the character of the university, adding new dimensions to traditional (departments – faculties – the center) or newer, flatter structures (departments and the center). They require different management styles as they are often non-permanent, contract-funded units, staffed by non-tenured contracted academics. These styles are more flexible and relationships between the center and peripheral units become much less formal and less bureaucratic – one of the reasons is that these units at the peripheries are often where external research funds are being invested.

The crucial role of these new research centers is overwhelming – and universally reported.<sup>227</sup> Research centers increasingly attract more outside

---

227 Not surprisingly, a considerable proportion of centers for higher education research in Europe could be classified as academic peripheries: often located between faculties of social sciences, education, and economics; financially unstable and funded through competitive (often European-level) research grants, with non-tenured, contracted staff funded via projects and working on their PhD dissertations; often with disciplinary problems in terms of academic promotion etc. As Patricia Gumport gloomily notes in an American context (2012: 18-19), “for all its promise, the study of organizations faces the same challenges as our larger field for the precarious position of higher education research and researchers in today’s academy. Stated simply and starkly, neither the scholarly nor practical legitimacy of higher education research is assured. ... the limited reach of our field beyond our own community remind us that we need to reconsider our intended goals and audiences – not only in writing up our research but

funding in the form of competitive grants and research contracts. Their existence confirms a dual structure of most entrepreneurial institutions: traditional academic departments (and traditional disciplines of teaching and research) and transdisciplinary and non-traditional research centers (and transdisciplinary research; sometimes teaching – but then mostly postgraduate programs and short courses). These academic peripheries can come under the structure of departments, or be accountable directly to the center (as is the case in Poland where most new research centers are accountable academically and financially directly to vice-rectors for research, avoiding hierarchies of departments and faculties, and deans and heads of departments, as reported for example in the AMU case study about AMU research centers).

The new peripheries take two basic forms: a) new administrative offices, and b) new academic units. The appearance of new specialized administrative offices is closely related to new tasks being undertaken and unknown to the institution in its traditional structures and funding opportunities. New peripheries are focused on Clark's third stream of funding – that is, in fact, on any non-basic sources – state and non-state (regardless of the level of their separation – governmental, ministerial or regional and local). And they are also focused on the second stream of funding, that is, on competitively acquired funding, mostly through state grants for research.<sup>228</sup> New offices (and posts) include: grants and contracts

---

also in terms of the questions we consider worthy of study and how we frame them". Gone are the times when "we had permission to explore ideas that were illuminating. Instead of having to take problems from practice, we were encouraged to identify problems that were just plain interesting" (Gumport 2012: 23). So to speak, *de nobis fabula narratur*, also in the case of the present book, as well as several previous ones... See in particular in this context such foundational books about the academic and disciplinary status of higher education research as Sadlak and Altbach 1997, Schwarz and Teichler 2000a, Teichler and Sadlak 2000, and Begg 2003, all related to the issues of higher education research and practice, its relationship to policy and practice, its institutional basis, and its social legitimacy.

228 In systems increasingly based on competition, there is an increasing concentration of resources in ever fewer number of top research institutions. The race for external funding includes only research universities which are often choosing in their institutional strategies specific fields of science in which they excel. In those selected fields, they can count on achieving excellence (for any university, choosing certain strategic areas always means not choosing other areas; on a national plane, see *Initiative for Excellence in Germany, Centre of Excellence Programme in Japan, 21st*

office; research and innovation offices, various offices related to new academic programs, such as “entrepreneurship support programs”, as described below. Other new units mentioned by Clark (2004a: 86) include the office of industrial relations, the alumni offices, the retail services office, the conference and special events office, the continuing education office, and the capital projects office. They all make sense at entrepreneurial universities where they are closely related to the third stream of university funding discussed above. Clark calls them “new bureaucrats of change” – who increasingly replace old traditional civil servants in transforming public universities (“just as there are seemingly no limits to the possibilities of extra sources of income, there is virtually no limit on the addition of bureaucratic units and hence on the constant need to reorder and concentrate them”, as Clark 2004a argues). New funding opportunities contribute to the emergence of new peripheral supporting units. The academic structure as reported by case studies on entrepreneurial universities is changing substantially owing to these new peripheries, both academic and administrative. New boundary-spanning academic units (research centers and institutes) link themselves much more easily to the outside world (and outside funding) – as often opposed to the traditional, disciplinary-centered departments. The relationships between academic peripheries and their environments tend to be easier for a combination of administrative, financial, and (institutional) culture-related reasons.

To sum up this section: the role of extended developmental peripheries in the private institutions studied is marginal. New transdisciplinary research centers are sometimes reported to exist but they do not change the character of these institutions and their (rare as it is) existence does not lead to the introduction of new management styles or new internal resource allocation procedures. They do not form – as is the case in the entrepreneurial part of the public sector – parallel, increasingly powerful, both administratively and financially, university structures. They do not seem to attract new sources of funding and they are not engaged in an aggressive search for new research areas, as is often the case in the entrepreneurial parts of the public sector. Also the role of new administrative units, so crucial to public entrepreneurial institutions studied, by comparison, is marginal. Most new posts and new

---

*Century Competitiveness Act* in the USA or recent KNOWs (National Leading Research Centers) initiative in Poland, started in 2012. The prize for winning the competitive race is significant in terms of both funding and academic prestige.

units in the public sector are related to new opportunities for research funding, or the exploitation of research results, innovation, or international and off-campus teaching, or royalty rights. In the private institutions studied, the need for these units is still very small and it is difficult to say whether it will increase in the near future – considering that they are associated primarily with funding for research that in private universities in Europe is generally conducted on a small scale (or at a very mediocre level). Thus, it is extremely difficult to obtain additional funding through competition with specialized units of the most entrepreneurial public universities (in these systems, where it is legally allowed to do so in the private sector).

The balance of power in management in the private sector is not changed by new peripheral research (or teaching) units. There are few academics employed through research grants, without teaching-based employment contracts, and there is no need to have bridging policies ready for this staff category (for the periods when they have no research grants but keep working on grant proposals). They do not have major (or in most cases – they do not have any) problems with managing intellectual property issues or research-based consultancies. There do not seem to exist clear research targets and funding for particular units does not seem to be based on meeting the targets, or bringing additional research-related revenue (or, alternatively, research-related prestige) to the institution. Consequently, at the moment, the extended developmental periphery seems almost absent from the picture of the private sector in Europe, at least as analyzed through the empirical material available in the EUEREK case studies.

## **6.5. The stimulated academic heartland**

The fourth element of Clark's entrepreneurial universities recognizes that strong universities are built on strong academic departments. The acceptance of change by departments is critical in the change process. As Clark (1998a: 7) argues, "for change to take hold, one department and faculty after another needs itself to become an entrepreneurial unit, reaching more strongly to the outside with new programs and relationships and promoting third-stream income". Entrepreneurial universities become based on entrepreneurial departments. Research centers and institutes proliferate and may change the balance of power at an institution – they have most often many more opportunities for outside funding, and are directly related to the university

management center (also owing to their successes in attracting funding; this proximity to the center, as reported by case studies, is often informal). But apart from academic peripheries, traditional departments do count, and this is where most teaching and research is reported to be taking place and this is where the vast majority of public funding is going.

### *Knowledge transfer and knowledge exploitation*

The issues of developing new knowledge from entrepreneurial activities, of the dissemination of new knowledge and knowledge exploitation and technology transfer mechanisms look quite similar in most of the private institution case studies. Except for the Swedish case of Jönköping (which uses the same funding as public Swedish universities, and which was created by changing the legal status of a university which previously was state-owned), none of the private institutions have science parks or statistically significant (either public or private) research funds. Interviewees in these institutions mention teaching, seminars and textbooks as their contribution to knowledge transfer. There is no major difference in this context between WSHIG in Poland, UCH in Spain or the TCUM university in Moldova: they are mostly teaching institutions, with a strong vocational component of studies. In the Russian case, the strong research inclination of the Pereslavl faculty are emphasized, following its origins in the fundamental research of the local branch of the Russian Academy of Sciences. As the Polish case study argues about the role of research and teaching:

WSHIG is a special case of a fully professionally-oriented educational institution. Being both a private institution, and an almost completely teaching (as opposed to teaching and research) institution, WSHIG does not intend – by its mission – to develop or disseminate new knowledge or intend to get involved in knowledge transfer. ... If any knowledge transfer could be mentioned, it would be the knowledge provided through short-term courses to professionals already working in the areas of studies represented by WSHIG. The role of research at WSHIG, both according to its mission and in practice, is marginal. But nevertheless WSHIG has published a few dozens books and collective volumes in its areas of its interest. As a vocationally-oriented teaching institution, WSHIG does not see the reason to get involved in research not related to its major areas (EUEREK case studies: WSHIG, Poland, 12).

Consequently, the private institutions studied tend not have a strong “academic heartland” as they are predominantly teaching-focused.

In more general terms, and with respect to the public sector, entrepreneurialism is reported not to belong to a few academic disciplines – it has come to characterize virtually all academic fields (and such universities as Twente and Warwick are best examples here, even though they represent two extreme poles in management structures: decentralization and centralization). The following features from academic departments are reported to reveal their growing entrepreneurialism (the Warwick case): the melding of periphery into the core; the intensive building of research centers under the auspices of departments; the construction of a university-wide graduate school; and the introduction of an imaginative and highly attractive research fellowship scheme (Clark 1998a: 27).

### *Entrepreneurialism across academic units*

Both Clark's case studies (from Clark 1998a and Clark 2004a) and other European case studies of entrepreneurial universities show that there is uneven spread of entrepreneurialism within an institution, with various rates of change, most often depending on external opportunities. While in Western Europe and the USA, apparently the most enterprising parts of traditional academia ("academic heartland") are in the science and technology areas, in most transition countries, as confirmed by the case studies available, the most entrepreneurially minded units, departments and institutions, as well as academics, are those in "soft" areas. These are areas in which the largest part of private sector institutions operate, and in which public sector runs its most enterprising study programs for fee-paying part-time students. Also the availability of research grants, including international research grants, in these areas until recently seemed considerable, compared with "hard" areas. In transition economies, "soft" disciplines, including especially economics and business and social sciences, tended to be more easily externally fundable ("hard" disciplines having a much more secure funding base from recurrent core public funding), and consequently tended to be more powerful agents of entrepreneurial changes in academic institutions (with one reservation, though: academic entrepreneurialism in "soft" disciplines is fundamentally teaching-related, while academic entrepreneurialism in "entrepreneurial islands" in "hard" disciplines is clearly research-related, and therefore closer to the traditional sense of the term as derived from Clark).

In the private institutions studied a variety of modes of studies are available (full-time, part-time, weekends); despite, at least in some countries, the institutional flexibility in opening new programs wherever useful, there seems to have been a relatively stable study offer over the last 10 years, despite the frequently publicly expressed need to expand their institutional profiles. No major changes in governance and organizational structures in the last 10 years were reported in the majority of the institutions studied. The institutions provide wide opportunities for on-the-job-training and for work experience for a large proportion of their students (especially in Poland, the UK, Russia, and Spain). There are often people with high professional prestige (non-academics) among their part-time staff. The feeling of being disadvantaged compared to public institutions is often reported in interviews (especially with respect to access to research funding). They have a record of appointing their own graduates to staff or faculty positions. Institutions are most often ineligible for public funding: Poland (ineligible for teaching and research subsidies, eligible for research grants schemes), UK (ineligible for teaching subsidies), Russia (both for teaching and research), and Spain (for teaching). Jönköping University is again exceptional in being eligible for public funds both for its teaching and research activities. Often the eligibility for public research grants in theory does not mean that research grants are awarded to private institutions in practice because of losing out in competition with elite public research universities.

## **6.6. The institution-wide, integrated entrepreneurial culture**

### *Culture and change*

The last element of the entrepreneurial university within Clark's analytical framework is the "entrepreneurial culture". "Enterprising universities ... develop a work culture that embraces change", as Clark argues (1998a: 7). Organizational culture, seen as the realm of ideas, beliefs, and asserted values, is the symbolic side of the material components featured in the first four elements, Clark claims. It may start as a (relatively simple) institutional idea which is later elaborated into a set of beliefs, and finally becomes the culture of the institution (the role of norms, values and beliefs in

transformations of universities has been stressed throughout the last three decades by normative institutionalism in organizational theory, especially as developed by James G. March and Johan P. Olsen, see Brunsson and Olsen 1998a, March and Olsen 1989, March and Olsen 1995, Cohen and March 1986, Egberg and Læg Reid 1999, March and Olsen 2006a, March and Olsen 2006b, Maassen and Olsen 2007, Olsen 2007 – for whom institutions, including universities, are collections of rules and practices).<sup>229</sup>

It is very hard to develop research-based entrepreneurialism in non-research intensive universities, for many reasons, including those related to academic infrastructure and those related directly to academic culture. As Shattock (2009b: 41) notes,

In research-intensive universities, research is driven by organizational culture and by internal competition and is facilitated by external reputation. Research-intensive universities have a research infrastructure that speeds up research outcomes and attracts large numbers of doctoral students and research manpower that can be deployed to create research teams. ... These advantages are not so likely to be available at non-research-intensive universities, thereby making it more difficult for individual academics to get research off the ground and to sustain it. Another inhibition may be the constraints, financial and otherwise, imposed in non-research-active academic departments on individuals who want to be “intrapreneurs” but who need support outside the usual conventions or regulations to progress their projects. Such individuals may want to engage in a mix of activities – research, consultancy, and short courses – which do not fit into standard financial arrangements and which appear to conflict with bureaucratic procedures.

Entrepreneurial culture is a crucial component for entrepreneurial transformations, the first four elements being merely the means. Also in research on entrepreneurship in a broad sense – not only in the sense of “academic entrepreneurialism” – the role of “enterprise culture” or “positive entrepreneurial climate” is crucial, alongside two other important factors – favorable regulatory conditions and well-designed government programs:

---

229 As Olsen (2007: 27) defines an institution, it is “a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances”. See Maassen and Olsen 2007, Olsen and Maassen 2007, and Kwiek 2012a for the application to the Polish case: from the deinstitutionalization to the reinstitutionalization of the research mission in Polish universities in the 1990-2010 period.

Entrepreneurship is the result of three dimensions working together: conducive framework conditions, well-designed government programmes and supportive cultural attitudes. ... Supportive cultural attitudes also complement framework conditions. For instance, other things being equal, an environment in which entrepreneurship is esteemed, and in which stigma does not attach to business failure resulting from reasonable risk-taking, will almost certainly be conducive to entrepreneurship (OECD 1998a: 12-13).

High levels of entrepreneurial activity are often ascribed to “cultural attributes”: a near unanimous view held by analysts of entrepreneurship is that “culture plays a critical role in determining the level of entrepreneurship. It is also a common view among practitioners and analysts dealing with entrepreneurship that cultural factors are important” (OECD 1998a: 50). What happens when institutional culture is not favorable to academic entrepreneurialism, or legal frameworks are too restrictive, or university traditions do not encourage entrepreneurialism? Mora and Vieira (2009: 98-99), based on EUERЕК case studies, highlight two responses on the part of universities which they term entrepreneurialism “through satellites” and entrepreneurialism “through individuals”. The former refers to universities which do not change their core but create satellites around it (and the Technical University of Valencia is a good example); the latter refers to entrepreneurialism at the level of academics and small research units they create.

### *Self-defining ideas in reform processes*

In the case studies analyzed, there were several founding ideas (or “innovative self-defining ideas”, Clark 1996: 53-54) which subsequently led to the development of institution-wide entrepreneurial cultures.<sup>230</sup> Examples include “the earned income” idea as conceived at the University of Warwick after the Thatcher financial cuts over 20 years ago (conceptualized in particular by Michael Shattock, its registrar at that time). Another example

---

230 As Clark (1996: 54) explains the role of innovative self-defining ideas in reform processes, “at the level of visions or ideas, we can speak of deliberately constructing a ‘climate for change’, or of generating ‘aspirations beyond current capability’, or of stimulating ‘enthusiasm for change’, or of creating a change-oriented ‘mythology’. ... My choice ... is to conceptualize change-oriented purpose as an innovative self-referring idea – an idea of the institution offering a distinctive self that is change-oriented. The idea is a claim upon distinction”.

are the ideas of “the valorization of research results” which originated at first in an unclear form more than twenty years ago at Twente University in Enschede in the Netherlands, when its rector was Frans van Vught. Such a founding idea was also the idea of the institutional commitment to “innovation” going back to the 1980s at the Chalmers University of Technology in Sweden (and its decision to opt-out of the Swedish state system in 1994). Another examples are the idea of following “Northern issues” at Lapland University in Finland, at a typical regional university located in the far north of the country, as reported in the University of Lapland EUERЕК case study and the idea of rejecting state funds (and state bureaucracy) at the foundation of Buckingham University in the seventies in England. Sometimes the emergent culture stems from individual visions, as reported in many institutions in transitions countries. The importance of sharing a vision for an institution is reported in case studies available as very important. The role of sharing a vision is confirmed at LSHTM at London University:

The School does not have the money-making entrepreneurialism, but the School is very academically entrepreneurial in constantly looking for new sources of funding and keeping that going. Many people in this School are very altruistic, they are interested in the School’s mission, improvement of health worldwide. They really believe in it, that’s what motivates them. You have to be creative and inventive to be able to do that, you have to keep your research and funding going. If that is entrepreneurialism, then we are good at that (EUERЕК case studies: LSHTM, the UK).

The role of a vision of creative, often charismatic individuals in transforming public universities (examples of University of Warwick and Twente University), or in the creation of private universities (example of WSHIG), is fundamental. This new culture of entrepreneurialism is also usually accompanied by a strong regional dimension (in England, Sweden, Finland and the Netherlands) which becomes as important as traditional teaching and research dimensions (and becomes part of a variety of so-called third missions of the university or an important component of “third mission activities”, as discussed in more detail in Chapter 4).

But also often in the case study institutions there was uncertainty about labeling them “entrepreneurial” as a whole; ongoing transformation processes were being reported, with some units and some individuals being more entrepreneurial than others. As a case study of Lund University in Sweden points out,

Few of our informants claim that Lund University as a whole is characterized by an entrepreneurial culture. Equally few say, with conviction, that the university by no means could be considered as entrepreneurial. Instead, most of our interview persons say that there has been a marked shift toward encouraging and supporting entrepreneurial activities at the university and point out some units and some individuals that could be labeled as particularly entrepreneurial. The many mechanisms created by the university, supporting entrepreneurship and innovation, are an indication of an ongoing transformation process. However, a culture resting on old traditions with a focus on academic excellence has its own incentives and rewards, not always with the same goals as those that characterize enterprises. It is a question of mind-set, according to several interviewees (EUEREK case studies: Lund University, Sweden).

## 6.7. Conclusions

Let us summarize the conclusions about the academic entrepreneurialism of private higher education institutions point by point (according to the conceptual scheme proposed by Burton Clark):

1. The case study private institutions generally view themselves as less entrepreneurial than public ones. Their access to research funds (especially public) – which most often determines the appearance of the entrepreneurial culture in public universities – is very limited. But they are often very successful teaching institutions. Their major concern is to survive financially as they are heavily dependent on student fees and they may experience heavy fluctuations in enrollments. Their mission and strategy are self-determined rather than influenced by state policies;<sup>231</sup> and it is usually difficult to embark on institutional transformations. No major relationships between changes in governance and organizational structures and the emergence of the entrepreneurial behavior were reported. The major sources of non-core/non-state funding in almost all cases are student fees; no major changes in income structures were reported in recent years (Buckingham is exceptional here because of its higher level of research funding, and recent

---

231 Examples of such state policy influence could be the introduction of tuition fees in the public sector and the idea of state contracts for teaching in both sectors, both under public consideration currently in Poland – which we understand as an indirect attempt to rescue the private sector in the face of the worsening demographic situation. The later example represents an exaggerated belief in the possibility of central planning of supply and demand for graduates, not practiced in mature higher education systems in Europe (see Kwiek and Arnholt 2010).

focus on third mission activities). No major academic risks associated with research (such as frontier research, known from the best public sector institutions) are being taken by staff and institutions, but often financial risks are taken by institutions. Compared with the public sector, few examples of the development of new knowledge from entrepreneurial activities are reported; it is also quite difficult to change them as institutions – hardened institutional structures can last for years in almost unchanged forms. Apart from teaching, few examples of other major kinds of dissemination of knowledge are reported. Also only a limited number of mechanisms of knowledge transfer/knowledge exploitation are reported. Generally, there is a non-supportive climate for developing knowledge exploitation (additionally, they are mostly teaching institutions). There is competition with other institutions mostly for students (and for their fees) and not in research. Financial incentives or award systems for staff are generally marginal. Inhibitors to entrepreneurialism have clearly national dimensions (different history and tradition, reasons to found an institution, national funding regimes and national laws on higher education).

2. In general, diversified funding bases do not seem to work for the private institutions studied. Their abilities (and opportunities) to use the “third source” of income, especially (perhaps most welcome) “university-generated” income, are very limited (and these characteristics bring them close to public institutions in transition countries). Their high degree of financial dependence on a single source of income (namely, student fees) makes them easily prone to financial problems. In general, they are able to compete for public or private research funds in a very limited degree; being largely teaching institutions, they are not able in practice to compete with top public universities where national and international research funds are being increasingly concentrated. Separate academic units are rarely rewarded (or punished) for their entrepreneurialism and rarely act as separate business units, as is often the case with most successful public entrepreneurial universities. They do not seem to have incentive policies to support their staff in seeking non-core source of income – income other than student fees. They do not have access to government funds – but also most often do not have access to government agencies as sources of third-stream income or to private organized sources (such as business firms, philanthropic foundations etc.), and do not use policies to support university-generated income. The share of their income from alumni fundraising, research contracts, patents, endowments or earned income from

campus operations is negligible, in most cases not even marginal. There is no mutual feeding and encouragement between various types of non-core sources of income. There is also no major need to keep complicated resource allocation formulas in funding particular departments, or the need to keep a fair balance between the center and the basic units through elaborate top-slicing and cross-subsidizing techniques. In the context of a diversified funding base, if entrepreneurialism is to be taken seriously in the private sector, the non-core income would be the income from any other sources than student fees, leading to a lower dependence on this currently single most important source (in the studied cases, such dependence often exceeds 90-95 percent of revenues).

3. The role of the “strengthened steering core” in entrepreneurialism in private institutions is significant but there does not seem to be the need for balancing influences across multiple levels of these institutions and there does not seem to be the need to keep a constant balance between particular departments through the intervention of the center. In contrast to public entrepreneurial institutions, the role of faculty participation in central councils is severely reduced. Collegial management is rare, and links between academics and administrators/ management/ founders/ owners are limited. The center is constantly dealing with risk, the management and understanding of which is crucial; and the risk, to be managed on a daily basis, is the financial one. The role of attracting resources (through retaining or increasing the number of students) seems more important than the role of building reputation for the private institutions studied. In terms of management structures, as in public entrepreneurial universities, private institutions have powerful centers, strong management groups, usually comprising a small group of administrators. In decision-making, the role of collegial bodies seems, in most cases, marginal. Most private institutions do not use resource allocation procedures to make strategic choices about their future direction. Also no major impact of a “new bureaucracy” is reported: both the number, and the role, of development officers, technology transfer experts, special staff managers, fundraising officers, is small. The role of strategic committees, so fundamental for managing entrepreneurial universities seems minimal. In transition countries, a unique feature is that management in the private sector is concerned, to a large extent, with academics working (in a parallel manner) in the public sector. The management structures are nominally three-level arrangements (center – faculties – departments) but in practice they often seem to be flat (center –

departments), and in smaller institutions, even center – academics, with no intermediaries.

4. The role of “extended developmental peripheries” in the EUEREK private institutions studied is marginal; new transdisciplinary research centers are sometimes reported but they do not change the character of these institutions, and their existence does not lead to introducing new management styles or new internal resource allocation procedures. They do not form parallel, increasingly powerful university structures. They do not seem to attract new sources of funding and are not engaged in aggressively searching for new research areas. Also the role of new administrative units, so crucial to public entrepreneurial institutions studied, by comparison, is marginal. Most new posts and new units in the public sector are related to new opportunities for research funding, or the exploitation of research results, innovation, or international off-campus teaching, or royalty rights etc. In the private institutions studied, the need for these units is still very small. The balance of power in management is not changed by new peripheral research (or teaching) units. There are few people employed through research grants, without employment contracts, and there is no need to have bridging policies to let academics be funded in periods between subsequent grant agreements (as, for example, at LSHTM) ready for this staff category. They do not have major (or in most case – any) problems with managing intellectual property issues or consultancies. There do not seem to be clear research targets and funding for particular units does not seem to be based on meeting the targets, or bringing additional research-related revenue to the institution. Consequently, at the moment, the extended developmental periphery seems almost absent from the picture of the private sector in Europe, at least as studied in the EUEREK case studies.

5. Almost all private institutions studied are involved only marginally in research. Competition with public institutions, in the context of the general lack of access (in theory or in practice, or both) to public research funds, means competition for students and their fees. The second factor relevant for the mission and strategy of the private institutions studied is the uncertainty about student enrolments – as enrollments may be going down or be fluctuating. What is reported in public institutions: despite internal competition, entrepreneurial universities report a high degree of internal cooperation, especially in grant applications, does not seem to work in private institutions. Because the access to research funds is very limited, so is both internal and external competition. Cooperation seems to concern

teaching rather than any other activities. The role of competition at public entrepreneurial universities is widely reported to be crucial. The competition is mostly for research funds, especially external sources of income. The overall effect of growing competition in sciences and the humanities alike is reported in case studies as extremely positive, even though the picture of universities most successful in this competition differs substantially from that of traditional, non-competitive academic institutions. There is a strong implication coming from the vast majority of case studies that without competition for funds, entrepreneurial universities would not become entrepreneurial, even though they could be top in their respective disciplines and excellent in research and teaching. Private institutions do not take part in this race for external funding. Paradoxically, the culture of competition (and cooperation), usually with the strong market, financial and prestige foundations increasingly dominant in Western European public institutions, is alien to private institutions.

6. Finally, the use of the concept of “academic entrepreneurialism” for the studies of private institutions requires further adaptations. In the case studies analyzed, out of (Clark’s) five constitutive elements of the entrepreneurial university, two (or three) could be confirmed to exist: the strengthened steering core, the integrated entrepreneurial culture (and perhaps, in some cases only, the stimulated academic heartland). No diversified funding seems to be reported, and no extended peripheries seem to be observed. Further conceptual analyses, and corresponding case studies of private institutions in other countries, would be useful for further clarifications. Theoretical and empirical work on the broader concept of the “public-private dynamics” in European higher education could open new interesting possibilities. This dynamics would include at once – for both sectors – issues of academic entrepreneurialism and cost-sharing, and could refer to far more diversified educational systems of Europe than those studied. These studies would be especially interesting in the future if several conditions have been met: if the share of tuition fees in revenues of European systems has become radically increased; or if the participation rate in the private sector in Western European systems has grown to levels known in Europe currently only in Central European systems; or, finally, if the private sector has been able to dramatically increase its research output, marginal at the moment. None of these conditions, and especially the first two ones, can be ruled out in the perspective of the next decade.



## Chapter 7

# **Diversified Channels of Knowledge Exchange in European Universities: Major Parameters of University-Enterprise Partnerships**

### **7.1. Introduction**

The present chapter focuses on knowledge exchange in European universities as viewed through the lenses of university-enterprise partnerships.<sup>232</sup> It presents research findings of a large-scale comparative European research project funded by the European Commission which focused on university-enterprise partnerships (called hereafter partnerships) in six European countries: Germany, Italy, Spain, the United Kingdom, the Netherlands, and Poland. The analysis of empirical material on partnerships is performed at three distinct levels: six national case studies, eighteen institutional case studies, and ten partnership case studies, with different units of analysis: countries, individual academic institutions, and individual institutional partnerships. (a full list is given at the end of the Chapter).

#### *The structure of the chapter*

The structure of the chapter is as follows. Following this introductory section, the analytical framework is presented in section two. Then the

---

232 This chapter is based on both theoretical and empirical work done within an EU-funded comparative research project GOODUEP, *Good Practices in University-Enterprise Partnerships* (2007-2009), coordinated by José-Ginés Mora of CEGES (Technical University of Valencia). The partners in the project included: José-Ginés Mora, Jose-Miguel Carot, Andrea Detmer, Maria José Vieira, Debra Payne Chaparro (Spain), Ulrich Teichler and Christian Schneijderberg (Germany), Stefano Boffo, Libera Picchianti, and Frank Heins (Italy), Paul Temple and Michael Shattock (the United Kingdom), Ben Jongbloed and Maarja Beerkens (the Netherlands) and Marek Kwiek (Poland), as well as Guy Haug as an external expert. I wish to express my gratitude to all colleagues involved in this project; all mistakes and limitations are my sole responsibility.

chapter explores the following three major partnership parameters: in section three, the role of individuals (academics/administrators) in establishing and running successful partnerships; in section four, the role of public authorities, public subsidies and private donations in operations of successful partnerships; and in section five, the staff mobility between public and private sectors as part of established partnerships. In section six, the chapter presents its research findings in a wider context of academic norms, values and attitudes towards the commercialization of research and technology transfer analyzed on the basis of a recent (2011) large-scale quantitative comparative European research on the academic profession in eleven countries (ESF-funded EUROAC, “Academic Profession in Europe: Responses to Societal Challenges”). Section seven presents tentative conclusions. In general, research findings are linked to current discussions in the knowledge transfer and science policy literatures on the growing role of knowledge exchange and university-industry linkages in the knowledge economy, with particular emphasis on the role of individual vs. institutional characteristics in successful university-industry collaborations, the role of the public/private mix in funding and governance modes in partnerships, and the relative separation of university and business cultures in European universities as factors inhibiting the inter-sectoral mobility.

### *Reconfigurations of knowledge production: a larger context*

Knowledge production in European universities is undergoing a significant reconfiguration, both in its governance and authority relationships (Whitley, Gläser and Engwall 2010, Whitley 2010, Whitley and Gläser 2007) and in its funding modes (Geuna and Martin 2003, Martin and Etzkowitz 2000). The combination of ever-increasing costs of academic research and the decreasing willingness and/or ability of European governments to finance academic research from the public purse (Aghion *et al.* 2008, Geuna 1999a, Geuna and Muscio 2009, Etzkowitz, Webster, Gebhardt *et al.* 2000) leads to growing emphasis in both national and European-level policy thinking on seeking new revenue sources for research universities (Mazza *et al.* 2008, Alexander and Ehrenberg 2003, Herlitschka 2008, Hearn 2006, EC 2008, EC 2009, EC 2011a, EC 2011b). New sources may include increased fees for the teaching mission and increasing reliance on various forms of third stream activities leading to more non-core non-state income for the research mission (see Geuna 1999a, Geuna 2001, Geuna and Martin 2003, Shattock

2009a, Temple 2012a), as we have shown in Chapter 5. The inter-sectoral national competition for tax-based public funding has been on the rise in the last two decades, following the rising costs of all major public services, especially health care and pensions (Powell and Hendricks 2009, Salter and Martin 2001, Kwiek 2006a), as we have shown in Chapter 1 and Chapter 3. At the same time, both the ability and the willingness of national governments to fund growing costs of academic research may be still reduced, for reasons as diverse as a shrinking tax base (Tanzi 2011), escalating costs of maintaining the traditional European welfare state model and economic challenges resulting from global economic integration and the passage to knowledge-based capitalism (Florida and Cohen 1999), as well as the overall social climate in which the promises of science may not be thought by both the population at large and policy makers to be kept by public universities and research organizations (see Martin and Etzkowitz 2000: 6-8 on the “changing social contract” between science and the university, and between society and the state; Guston 2000 and Guston and Keniston 1994b on the emergent “fragile contract” with science in the context of Bush 1945; Ziman 1994 on science under “steady state conditions”, and Kwiek 2005 and 2006a on the changing social contract linking universities, nation-states and welfare states).<sup>233</sup> In this wider context of the reconfiguration of governance modes and funding modes of university research, knowledge transfer has become “a strategic issue: as a source of funding for university research and (rightly or wrongly) as a policy tool for economic development” (Geuna and Muscio 2009: 93, Etzkowitz *et al.* 1998). There are increasing social and political expectations from universities, as discussed throughout the book, to show “more direct interaction with society and the economy” (Bonaccorsi *et al.* 2010: 1) to

---

233 The traditional social contract between states and societies is under renegotiations together with a traditional contract between states and universities, as discussed in Chapter 2. From a historical perspective, “beginning some time around the end of the 1980s (but perhaps slightly earlier in certain countries like the UK and the US), we have seen the emergence of a revised social contract ... under the revised social contract there is a clear expectation that, in return for public funds, scientists and universities must address the needs of ‘users’ in the economy and society. Furthermore, they are subject to much more explicit accountability for the money they receive. In addition, implicit in the new contract is a much more complex model of innovation than the previous linear model, unfortunately making it much harder to persuade politicians of the merits of increasing public spending on research!” (Martin and Etzkowitz 2000: 7).

which both academic knowledge production and various knowledge exchange channels need to respond, following transformations in universities' environments. As Geiger and Sá (2008: 210) point out,

in sum, although it has often been a contested mission for research universities, economic relevance should instead be seen as a complementary mission. ... virtually all research universities have pursued at least some portion of the economic relevance agenda. But it has essentially been an addition, like previous external missions, rather than a displacement of any other university commitments. In fact, dedication to economic relevance falls unevenly across the field of research universities and within individual universities.

The policy focus at national, European, and global levels on universities functioning in a closer symbiosis with enterprises has never been so dramatic in the last four decades (for early reports, see Stankiewicz 1986, Fairweather 1988, Gibbons 1992, and Ziman 1994).<sup>234</sup> Linking universities to the world of business may take a variety of forms but each of them, over a period of time, is able to influence the core institutional culture of academic institutions (Maassen and Olsen 2007, Olsen 2007b). Certain patterns of university-business relationships may gradually become institutionalized; but the process of recognition of new institutional norms and values, institutional behaviors, routines and procedures (Braunerhjelm 2007: 621) takes time in such institutions as culture-embedded and history-attached European universities (see in particular Bruneel, D'Este and Salter 2010: 859, Etzkowitz 2003: 116, Etzkowitz, Webster *et al.* 2000: 326, Ranga *et al.* 2003: 302, David and Metcalfe 2010: 90). Transformative rather than incremental changes are possible but, as aptly remarked, "the university is a very adaptable organism. Throughout its history, it has proved able to evolve in a changing environment" (Martin and Etzkowitz 2000: 17, see Kwiek 2012a). Universities do evolve, following transformations in their

---

234 For the European Commission, for instance, the concept of the "knowledge triangle" (education, research, and innovation) is crucial in rethinking the role of higher education institutions and their environments. As it stresses (EC 2011b), "to optimise skills, innovation and research outcomes, it is important for these three domains to work closely together. This in many cases requires changes in the traditional approaches to designing and delivering education programmes. ... Turning the theoretical concept of a strengthened knowledge triangle into reality in teaching, research and innovation is a complex task, but an area where progress is being made. Public authorities can play an important role in supporting higher education institutions to form closer links with employers and employer's organisations, external research organisations and innovative businesses to enhance their educational offer".

environments, do redefine their norms and values, and in the last two or three decades, depending on a national context, they have been following new, highly economic (rather than culture-related) legitimation for scientific research (Ziman 1994, Etzkowitz and Leydesdorff 2000: 117, Aghion *et al.* 2008) as the link between universities and “the promise of economic growth” becomes ever closer (Geiger and Sá 2008: 186-210). The emphasis in national and European policy thinking on the redefinition of academic cultures, norms and values towards accepting ever closer relationships between universities and their economic surrounding has been stronger than ever before in the post-war period. University-enterprise partnerships studied in this chapter are clearly linked to these more widespread processes of universities’ institutional adaptations resulting from powerful global and European policy trends (see Florida and Cohen 1999: 589-610 on “knowledge-based capitalism” and Slaughter and Rhoades 2004: 305-338 on the “academic capitalist knowledge/learning regime”).

The role of different types of collaboration between European universities and their environments has been increasingly discussed in both scholarly and policy literature throughout the 2000s. In particular, current national and EU-level policies stress the role of universities’ collaboration with enterprises (EC 2009, EC 2011a, EC 2011b). In this chapter, we shall discuss several parameters relevant to the successful development of university-enterprise partnerships in European universities. Efforts to build business-university collaborations are “gathering momentum throughout the developed world” (Lambert 2006: 161).

The chapter explores uneasy relationships between the world of academia and the world of business, as they appear in joint undertakings between academics and business people, most often with the support of public officials and public funding. Differences between the three groups of partnership stakeholders can clearly be shown; indeed their languages and timetables, their incentives for collaboration and their institutional cultures, are often radically different (and therefore university-industry research relationships have to overcome what Robert L. Geiger (2004: 182-186) termed the “cultural divide”). And these different institutional cultures clash in partnerships and in their governance modes, which leads to clashes of values and attitudes, procedures and behaviors, and to ad hoc idiosyncratic governance solutions. At the same time, as Braunerhjelm points out in his study linking social norms, university culture and policies (2007: 621), “altering existing routines and norms that have prevailed for a long time is a

difficult and time-consuming task”. Novel trial-and-error governance and management modes gradually become institutionalized as partnerships grow and mature. Some partnerships are short in duration and others are long-term, sustained, but all operate at the intersection of mostly incommensurable institutional cultures (Metcalf 2010: 30). Academia and industry, due to their different missions and modes of operation, are subject to what Müller (2006: 178) called “intrinsically different agendas” and the cultures of industrial and academic research are “fundamentally different”:<sup>235</sup> while research in industry possesses “an inherent inclination toward applied research and nondisclosure”, faculty research is “inherently inclined toward theoretical topics and open publications” (Geiger 2004a: 183). Private industry’s support of university research certainly raises the question of “what businesses expect to receive in return for their investments. After all ... industry funding is presumably based on a profit calculation” (Weisbrod *et al.* 2008: 151). The present chapter explores these issues in European universities across six countries.<sup>236</sup>

## 7.2. The analytical framework

### *Definitions*

The chapter is focused on diversified channels of knowledge transfer in universities rather than on (more restricted) technology transfer.

---

235 The key differences between the academic agenda and the business agenda in the context of (for instance) pharmaceutical companies and universities are the following: novelty/curiosity driven vs. goal/target driven; novelty, publication vs. impact in drug discovery; satisfaction of curiosity vs. decision-critical data; education on projects vs. experts in charge; volatile expertise vs. continuity in expertise; struggling for funds vs. struggling of approval; long project approval times vs. prompt start on needs; continuity/project life cycle vs. flexibility to change or stop; research alone vs. research in teams; and teaching to next generation vs. peer knowledge exchange (Müller 2006: 178).

236 The list of the eighteen European universities for which institutional case studies were produced and the ten institutional partnerships for which case studies were produced is given at the end of the chapter. I would like to thank interviewees throughout Europe who were willing to spend time with the GOODUEP project international team members, and in particular my own interlocutors in Poland, Germany, and the Netherlands.

Consequently, in its analytical framework and empirical background, it goes beyond what Abreu *et al.* (2008: 45) called “a prescriptive view of university-business interactions with a narrow focus on technology transfer”. As they pointed out in their study on *Universities, Business and Knowledge Exchange*, “although technology transfer may be important, it is also necessary to focus on the more diverse and varied impacts of business-university knowledge exchange relations” (Abreu *et al.* 2008: 45).

In the course of research performed within the GOODUEP project, two definitions of university-enterprise partnerships have been adopted: a more open one was adopted in the mapping of partnerships in eighteen European universities selected in six countries (university-enterprise partnership as “any joint activity involving university and enterprises”) and a more restrictive one was adopted in the selection of case studies of good practices of specific partnerships. Thus a university-enterprise partnership in the second, more restrictive account, is:

a partnership between the university (or a university unit such as a particular department or research institute), an industrial partner (or some other private entity such as a foundation), and, in most cases, a government partner (national, regional, municipal). The partnership is based on a formal agreement between the partners about the goals, funding, management and governance of the partnership in terms of each partner’s responsibilities and contributions. The activities of the university-enterprise partnerships focus on the manipulation (co-production, sharing, dissemination, valorization, and commercialization) of academic knowledge (see a final report from the GOODUEP project: Mora, Detmer and Vieira 2010: 126).

### *A three-level analysis*

The analysis of partnerships was thus performed at three distinct levels: national case studies, institutional case studies, and partnership case studies (on the role of case studies in theory development in the social sciences, see George and Bennett 2005: 3-36, 263-266, and on case study research, see Gerring 2007: 65-2010 and Gerring 2008). At the first level, national case studies evaluated general conditions for developing partnerships in six countries. At the second level, institutional case studies reported currently developed partnerships in eighteen European universities in terms of their types, institutional policies to promote them and governance structures used to develop them. Institutional case studies, in particular, referred to the following variables: types of universities in the country, size of universities,

geographical aspects, teaching/research orientation, originality of content/structure of possible partnerships, and originality of governance structures. Finally, at the third level, partnership case studies included science parks, research institutes, joint teaching programs and joint support structures for promoting entrepreneurialism and were based on both documentary analysis and semi-focused interviews with key stakeholders.

The partnership-level case studies provide an empirical basis for the present analysis. The variables included in the analytical framework were analyzed transversally for the ten cases. The analytical framework referred to two dimensions: the institutional context of partnerships and the governance of partnerships (see Mora, Detmer and Vieira 2010: 175-176). The institutional context section included key elements of the regional and institutional settings (including institutional support structures) which directly affected the development of a partnership.<sup>237</sup> And the governance section focused on partnership-level structures, mechanisms and instruments used in governing the partnership. The unit of analysis in partnership case studies was a specific partnership at a given university. The institutional context of partnerships studied focused on the level of institutional governance structures, institutional human resources management, incentives to academics and academic cultures, and the degree of

---

237 The analysis was therefore focused on the following issues (see Annexes to Mora, Detmer and Vieira 2010: 171-184): (1) The extent to which the university has put support structures for partnerships in place; (2) The extent to which the university includes the collaboration with enterprises as relevant components of its teaching and research activities (e.g. regular collaboration in curricula design); (3) The extent to which external funding (non-core public funding and, in particular, funding from enterprises) is relevant in the institutional budget; (4) The extent to which enterprises, industrial organizations and chambers of commerce are represented in university governance boards; (5) The extent to which the collaboration with the industry is considered in research and teaching assessments/evaluations; (6) The extent to which the collaboration with the industry is considered in promotion, salary and employment decisions; (7) The extent to which university intellectual property (IP) policy financially rewards researchers; (8) The extent to which university policy to encourage commercialization and spin-offs brings any financial rewards to individual researchers and research groups; (9) The extent to which the university encourages/tolerates mobility between the university and enterprises; (10) The degree of autonomy at the institute/department level to create new research and staff positions; (11) The degree of autonomy experienced by university departments in setting salaries; and (12) The degree of autonomy in budget allocation and generation of external revenues by departments and research groups in the university.

decentralization. The partnership's governance was the focus of interviews and it assessed specific aspects of partnerships rather than aspects of institutions, in particular various roles and responsibilities of partnerships' stakeholders and the role of institutional support structures in developing particular partnerships, the role of governmental actions, policies taken by enterprises and their associations, and potential conflicts of interest. The first question explored was the degree to which responsibilities were shared between institutional, enterprise and other types of partners in a partnership in developing, by each stakeholder, different functions (funding, programming/research agenda, facilities, execution of core activities, supervision and other). The second question explored was the degree to which different benefits from partnerships were shared between the university, the enterprise and other actors (such as governmental agencies): financial benefits, intellectual property, training and education, knowledge and acknowledgement of partners' needs and capacities (including on-site training for students and academic staff and continuous education for enterprises' employees and the acknowledgement of labor market conditions and enterprises' needs, as well as university research results, facilities, and capacities).

### *Both “numbers” and “words”*

The chapter uses a mixed-method approach (that is, in its simplest form, at least one quantitative method and at least one qualitative method, see Greene 2007: 95-137, Nagel, Bieber, Jakobi *et al.* 2010: 28-50, Greene *et al.* 2009). While quantitative methods in this chapter collect “numbers”, qualitative methods collect “words” (Caracelli and Greene 1993: 195). Following Nagel, Bieber, Jakobi *et al.* (2010), it uses different methodological strategies: an (expert) interviews and documentary analysis and a policy network analysis (for GOODUEP data) and a time-series cross-section regression analysis (for EUROAC data only). Each of the three methods uses specific research logic: explorative logic (interviews), descriptive logic (documentary analysis) and explanatory logic (regression analysis) and each is used here to different degrees. The chapter supports its theoretical propositions with two-level case studies, statistical analyses, financial statements analyses, analysis of transcribed semi-focused interviews and (in its contextual part in section six) analyses of large-scale European surveys. In its research design, it follows the logic of case-

oriented research, with its emphasis on understanding through differences, exploring diversity, keeping the number of cases low and focus on processes and temporal sequences (rather than periodization) (see della Porta 2008: 198-222), as well as with its emphasis on “policy relevance” (George and Bennett 2005: 263-286).

The three parameters to explore partnerships in the present chapter are the following: the leadership and the role of individual academics /administrators in establishing and running successful partnerships; the role of public authorities (from the EU, national, regional and local levels), public subsidies and private donations; and the staff mobility between public and private sectors as part of partnerships.

### **7.3. The leadership and the individual/institutional characteristics**

#### *Individual research motivations vs. the academic culture and institutional arrangements*

Recent literature on different factors underlying the development of university-industry links draws an important distinction between (often overlooked) individual characteristics and institutional characteristics. For instance, D’Este and Patel (2007: 1309) conclude that “in explaining the variety and frequency of interactions with industry among academic researchers, individual characteristics have a stronger impact than the characteristics of their departments or universities”. The present research indicates that individual research motivations, drives and interests of particular researchers or administrators count at least as much as (and often more than) the academic culture and institutional arrangements in which their activities are embedded (which is consistent with findings by Este and Patel (2007) about individual vs. department vs. university characteristics underlying various interactions with industry). Individual academic norms, behaviors and routines seem to count as much as (and often more than) institutional academic norms, rules, behaviors and routines (to which we shall return in a contextual survey-based sixth section about the academic profession).

University-enterprise partnerships studied in this chapter are clearly bottom-up driven; they succeed because individual researchers’ motivations

are followed, often despite a weak or missing entrepreneurial culture across their institutions; in contrast, top-down approaches to creating partnerships where individual motivations are weak or missing seem to be bound to fail (just as top-down pushes towards more third mission or more entrepreneurial activities in European universities may be detrimental or ineffective: as Philpott *et al.* observed, “the research indicates that a bottom-up approach is more conducive to fostering academic entrepreneurialism in a comprehensive university setting and thus university management need to be cognisant of the underlying culture within their institution before engaging in interventionist policies”, 2011: 169). Partnerships studied, from the perspective of the individual/institutional distinction, are all clearly individual-driven rather than institution-driven. They seem to be more successful, though, when the norms, rules, behaviors and routines shared across the institution are similar to those shared by entrepreneurial researchers or administrators involved in running partnerships. The role of institutional academic norms was viewed as key already when first studies of university-industry liaisons were published (see, for instance, early studies by Stankiewicz 1986: 27, Fairweather 1988).

The role of individuals, powerful and visionary leaders in partnerships studied, is critical. Leaders, both researchers, administrators and researchers-turned-administrators (as often in the case of research groups as “quasi-firms”, Etzkowitz 2003: 111), make every effort to sustain expanding partnerships and research groups they created. The “human factor” in partnerships, or individual-level characteristics accompanying institutional-level characteristics, represented by academics and administrators alike (located in universities or in its close surroundings, most often both physically and organizationally), is at least as important as other factors. Which is consistent with what Abreu *et al.* (2008: 45) observed recently on the basis of their study of knowledge exchange in the United Kingdom: “There are multiple knowledge exchange mechanisms; the most important of these involve people”. Other factors include the legal ambience in which partnerships appear, the availability of infrastructure and university support structures for entrepreneurialism, public and private funding available, and the overall positive attitude of universities towards partnerships with enterprises (or the appropriate “institutional culture”, see Braunerhjelm 2007, and the “entrepreneurial belief” or the “integrated entrepreneurial culture”, see Clark 1998a). And often, as our research shows, the “human factor” seems more important than other factors for the partnership’s lasting success.

In several cases studied, the role of individuals involved in creating and maintaining partnerships is overwhelming. Their determination, persistent acting against institutional and administrative obstacles, but also persistent opportunism, or acting when opportunities arise, make partnerships financially sustainable. Also recent studies of academic entrepreneurialism in European universities show that the bottom-up approach is of critical importance in establishing and running partnerships, even though the top-down arrangements (e.g. national, regional and institutional policies accompanied by various national and regional forms of supporting entrepreneurialism, or national or regional funding schemes to support university-enterprises partnerships) are important as well (on specific conditions for academic entrepreneurialism to appear more widely in European universities, see Shattock 2009a, Temple 2009, Kwiek 2008a, Kwiek 2009a, Williams 2009, Temple 2011, and Mora, Vieira and Detmer 2011).

### *Top-down vs. bottom-up initiatives*

The pattern of the emergence, growth and evolution of successful partnerships is structurally similar in several cases studied: there are powerful, charismatic individuals (rectors, former rectors, or university professors with internationally recognized research achievements). Without much influence of top-down national policies supporting university-industry links, these individuals become heavily involved in establishing a viable support structure of university-industry cooperation. The structure often involves a network of local and regional private businesses (mostly, although not exclusively, small and medium-sized enterprises). These individuals use both their academic powers at the university (to make a public institution enter smoothly the partnership) and their excellent relations with local and regional authorities (to make them enter the partnership and possibly invest municipal land and/or municipal and regional public funding). At the same time, powerful university leaders ensure good working relationships with local and regional businesses, sometimes with core business funders in the region, and based on their networking abilities and past experiences of collaboration, ensure a necessary level of trust between all stakeholders involved in the emergent partnership. Partnerships to be sustainable need long-term trust between their major stakeholders, first of all between universities and enterprises. The initial trust is often based on previous good personal relationships. What

also seems useful is high social and institutional visibility (and resulting social and institutional respect) in the region of the major stakeholders in a partnership.

Examples of powerful academic leaders involved in the creation and maintenance of successful partnerships in the current research include a former rector of the University of Poznań, Poland, who in the 1990s founded the first Polish science and technology park with the aid of Poznań municipalities and their land donation, with the aid of European Union structural funds and municipal and regional funding. After two decades, he is still running the park, the university foundation, and coordinating its recent multi-million-euro expansion. Other examples include a former rector of Politecnico di Torino, Italy, who founded the Istituto Superiore Marion Boella (ISMB) and combined several factors: regional needs of university-industry cooperation, the availability of funding from a private foundation, and the presence of a prestigious Italian university of technology. As the Italian institutional case study (GOODUEP case studies 2009, Politecnico di Torino, Italy)<sup>238</sup> explains, “with the support of the Compagnia di San Paolo, he gave the initial boost for creating the ISMB and he was the Chairman of its Governing body from the beginning. The leadership of one person able to connect different elements in a big project is in this case the spark which explains to a great extent the success of the ISMB”. These findings are consistent with research results from other countries: as stressed recently, in Spain “relationships between universities and firms are linked to personal interactions between individuals. They are born from common and overlapping interests from both sectors and often take place through exchanges which are negotiated informally” (Ramos-Vielba *et al.* 2010: 652).<sup>239</sup>

---

238 References to the GOODUEP empirical material in this chapter will be given in the following format: GOODUEP case studies 2009/GOODUEP national reports 2009, the name of the institution, country.

239 It is different in the case of transformation of universities into entrepreneurial or adaptive organizations. As Clark (2004a: 5-6) summarizes his empirical findings from European universities, “sustainable adaptive universities do not depend on ephemeral personal leadership. Charismatic leaders can serve for a time but in the lifeline of universities they are here today and gone tomorrow. Lasting transformation also does not depend on a one-time burst of collective effort occasioned by a dire environmental threat ... Rather, whatever the initial stimulus, it depends on those collective responses that build new sets of structures and processes – accompanied by allied beliefs – that steadily express a determined institutional will”.

Powerful leaders in partnerships studied come from both managerial and academic university ranks. Examples in the current research include the visionary leadership of an eminent professor from the University of Santiago de Compostela, Spain, who stood behind the creation of the UNIEMPRENDE, a support structure dedicated to increasing the entrepreneurial culture at the university; its financial structure, the UNIRISCO, was already “exported” at the national level throughout Spain and then was used as a model in Colombia and Chile. As the Spanish institutional case study stresses,

The success of the UNIRISCO is certainly also due to the visionary leadership of its inventor: the professor who created the UNIEMPRENDE is completely dedicated to the development and improvement of the complex system of supporting structures he has set up over the years. ... With his networking skills and his strong will to realize the vision, the inventor of the UNIEMPRENDE presents a strong pull factor driving the university-enterprise partnership towards success by connecting university to entrepreneurial culture (GOODUEP case studies 2009, Santiago de Compostela, Spain).

Another example of the crucial role of individuals in the emergence of knowledge transfer and knowledge exchange structures comes from Valencia, Spain. The Institute of Biomechanics (IBV) was started over 30 years ago by a small group of people, including its current director, and the role of visionary leadership was key to its success. At Twente University in the Netherlands, the key role in promoting the initiative of the Kennispark was played by its former rector who was heavily involved in turning the university into an entrepreneurial organization (the institutional change process at Twente was reported for the first time in Burton Clark’s seminal discussion of a set of empirical case studies of European universities in *Creating Entrepreneurial Universities*, Clark 1998a: 39-60, and then in his *Sustaining Change in Universities*, Clark 2004a: 38-49). In smaller-scale partnerships, as in the case of the University of Kassel, Germany, the role of a strong, visionary academic leader was critical. The Kassel partnership studied represented a pyramid of twenty five researchers in the area of mechanical engineering, with a highly successful professor at its top. The role of the ability to combine the two university missions (the traditional research mission and various types of “third mission activities”, see especially Gulbrandsen and Slipsaeter 2007: 112ff, Laredo 2007: 441-456, Molas-Gallart *et al.* 2002, and Molas-Gallart 2004: 74-89, Zomer and Benneworth 2011) seems crucial to the success of the partnership. While

highly competitive, nationally and internationally relevant research output of the research team paved the way to get competitive national German research funding and research-based academic respect, diversified third mission activities provided additional funding based on hundreds of smaller-scale practical interventions performed at the level of companies, mostly located in the region. The vision of combining internationally competitive research on the one hand, and the provision of research-derived practical solutions to daily technical problems of regional small- and medium-size companies, often at an ad hoc basis, on the other hand, lies at the core of the long-term success of this partnership.

This University of Kassel partnership shows also the role of academic leadership combined with the ability to work according to two substantially different modes of operation: the academic mode and the business mode. It is a good example of Etzkowitz' findings about a research group functioning as a "quasi-firm" and about the stages of development of a research group:

Research groups operate as firm-like entities, lacking only a direct profit motive to make them a company. In the sciences, especially, professors are expected to be team leaders and team members, with the exception of technicians, are scientists in training. As group size increases to about seven or eight members, professors who formerly were doing research are typically compelled to remove themselves from the bench to devote virtually full time to organizational tasks. Often persons in this situation describe themselves as "running a small business" (Etzkowitz 2003: 111).

Leaders in partnerships studied are highly ambitious, being clearly in line with what Shattock noted about *Managing Successful Universities*, "ambition fuels success in universities as in other organizations. ... No organization can achieve success without being ambitious and competitive; success does not just happen, it is achieved" (Shattock 2003: 137). Both enterprises and universities, as well as their units involved in partnerships, are highly prestige-driven and competitive. Their logic of operation differs considerably, though (David and Metcalfe 2010: 90). As Lambert 2006: 161 summarizes the difference, "academics and business people are not natural bedfellows. They talk in different languages. They work to different timetables, and are driven by different incentives". Their time-scales seem to be different, and bureaucratic hurdles encountered in universities are sometimes hard to explain to enterprise partners. Our findings are consistent with what Ternouth *et al.* (2010) included among limiting factors influencing university-business cooperation: "the natural pace of activity

tends to be slower for universities. Lack of true commercial experience leads to protracted and bureaucratic processes. These tendencies reinforce each other to increase transaction costs which are a deterrent especially to smaller companies which are unused to such dealings”. Also Abreu *et al.* (2008: 13) enlist “a mismatch in time lines, with universities often operating on longer time scales” among barriers to cooperation. As reported, in a similar vein, in the Kassel partnership case study,

The logic of the company is different from the logic of the university in e.g. time-lapse: the university is naturally inclined to be involved in longer projects while companies usually want as short projects as possible. What does success mean for the staff involved in contract research? Successful projects mean that “the company will call us again”. The institute views itself, and its staff views themselves, as a helping partner to companies – and acts itself “almost like a company”. After years of experience, there is no major clash between the academic culture and the company culture in contracted work performed (GOODUEP case studies 2009, University of Kassel, Germany).

Not surprisingly, the majority of employees in university support structures studied (located within universities or in a close institutional proximity to them) come from universities but, at the same time, they do not share the same academic culture as their university-based colleagues. They seem more often to rely on a more business-related culture of entrepreneurialism (and often only heads of these structures remain both inside and outside of the academia, combining academic posts in the university and administrative posts in the cooperation support structure). The prestige gained through high research achievements is translated into the trust into academics’ abilities to solve technical problems of their enterprise partners on the part of enterprises seeking partnerships (in a similar manner, the partnership with a medical company studied at Hertfordshire University in the UK would not occur if the department partner did not have academic credibility in the area in which this company sought a solution to its technical problem).

### *“Inter-organizational trust” and the role of powerful individuals*

Most university partnerships with enterprises studied are long-lasting and based on mutual “inter-organizational trust” (Bruneel *et al.* 2010: 861), gained in various types of previous smaller-scale collaborations. Previous small-scale collaborations lead often to higher-level, more institutionalized

and larger-scale collaborations, as various recent studies show (D'Este and Patel 2007: 1309, Ramos-Vielba and Fernández-Esquinas 2012). As Paul Temple (2012b: 14-15) pointed out recently, “partnerships shift over time across various categories of interaction. What might have begun as a relatively informal consultancy may turn into a formal, specially tailored teaching activity which might lead to a research collaboration”. Universities display the ability to manage and to reconfigure knowledge; they are able to “to take knowledge created in one context (consultancy, say) and to apply it in another context (perhaps formal research), with this then feeding into teaching” (see also Jongbloed and Zomer (2012: 99) on mutually feeding relations of “exploration” and “exploitation” between university and industry, Geuna and Muscio 2009 on two-way interactions between the two sectors, and Philpott *et al.* (2011: 162-164) on the impact of earlier “softer” entrepreneurial activities on later, more mature and “harder” activities).

The relationships of universities with enterprises studied are established with strong individuals (rectors, directors or academics), as well as with academic or non-academic (but remaining in an institutional proximity to universities) units or structures at first formed and then headed by those individuals for many years. Also external funding seems guaranteed by high academic prestige of university stakeholders, or their powerful business or political or social connections, as well as their high networking skills at local, regional or national levels. These powerful individuals are founding-fathers of a particular partnership or a particular university support structure for university entrepreneurialism. It is different at the university level and at the level of partnerships studied; Burton Clark in his early studies of the three “distinctive colleges” stresses the limited and controlled role of charisma in university leadership (Clark 1970: 240-245) and points out that, generally,

the occurrence of charisma is controlled and enhanced in systematic ways. It is partially controlled through the deliberate avoidance of charismatic figures. In higher education, men who appear strongly charismatic are not commonly selected by boards of trustees and faculties to be presidents of colleges, not primarily because of a shortage of supply, but because such men are inappropriate for the stability, continuity, and maintenance of the existing power structure. Such men seize and demand, rather than follow rules and respond to others. In normal times, they are judged too disruptive (Clark 1970: 241).

Former rectors involved in partnerships are sitting on boards in companies which are subsidizing their academic units or academic structures involved

in partnerships as they have long-lasting, trustful relationships with the business stakeholders in the partnership. They have trustful working relationships with business funders and their foundations; also charismatic academic professors maintain their endowed chairs in universities funded or co-funded by private local or regional companies, maintain their board memberships in science and technology parks and in university support structures, inside or outside of the academia.

Their role as individuals is critical, and they are not easily replaceable. The success of a lasting partnership is often an individual success much more than an institutional success. The less institutionalized partnerships are, the more susceptible they are to the succession problem, though, as emergent in several case studies. Social networking skills play an important role in partnerships, as shown by the Italian partnership case study of the Politecnico di Torino:

The ISBM was supported from the beginning by the Torino Wireless, a regional foundation of companies, local authorities, and universities which promote innovation in the region. The role of the Torino Wireless is finding out the needs of innovation that, when feasible, are solved by the ISMB. To some extent, the Torino Wireless is a provider of clients to the ISMB. Not too surprisingly, it happens that the Chair of the Torino Wireless is the former rector of Politecnico and Chair of the ISMB. Public authorities are not directly involved in the ISMB (although they are part of the Torino Wireless) but they have important demands of innovation which are tunneled through the ISMB (GOODUEP case studies 2009, Politecnico di Torino, Italy).

Academic linkages with private companies are based on very individual, trustful, and long-lasting relationships. The general rule could be that the more institutionalized a partnership support structure is (as the cases of the Kennispark in Enschede, the Netherlands, the ISMB in Torino, the IBV in Valencia, and the AMU Foundation in Poznań indicate), the more financially and institutionally viable (and the less vulnerable) it is in the future. In the cases of more individual (academics-led research) partnerships such as e.g. partnerships with small and medium enterprises via contracted research (as in the cases of the Kassel and Hertfordshire partnerships studied), there is a danger that they may gradually disappear as the level of their institutionalization is usually very low (and this is exactly what happened to the Kassel partnership in 2011, after the retirement of its academic leader).

## **7.4. Public subsidies and private donations in partnerships**

### *Universities, business partners, and governments*

Partnerships studied involve usually universities, business partners and local, regional or national governments. Public subsidies, private donations, or a combination of both sources of third stream funding, play a fundamental role both in their establishment and in their financial sustainability (which is consistent with the “no margin, no mission” slogan, a reminder that university partnership structures, as other organizations, cannot operate without revenue, as Weisbrod *et al.* point out, 2008: 5). The combination of the support of public authorities and access to public subsidies (especially of municipal and regional authorities and to regional public funding) and the support of private business donors and partners is crucial. Regional and national governments, in general, are as important in partnerships as universities and business even though, following Geiger (2004: 182) who analyzed American universities, it can be stated that “universities are the sellers and commercial firms the buyers”. Governments throughout the industrialized world are helping to build bridges between the higher education sector and the business sector. The link between academic research and the world of business is viewed as central in the knowledge economy discourse, both in academic research and at the national and European policymaking level (EC 2011a, EC 2011b, EC 2009a, and EC 2007a)

Lambert (2006: 162) lists three incentives governments can have in supporting building the bridges: they want to push their economies up the value chain and build a competitive advantage in knowledge-intensive industries; they want to maximize the return on the public funding of research; and they want to attract and retain research-intensive multinational businesses at a time when business research is going global. “Nowhere are these challenges more important than in Europe”, he concludes. Partnerships studied seem to need both public subsidies, especially at the time of their inception, and private donations from their business partners, especially later in their lifecycles. The combination of public and private funding and public and private lobbying and public relations seems especially fruitful. Public funding is most often available to partnerships and university partnership support structures in their initial stages of operation. Then they often become increasingly financially self-reliant and base their operations

increasingly on non-core income. But as literature shows, financial self-reliance of both partnerships and support structures is extremely hard to achieve. Some partnerships studied (e.g. the ISMB in Torino, see <http://www.ismb.it>) have had access to annual multi-million euro business partners donations for running costs from their major private partners for many years. Other partnerships, like the AMU Foundation in Poland and its science and technology park (see <http://www.ppnt.poznan.pl>), or the Kennispark at Twente University (see <http://www.kennispark.nl/>), have received substantial public financial support in the beginning, including the title to the ownership of land on which their infrastructure is being built. The case studies suggest that, in general, successful partnerships with enterprises most often made very good use of public subsidies, especially of regional development funds from regional development agencies or, as in the Polish case, of both regional and European structural funds. Then, with the passage of time, they are increasingly determined to seek new sources, especially non-state or private sources of revenues.

### *Public funding, private funding, and the governance of partnerships*

The availability of public funding is sometimes a decisive factor for a partnership to emerge: it was the case of the Hull University partnership in the UK where regional development funding was made available to meet its start-up costs. In the case of the AMU Foundation and its science and technology park, both regional funding and European structural funds (regionally distributed), as well as the donation of the land belonging to the municipality were of critical importance both in the early 1990s and in the 2000s, its second period of expansion. The Twente University case of its Kennispark (and its predecessor, science and technology park) shows the importance of both public (municipal, regional, and national) funding and the donation of land belonging to the city. As the Kennispark partnership case study explains,

Financial commitment from the city, provincial and central governments for Kennispark started. The initiative was attractive due to its potential economic impact on the Twente region; at the same time, there were funds available for innovation, including those from the 2002-2003 Municipality Master Plan. Important funding from the three levels was received, being crucial for the project's viability (GOODUEP case studies 2009, University of Twente, the Netherlands).

On a smaller scale, public funding was also instrumental in setting up a University Hertfordshire partnership with a medium-sized medical company in which governmental KTP scheme (Knowledge Transfer Partnerships) was used to cover the costs of placing researchers (called KTP Associates) in firms, with specific research and development tasks to perform. Also in the Spanish case of the University of Santiago de Compostela, the UNIEMPRENDE university support structure (see <http://www.uniemprende.es>) has initially received financial and technical support from the regional government.

The regional involvement means in practice not only public funding for partnerships but also the commitment of governmental structures and regional development agencies to the development of the region through the partnership. The will to boost regional economy via various forms of university support structures for partnerships was clear in the cases of Twente University and the Maastricht University where regional authorities have had strong interest in collaborating not only with the university sector but also with the private sector, the other necessary element of partnerships. In the AMU Foundation case in Poland, structural funds invested in both AMU Foundation's science and technology park and the university itself have a clearly regional dimension. In the Cologne partnership studied, where demand-oriented study programs were developed (and whose model of combining studying and working became a German benchmark for other universities of applied sciences), the regional market-led demand to develop fee-based courses in some areas of studies was a determining factor.

Regional funds in the partnerships studied were both public and private. In two cases, the fostering of regional development was strongly supported by regional private big business institutions: in the case of the Torino's ISMB, an important national Torino-based bank (INTESA San Paolo) started a foundation and acted together with the technical university (Politecnico di Torino), accompanied by several other smaller private business partners. In the case of the UNIEMPRENDE support structure at the University of Santiago di Compostela, two big Galician private enterprises (Inditex and Grupo San José) invested their money needed to start the UNIRISCO company (see <http://www.unirisco.org>). The role of local small and medium enterprises was important in the Kassel case of academic entrepreneurialism: the regional entrepreneurs' association was funding at first an endowed chair for the professor in charge of the partnership at the university, and then the enterprises involved were often valuable clients in contracted research activities of the partnership. Ideally, both substantial public and private funding is made

available to a partnership, as in the case of the University of Santiago de Compostela in which both the support from Galician private enterprises and from regional development agencies were of critical importance to establish the partnership.

Both public funders (national and regional authorities, regional development agencies) and private donors (especially big companies) remain heavily involved in the governance of partnerships, and the relationships between public and private stakeholders and the university representatives in partnerships becomes trustful. Joint steering and supervisory bodies that include representatives of both public authorities and private companies are being formed and the three types of stakeholders – that is, representatives of public authorities, private companies, and public universities – often meet on a regular basis. As a Maastricht partnership case study stresses,

Steering bodies with representation of members from Maastricht University and other stakeholders (City of Maastricht, Academic Hospital, LIOF development agency, business sector) are put in place and meet on a regular basis with the management of the respective valorization bodies. The board members discuss the strategy of the Holding, respectively the BioPartner, and the BioMedBooster. There is good communication and trust among the partners. This was built up over the years and partly thanks to the persons sitting on the boards and the management GOODUEP case studies 2009, University of Maastricht, the Netherlands).

The partnerships studied, ideally, need both public subsidies and private donors for their operations. Both public and private funding is valuable, both short-term (for instance, start-up costs) and long-term commitment contributes to the success of partnerships. The scale of public and private commitments to partnerships differs across partnerships and across countries studied; also the role of representatives of public authorities and of private donors in boards of directors, councils or steering bodies of partnerships differs across institutions and countries, often being a reflection of national traditions. Most successful institutions and institutional support structures seem to be able to combine public and private funding from the very beginning. As noted in a study on American research universities and their patrons already three decades ago, “excessive dependence on a single patron produces an unhealthy degree of vulnerability. This is true even when the patron is as internally diverse as is the federal bureaucracy” (Rosenzweig and Turlington 1982: 47; see esp. Shattock 2009a and Williams 2009).

## 7.5. The university-enterprise inter-sectoral staff mobility

### *Choosing between the two different worlds?*

It is also interesting to explore the extent to which European universities studied encourage (or tolerate) the mobility between public and private sectors, especially between the two nodes of partnerships: enterprises and universities. Not surprisingly, as the AMU partnership case study reports on Poland,

the world of enterprises and the world of academia are different, totally separate worlds. There seems to be no mobility between enterprises and universities possible. Once an academic leaves the university, his/her chances to return are minimal. The institutional culture at the university does not seem to allow such mobility (GOODUEP case studies 2009, University of Poznań, Poland).

It is not much different in other European countries studied, though. The findings are consistent with the strand of literature that shows that “in many European countries, researchers have to choose between academia and business, as any activity in one field will lead to the rejection by the other” (Wink 2004: 2).

Staff mobility from businesses to universities is rare in almost all countries studied. It is infrequent in Germany (as the Cologne partnership case study sums up, “mobility as such, although it is tolerated, it is not frequent” and, as the Kassel partnership case study puts it, “there is no mobility between the university and the academia”), hardly possible in Italy (“the rigidity of Italian university recruitment regulations does not allow easy mobility to and from enterprises”), and rare in the Netherlands (“there is not a lot of mobility between the university and enterprises. It is tolerated, though”). A slightly more positive conclusions are reached in the two UK cases (as the UK national report put it, “in principle, this would be welcome”). Finally, new developments were reported in the two Spanish cases: at a national level, a new law on universities (2007) promotes university-business partnerships and seems to enable academics to participate in, or create, private firms. The law allows them to take so-called “technological leaves of absence” and to retain their university tenure for up to 5 years. The practical consequences of the new law after several years in this area seem uncertain, though; as the Valencia partnership case study stresses, “this new norm represents a strong cultural change that is just starting to be used by academic staff” (GOODUEP case studies 2009, Valencia University of Technology, Spain).

Thus so far, the mobility understood as moving back and forth between universities and enterprises, and especially moving from enterprises to universities, seems marginal in the European countries studied. Researchers running their own spin-off companies in the Netherlands (as reported both in the Maastricht University and the Twente University cases) are requested to reconsider their presence in the company's management bodies within a year, and to make a choice which path of activity (the business path or the academic path) to follow. In Poland, there are no legal restrictions to run spin-off companies and to work full-time at the university at the same time, but the number of such companies is very limited. A new law on higher education (of March 2011) requires academics to seek consent of rectors of their universities to run any company, with no distinctions made between companies in general and spin-off companies. In the Kassel University case in Germany, there is a clear path followed by many researchers involved in research projects (the academic model) and in contracted research (the business model): researchers stay at the university until the completion of either their MA theses or their PhD theses under the supervision of their academic leader, the founder of the partnership studied. Then they immediately leave academia and go to the business sector. This is a classic example of a one-way university-enterprise mobility: as the Kassel partnership case study explains,

The standard career pattern for young researchers is to leave the university for much better paid company jobs. For the university, as in this case for the academic center in mechanical engineering studied, it is of critical importance which German companies are hiring its graduates or its PhDs. One of dimensions of excellence of the center is the prestige of companies which employ its graduates. The better companies, the better students in the future, this is the link (GOODUEP case studies 2009, University of Kassel, Germany).

There are many success factors for partnerships found in current research. They are consistent with what Lambert summarized as the ingredients for success in the case of small and medium-sized companies: "they include a strong and shared sense of purpose, a common strategic vision and detailed planning from the beginning. Each side must feel that the other is making a genuine contribution to the collaboration, and researchers need to get together often enough to discuss problems and establish trust" (Lambert 2006: 169, see Bruneel *et al.* 2010: 861).

Some types of partnerships produce researchers directly for the business sector, with no future chances to return to the academic

community, because of rigid institutional structures inhibiting the university-industry staff mobility. In European universities with more hierarchical institutional settings, with very limited access to career progression for junior researchers, or a very limited number of senior academic posts, the mobility is almost always from universities to enterprises. Although full-time returns from the business world to academia seem difficult, some part-time returns (e.g. sharing practical knowledge derived from company experience) still seem possible. In general, they are reported as rare. There is much more mobility between university support structures for partnerships and enterprises than between universities themselves and enterprises. Support structures differ in their proximity to universities; they can be parts of it, or be close to it in institutional and financial terms. Most support structures studied, no matter how close they are to universities from which they emerged, represent business attitudes and foster business or business-like culture of entrepreneurialism, which is closely related to their strongly felt need of financial self-reliance.

### *Tensions between different institutional cultures*

We can draw a distinction between three separate cultures (and separate worlds) in the organizations studied: the academic world, with its traditional academic norms and values, usually with powerful Mertonian overtones (Martin and Etzkowitz 2000); the in-between world of academic support structures for partnerships (and for academic entrepreneurialism), with its academic norms and values, combined to different degrees with business norms and values; and, finally, the world of enterprises, with purely business norms and values and clear for-profit orientation (Ternouth *et al.* 2010). Changes in attitudes and norms must complement various incentive mechanisms in order to enhance to diffusion of knowledge from universities to the outside world (Braunerhjelm 2007: 622). There is a continuous tension between the two or three institutional cultures in the course of the existence of partnerships; their mix differs in time and is related to the staff composition and their sector origin, the financial condition and major sources of funding, and the organizational maturity of a partnership. More mature partnerships tend to show more business-like attitudes. From the perspective of institutional culture, the tension testifies to the one-way interpenetration of values and norms, though: business attitudes are clearly invading both support structures and university units (rather than traditional

academic attitudes invading enterprises; for an opposite view, see Bastedo (2012b: 4) who argues that nowadays “business is becoming more like higher education”). The differences in attitudes were clearly reported for the Kennispark at Twente University and for the Maastricht University partnership. Academic cultures and business cultures still rarely mix in the cases studied and therefore the mobility between business-oriented partnership support structures to the business world and back tend to be much more conceivable than the mobility between strictly academic structures and enterprises. At both national level and at the EU level, there is a growing interest in the staff mobility (EC 2009), especially at the level of PhDs, as various national and EU programs testify (for instance, there are IPPs, or Industry-Academia Partnerships and Pathways, one of Marie Curie Actions in the 7<sup>th</sup> Framework Programme, in which research and business sectors have to work hand in hand).

To sum up, the mobility between the world of business and the world of academia in European universities is infrequent; the isolation between the two worlds is reported to be high and university-enterprises partnerships are those rare institutional arrangements in which the two distinct institutional cultures meet on a daily basis. There are different motivations for knowledge production in the two sectors, and there are clashes in values and norms, widely studied in the literature (see especially Bruneel, D’Este and Salter 2010, Abreu *et al.* 2008, Ternouth *et al.* 2010, Philpott *et al.* 2011, David and Metcalfe 2010, Guldbrandsen, Mowery and Feldman 2011, and Braunerhjelm 2007). Our research findings are fully consistent with how David and Metcalfe summarized the differences between universities and companies involved in knowledge exchange activities recently: apart from different “governance systems”, and “different norms for the production and sharing of knowledge within and between the two systems”, they also represent “different cultures, different value systems, different time frames, and different notions of what their principal activities are. Thus the principal output of universities are educated minds and new understandings of the natural and artificial worlds, economy, society and so on. The outputs of business are different” (David and Metcalfe 2010: 90).<sup>240</sup>

---

240 The role of close university-business links have been emphasized at the level of the European Commission repeatedly in the last few years. The Commission has launched what it termed “the University-Business Forum”, which is described as (EC 2011b) “a platform on European level for a structured dialogue between the stakeholders. The exchanges and discussions are based on real cases and address university-business

While knowledge produced in universities is more “public”, knowledge produced in firms is “private” (Bruneel, D’Este and Salter 2010: 859): it is

largely closed, remaining hidden within the firm or disclosed in a limited way through patents filed primarily for the purposes of obtaining temporary monopolies. ... the primary motivation of firms’ knowledge creation activities is the appropriation of knowledge for private gain, and openness to external actors is used as a strategic mechanism to gain advantage over competitors. Given these two systems of knowledge production, U-I [university-industry] collaborations are likely to be plagued with conflicts due to a weak attitudinal alignment between partners.

There is a lot of uncertainty and suspicion between the two sectors but especially public (and in some cases private) funding makes the meeting of two institutional cultures fruitful for both academic and business partners.

## **7.6. A wider empirical context: partnerships and academic norms and values in 2011**

### *Norms and values of European academics in 2011*

In exploring the diversification of channels of knowledge exchange in European universities and changing roles of individuals, institutions, public and private funding arrangements and staff mobility in the success of partnerships, a wider empirical context is also useful. A large-scale comparative empirical studies of attitudes to university-enterprises partnerships can either focus on academics or on the business community (for the business perspective, see a study by Ternouth *et al.* 2010). Here, we refer to recent (2011) studies of European academics in eleven countries. Thus research findings presented in this chapter

---

cooperation related topics from the business and higher education perspectives, including governance, curriculum development and delivery, mobility, lifelong learning, knowledge transfer, entrepreneurship, etc. The Forum has opened a dialogue between the two worlds about how they can work more closely together. It has demonstrated that there is an appetite on both sides for working in partnership focused on education, with the common goal to ensuring that education delivers high-level and highly valued skills, underpinned at all times by high levels of adaptability, entrepreneurship and creative and innovative capacities. ... The overall objective of this action is to ensure stronger societal and economic relevance and outreach of higher education through strengthening the employability, creativity and innovative potential of graduates and professors and the role of higher education institutions as engines of innovation”.

can be viewed in a larger context of general attitudes of European academics to research they perform and how they classify their own research activities. So far, the literature in the area based on empirical data tended to focus on national systems (or if globally, then with only four European systems represented, as in the Carnegie study of the academic profession, as reported in Altbach 1996 and Boyer, Altbach and Whitelaw 1994). The present contextual analysis comes from the EUROAC project dataset (an ESF “Academic Profession in Europe: Responses to Societal Challenges” project which follows the global format of a CAP “Changing Academic Profession” project, based on country data from 11 European countries, with about 20,000 returned surveys and 600 semi-structured in-depth interviews (the present author was coordinating the Polish part of the EUROAC project which includes about 3,500 returned surveys and 60 semi-structured interviews).<sup>241</sup>

The survey data (as well as large qualitative material from interviews in seven countries, not studied in this chapter) tend to indicate a huge heterogeneity in attitudes towards commercialization and technology transfer, based on prevailing academic norms and values, across the European continent. From among self-identifying options studied in the survey (four answers to the question “How would you characterize the emphasis of your primary research this (or the previous) academic year?”: “basic/ theoretical”, “applied/ practically oriented”, “commercially-oriented/ intended for technology transfer” and “socially-oriented/ intended for the betterment of society”), half or more of academics in the countries studied (except for Switzerland and Portugal) chose “basic/theoretical” (50-69 percent) and more than a half of academics chose “applied/practically oriented” (55-73 percent) self-declared identification.

### *The emphasis of primary research across European systems*

The “commercially-oriented/intended for technology transfer” option is indicated by between 14 percent of academics (in such countries as Austria, the Netherlands, and Norway) and 20-22 percent (in such countries as

---

241 Research in Europe was conducted in 2009-2011, coordinated by Ulrich Teichler of Kassel University, and funded by the European Science Foundation. The dataset used in this chapter was created by René Kooij and Florian Löwenstein for the EUROAC project (date of version: 17.06.2011), E-mail: kooij@incher.uni-kassel.de; loewenstein@incher.uni-kassel.de, International Centre of Higher education Research - INCHER-Kassel, University of Kassel, Germany.

Germany, Finland, and Switzerland). Most innovative economies in Europe in the last half a decade – Germany, Finland, and Switzerland – have systems of higher education which are highly positive towards commercialization activities compared with other countries, which may indicate a more direct link between academic values and norms, and especially positive attitudes towards knowledge exchange between the university sector and the business sector, and innovation and the economic competitiveness of nations. Cross-national variations between European systems in attitudes about the commercialization of research and technology transfer are given below, in the context of overall emphasis in research activities across eleven countries. The scale of answers in Tables 1 and 2 below was from 1 = “Very much” to 5 = “Not at all”. The number of academics surveyed varied but in most countries the number was more than 1.000. The countries in Tables 1 and 2 are shown in a descending order: from those systems in which academics identify most with the commercial orientation in their own research to those systems in which this identification is the lowest; the difference between the highest ranking countries (Switzerland, Finland, and Portugal) and the lowest ranking ones (Austria and Norway) is not substantial, though (3.8 vs. 4.2).

**Table 1.** *Character of Primary Research (arithmetic mean)*

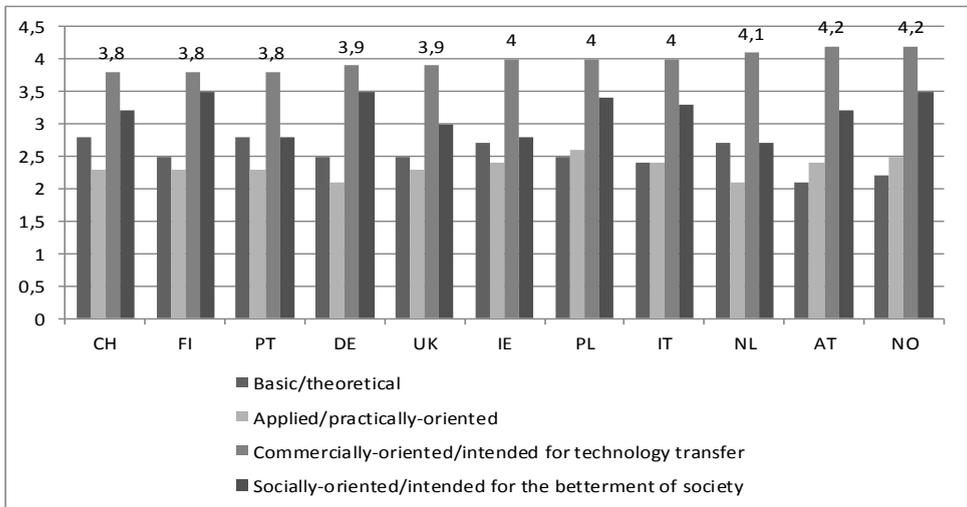
Question D2: **How would you characterize the emphasis of your primary research** this (or the previous) academic year? (Scale of answer from 1 = Very much to 5 = Not at all)

Country	Basic/ theoretical	Applied/ practically- oriented	Commercially- oriented/ intended for technology transfer	Socially-oriented/ intended for the betterment of society	Count (n)
CH	2.8	2.3	3.8	3.2	1234
FI	2.5	2.3	3.8	3.5	1126
PT	2.8	2.3	3.8	2.8	1006
DE	2.5	2.1	3.9	3.5	1053
UK	2.5	2.3	3.9	3	805
IE	2.7	2.4	4	2.8	856
PL	2.5	2.6	4	3.4	3410

IT	2.4	2.4	4	3.3	1684
NL	2.7	2.1	4.1	2.7	578
AT	2.1	2.4	4.2	3.2	1410
NO	2.2	2.5	4.2	3.5	912

**Table 2.** *Character of Primary Research (arithmetic mean)*

Question D2: **How would you characterize the emphasis of your primary research** this (or the previous) academic year? (Scale of answer from 1 = Very much to 5 = Not at all)



Count: n(CH)=1234; n(FI)=1126; n(PT)=1006; n(DE)=1053; n(UK)=805; n(IE)=856; n(PL)=3410; n(IT)=1684; n(NL)=578; n(AT)=1410; n(NO)=912.

The differences between European systems become much more marked if we analyze only the answers 1 and 2 (from a scale of 1 to 5), i.e. those closest to the (positive) “Very much” answer. The variation between systems the least identifying with the commercialization and technology transfer in universities is by more than 50 percent: while in Austria, the Netherlands, and Norway, the percentage of answers is 14 percent, in those systems most strongly identifying with third mission activities, commercialization and technology transfer (Germany, Switzerland, and Finland), the percentage of answers is in the 20-22 percent range. The details are given below in Table 3.

**Table 3.** *Character of Primary Research (percent; responses 1 and 2)*

Question D2: **How would you characterize the emphasis of your primary research** this (or the previous) academic year? (Scale of answer 1 = Very much to 5 = Not at all)

Country	Basic/ theoretical	Applied/ practically- oriented	Commercially- oriented/ intended for technology transfer	Socially-oriented /intended for the betterment of society	Count (n)
AT	69	61	14	39	1490
NL	50	73	14	51	578
NO	67	59	14	30	912
IT	57	61	15	34	1684
IE	50	63	16	48	856
UK	55	66	17	41	805
PL	58	55	18	32	3410
PT	42	64	18	48	1006
DE	58	70	20	30	1053
FI	56	66	21	31	1126
CH	44	65	22	37	1234

### *Writing academic papers vs. technology transfer activities and patenting*

There have been concerns about the impact of changing relationships between universities and industry on basic research performed in universities, as summarized by Ranga *et al.* (2003: 301-302): “the process of reorienting Science to the needs of industry is often seen as coming only at a very heavy price, namely that universities will be deflected from their primary mission of undertaking basic research, in the interests of commercialization”. In the cases studied in the GOODUEP project, similar concerns have not been voiced. Rather, consistently with one line of

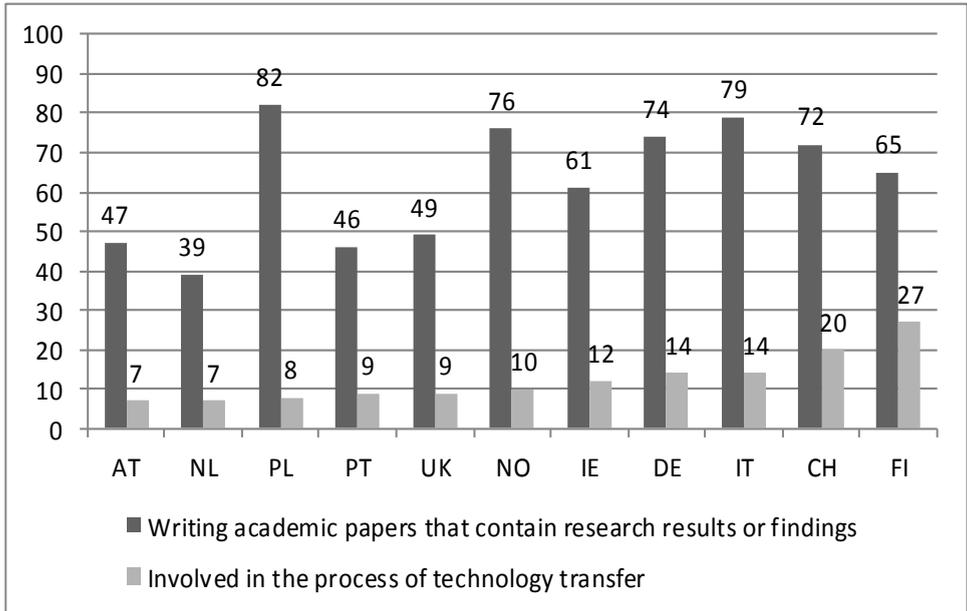
literature (Ranga *et al.* 2003: 318, Siegel *et al.* 2007: 497), mutually reinforcing relationships were observed between various channels of knowledge exchange (as Larsen (2011: 16) pointed out, “publishing, patenting, and various other forms of academic enterprise, appear to be complementary rather than competing activities”). A higher degree of involvement in partnerships, at an individual academic or a research group level, meant usually a higher publication record and more other academic achievements (see a study by Lam (2011) on three different motivations of academic scientists to engage in research commercialization: “gold”, “ribbon” or “puzzle”, Bercovitz and Feldman 2007).

The majority of partnerships studied were “soft” channels of knowledge exchange or entrepreneurial activities (and only several were “hard”, on the distinction, see Philpott *et al.* 2011: 162-163) but the findings were consistent across academic institutions and across countries. They are in turn consistent with research results of the EUROAC project which shows that the large-scale involvement of the academic community in the traditional channel of knowledge exchange (“writing academic papers” as an academic activity; see Godin and Gingras (2000: 277) on the centrality of universities vis-à-vis the government, industry, and the hospital sectors in the knowledge production through scientific papers, and Cohen *et al.* 2003 on published papers as a key channel through which university research impacts industrial R&D) in many systems is combined with technology transfer activities and patenting. One of the questions asked in the survey was the following: “Have you been involved in any of the following research activities during this (or the previous) academic year?” The analysis of the EUROAC dataset shows that in the countries in which the highest share of academics is involved in writing academic papers, also the highest share of academics is involved in technology transfer (they do not have to be the same academics; on the same research groups, see Ranga *et al.* 2003, the same academics, or the level of “forgotten individuals” in the studies of commercialization, see Magnusson *et al.* 2009). This is especially clear in the four countries with the highest level of staff involvement in technology transfer activities: Finland (27 percent), Switzerland (20 percent), Italy (14 percent) and Germany (14 percent); Poland is a special case which combines the highest degree of involvement in writing academic papers and one of the lowest degrees in technology transfer, due to the Polish system being highly inward-looking and academically-driven, see

Kwiek 2012a, Kwiek and Maassen 2012). The details are given below in Tab. 4, and full data in the Data Appendix.

**Table 4.** *Research Activities (percent of all respondents; multiple responses)*

Question D3: Have you been involved in any of the following research activities during this or the previous academic year? **Writing academic papers that contain research results or findings vs. involved in the process of technology transfer**

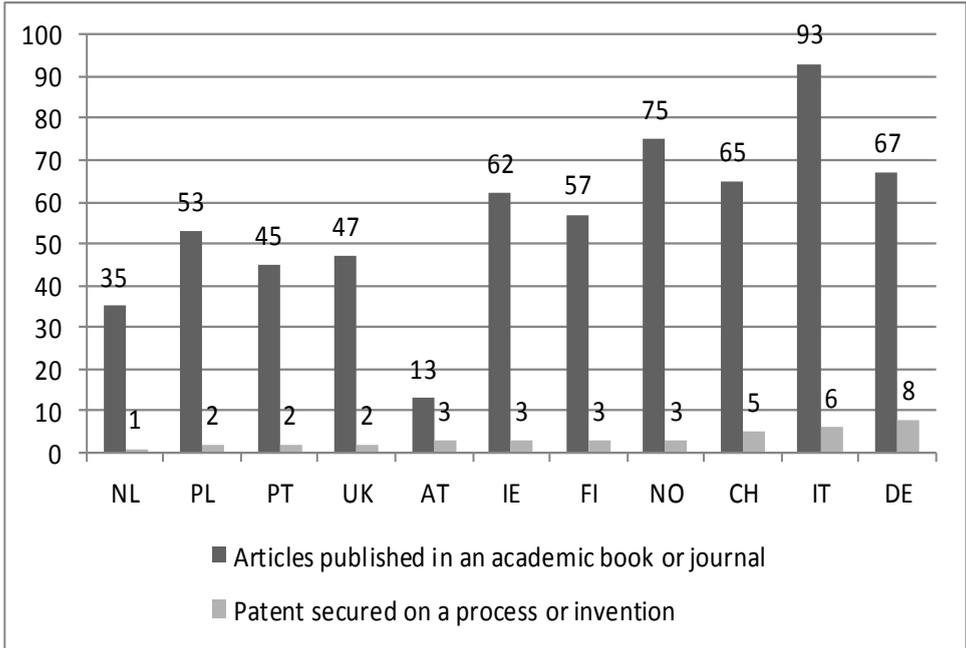


Count: n(AT)=1492; n(NL)=1209; n(PL)=3704; n(PT)=1513; n(UK)=1467; n(NO)=986; n(IE)=1126; n(DE)=1215; n(IT)=1711; n(CH)=1414; n(FI)=1374.

A similar cross-country analysis can be performed with another set of variables referring to different research outputs completed in the past three years: “articles published in an academic book or journal” and “patent secured on a process or invention”. The three countries in which the highest share of academics was involved in patenting (Germany 8 percent, Italy 6 percent, and Switzerland 5 percent) are all countries in which the share of academics publishing academic articles is higher than the average in the sample of European systems. The details are given below in Tab. 5, and full data in the Data Appendix.

**Table 5.** *Proportion of Respondents Producing Different Research Outputs in the Past Three Years (percent of all respondents; multiple responses)*

Question D4: How many of the following scholarly contributions have you completed in the past three years? **Articles published in an academic book or journal vs. patent secured on a process or invention** ( percent of all respondents)



Count: n(NL)=1209; n(PL)=3704; n(PT)=1513; n(UK)=1467; n(AT)=1492; n(IE)=1126; n(FI)=1374; n(NO)=986; n(CH)=1414; n(IT)=1711; n(DE)=1215.

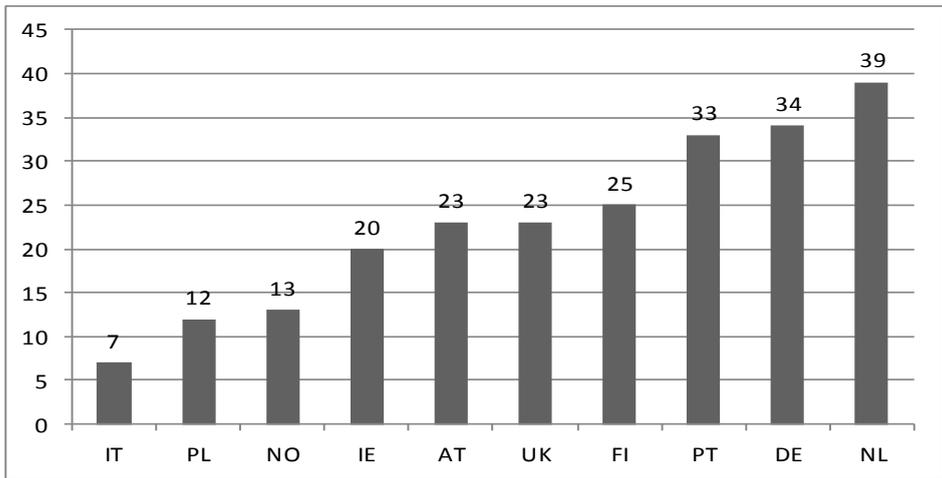
### *Staff recruitment procedures: work experience outside academia*

Also the research findings about the staff mobility presented in this chapter are consistent with the EUROAC survey data which clearly show that most European institutions do not consider work experience outside of academia as important in their staff recruitment procedures. The survey question asked was “to what extent does your institution emphasize the following practices” (Scale of answer 1 = Very much to 5 = Not at all): “recruiting faculty who have work experience outside of academia”. The (most positive) answers 1 and 2 varied substantially across countries, from 7 percent to 39 percent, with the lowest scores in Italy, Poland, and Norway, and the highest scores in Portugal, Germany and the Netherlands. Only in four countries, the

emphasis on the recruitment of faculty who have work experience was reported by a quarter or more of academics (Finland, Portugal, Germany, and the Netherlands). The details of cross-country variations are given below in Table 6, and full data in the Data Appendix.

**Table 6.** *Strong Perceptions of Teaching and Research Related Institutional Strategies (percent; responses 1 and 2)*

Question E6: To what extent does your institution emphasize the following practices? (Scale of answer 1 = Very much to 5 = Not at all): **“Recruiting faculty who have work experience outside of academia”**.



Count: n(IT)=1622; n(PL)=3424; n(NO)=871; n(IE)=794; n(AT)=1113; n(UK)=796; n(FI)=1173; n(PT)=960; n(DE)=1001; n(NL)=688.

To sum up this contextual brief section: the context provided by large-scale European comparative higher education research is useful in relating various knowledge exchange channels and processes to academic norms and attitudes represented by the European academic profession. The implementation of national and European-level policies of strengthening university-enterprises links is always conditional to, and embedded in, academic institutions and their values and norms. Large-*N* (statistical) research designs are becoming increasingly useful in putting knowledge transfer in the context of the academic profession studies.

## 7.7. Conclusions

Research findings in this chapter support strongly the argument according to which the role of individuals in knowledge exchange is equal to (and often higher than) that of institutional (both funding- and governance-related) arrangements. Case studies across European universities seem to indicate that individual academic norms and values, as studied in the academic profession research, count at least as much in the development of university-enterprise partnerships as institutional academic norms and values, as studied in institutionalist approaches to the studies of organizations (Maassen and Olsen 2007). Partnerships studied here are bottom-up driven and heavily dependent on their visionary leaders who are often functioning like “quasi-firms”. Policy changes leading to the enhancement of university-business links, to be successful, need to refer to the existing academic norms and values which show strong country-variations across Europe. The most successful partnerships seem to emerge when there is a convergence between individual academic norms, supportive of knowledge exchange with the outside environment, and institutional academic norms, favoring academic entrepreneurialism and third-mission activities.

The pattern of growth of partnerships across Europe seems structurally similar, although the level of public engagement (and public funding) in partnerships varies widely. While the world of academia and the world of business operate like separate universes (with different attitudes and work motives, different institutional cultures, timeframes of operation and conceptions of what their core activities are), at the intersections between them found in partnerships, the two worlds come closer for specific purposes, in specific academic places, and with specific (often publicly-supported) funding arrangements. The inter-sectoral mobility was found to be very low, mostly one-way (from the academia to the business sector) but nevertheless present through various part-time arrangements. The European academic profession, as viewed through the lenses of a large-scale statistical analysis of eleven countries, seems surprisingly highly appreciative of commercially-oriented research, with such countries as Germany, Finland and Switzerland having one fifth or more academics characterizing their research emphasis as strongly commercially-oriented. The most popular soft channel of knowledge transfer, that is “writing academic papers”, does not seem to collide with such hard channels as technology transfer and patenting, at least at the level of national systems (an individual-level cross-country analysis of relationships between

engagement in soft and hard channels goes beyond the scope of this chapter but is an exciting research direction for the future).

Finally, there are two wider lessons to be drawn: one is in line with what John Ziman suggested almost two decades ago in his study on science in a “dynamic steady state”: we are in a state of flux leading to transformative changes in the university sector across Europe, and various knowledge exchange mechanisms are those university nodes where the changes are experimented with. They are in the eye of the storm:

We are still in the midst of a major historical event, whose contours and outcome we can only guess. ... The new structures that are emerging are not the products of a gentle process of evolution: they are being shaped very roughly by a dynamic balance between external forces exerted by society at large and internal pressures intrinsic to science itself. ... The whole system has become extraordinarily fluid. Nobody is quite sure what arrangements will crystallize out and harden into a regular pattern of principles, procedures, policies and practices for the longer run (Ziman 1994: 25).

And the second lesson is in line with a long-term historical perspective in which universities and businesses are entirely separate social institutions with separate, incongruent social roles and tasks. They increasingly meet and cooperate in such places as partnerships studied in this chapter but their internal cultures remain and should remain different. As J. Stanley Metcalfe (2010: 30) stressed recently,

the division of labour between profit seeking business corporations and universities reflects both the quite distinct roles that these organisations fulfill, and, the complementarity between those roles. We can all understand that it would be as unwise to expect firms to behave like universities as it would be to expect universities to behave like firms. The division of labour is there for a purpose, it should be respected.

---

Note: the chapter refers specifically to national reports from six countries (Spain, Germany, Italy, the Netherlands, Poland, and the United Kingdom), eighteen institutional case studies (University of Kassel, Technische Universität Darmstadt, and Cologne University of Applied Sciences in Germany; Valencia University of Technology, University of Santiago de Compostela and University of Seville in Spain; Politecnico di Torino, University Commerciale Luigi Bocconi, and University of the Salento at Lecce in Italy; University of Maastricht, University of Twente, and Utrecht University of Applied Sciences in the Netherlands; Adam Mickiewicz University/University of Poznań, Poznań University of Economics and Poznań University of Technology in Poland; and University of Warwick, University of Hull, and University of Hertfordshire in the United Kingdom), and ten

## Data Appendix:

**Table 7.** *Research Activities (percent of all respondents; multiple responses)*

	2010				2007/08							
	AT	CH	IE	PL	NL	DE	FI	IT	NO	PT	UK	
Preparing experiments, inquiries etc.	53	57	55	40	34	60	57	56	51	32	30	
Conducting experiments, inquiries etc.	50	54	66	38	30	58	50	54	41	30	29	
Supervising a research team or graduate research assistants	48	40	36	49	23	39	38	63	31	16	25	
<u>Writing academic papers that contain research results or findings</u>	82	72	61	82	39	74	65	79	76	46	49	
<u>Involved in the process of technology transfer</u>	11	20	12	8	7	14	27	14	10	9	9	
Answering calls for proposals or writing research grants	56	45	45	54	27	50	49	70	70	15	35	
Managing research contracts and budgets	42	34	33	16	10	37	29	44	30	11	21	
Purchasing or selecting equipment and research supplies	34	34	30	46	8	40	39	59	32	23	24	
No answer	11	15	11	12	55	17	18	4	13	42	48	
Total	387	370	349	346	233	389	373	443	354	225	271	
Count (n)	1492	1414	1126	3704	1209	1215	1374	1711	986	1513	1467	

Question D3: Have you been involved in any of the following research activities during this or the previous) academic year?

partnership case studies (Institute of Materials Technology – Polymer and Recycling Technology, University of Kassel; Integrated and Dual Study Programmes, Cologne University of Applied Sciences; Valencia Institute of Biomechanics, Valencia University of Technology; UNIRISCO, University of Santaigo de Compostela; Instituto Superiore Mario Boella, Politecnico di Torino; University of Maastrich Holding BV; Kennispark, University of Twente; Adam Mickiewicz University Foundation’s Science and Technology Park, University of Poznań; Hull Logistics Institute, University of Hull; and University of Hertfordshire and Heales Medical Ltd), publicly available from the GOODUEP (“Good Practices in University-Enterprise Partnerships”) project website: <http://www.gooduep.eu/>.

**Table 8.** *Proportion of Respondents Producing Different Research Outputs in the Past Three Years (percent of all respondents; multiple responses)*

	2010				2007/08							
	AT	CH	HR	IE	PL	NL	DE	FI	IT	NO	PT	UK
Scholarly books you authored or co-authored	29	22	34	15	9	12	18	19	47	23	16	11
Scholarly books you edited or co-edited	26	12	24	14	7	8	12	14	26	12	13	8
<u>Articles published in an academic book or journal</u>	23	65	82	62	53	35	67	57	93	75	45	47
Research report/monograph written for a funded project	46	45	26	34	12	17	47	30	47	19	28	20
Paper presented at a scholarly conference	76	65	85	65	51	32	64	59	84	70	49	46
Professional article written for a newspaper or magazine	26	32	31	23	19	22	24	26	28	31	20	14
<u>Patent secured on a process or invention</u>	5	5	1	3	2	1	8	3	6	3	2	2
Computer program written for public use	5	7	8	4	1	3	6	5	4	4	4	3
Artistic work performed or exhibited	2	6	4	4	2	1	4	3	1	5	3	2
Video or film produced	4	7	4	6	0	1	6	3	3	4	3	2
Others	5	5	6	5	3	2	4	5	4	9	8	5
No research activity stated	15	18	7	27	39	56	17	24	2	12	39	47
Total	262	289	313	263	199	189	276	247	344	266	231	207
Count (n)	1492	1414	354	1126	3704	1209	1215	1374	1711	986	1513	1467

Question D4: How many of the following scholarly contributions have you completed in the past three years?

**Table 9.** *Strong Perceptions of Teaching and Research Related Institutional Strategies (percent; responses 1 and 2)*

	2010				2007/08						
	AT	IE	PL	NL	DE	FI	IT	NO	PT	UK	
Performance based allocation of resources to academic units	40	22	38	37	49	55	30	53	16	47	
Evaluation based allocation of resources to academic units	25	13	25	26	26	35	23	23	15	33	
Funding of departments substantially based on numbers of students	29	59	49	75	45	46	54	51	40	70	
Funding of departments substantially based on numbers of graduates	18	30	9	66	25	70	23	55	20	30	
Considering the research quality when making personnel decisions	48	40	32	38	50	39	23	34	22	62	
Considering the teaching quality when making personnel decisions	20	18	23	39	26	28	12	26	17	31	
<u>Considering the practical relevance/applicability of the work of colleagues when making personnel decisions</u>	23	16	16	31	22	31	11	20	15	29	
<u>Recruiting faculty who have work experience outside of academia</u>	22	20	12	39	34	25	7	13	33	23	
<u>Encouraging academics to adopt service activities/entrepreneurial activities outside the institution</u>	11	23	12	27	50	20	15	14	32	30	
<u>Encouraging individuals, businesses, foundations etc. to contribute more to higher education</u>	34	40	21	37	45	19	22	20	29	36	
Count (n)	1138	794	3424	688	1001	1173	1622	871	960	796	

Question E6: To what extent does your institution emphasize the following practices? (Scale of answer 1 = Very much to 5 = Not at all)

# Bibliography

- Abreu, Maria, Vadim Grinevich, Alan Hughes, Michael Kitson, Philip Ternouth (2008). "Universities, Business and Knowledge Exchange". Report based on a research project funded by ESCR, Grant RES-171-25-0018 and the Sasakawa Peace Foundation. The Council for Industry and Higher Education, and Centre for Business Research 2008.
- Abreu, Maria, Vadim Grinevich, Alan Hughes, Michael Kitson (2009). "Knowledge Exchange between Academics and the Business, Public and Third Sector". Report based on a research project carried out in the Centre for Business Research (CBR) at the University of Cambridge. London, UK-Innovation Research Centre.
- Acemoglu, Daron (2009). *Introduction to Modern Economic Growth*. Princeton: Princeton University Press.
- Acs, Zoltan J., Henri L. F. de Groot, Peter Nijkamp, eds. (2002). *The Emergence of the Knowledge Economy: A Regional Perspective*. Berlin: Springer.
- Acs, Zoltan J., David B. Audretsch, eds. (2003). *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. Second Edition. Dordrecht: Springer.
- Acs, Zoltan J., David B. Audretsch, Robert J. Strom, eds. (2009). *Entrepreneurship, Growth, and Public Policy*. New York, Cambridge University Press.
- Adema, Willem, Peter Whiteford (2010). "Public and Private Social Welfare". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 121-138.
- Adeyi, Olusoji, Gnanaraj Chellaraj, Ellen Goldstein, Alexander Parker and Dena Ringold (1997). "Health Status During the Transition in Central and Eastern Europe: Development in Reverse?" *Health Policy and Planning*. Vol. 12. No. 2.
- Aghion, Philippe (2008). "Growth and the Financing and Governance of Education". In: *Proceedings of the International Conference: Privatization in Higher Education*. The Samuel Neaman Institute, Haifa, Israel, January 7-8, 2008.
- Aghion, Philippe, Mathias Dewatripont, Caroline Hoxby, Andreu Mas-Colell, André Sapir (2008). *Higher Aspirations: An Agenda for Reforming European Universities*. Brussels: Bruegel.
- Aghion, Philippe, Peter Howitt (2009). *The Economics of Growth*. Cambridge: The MIT Press.
- Aghion, Philippe, Mathias Dewatripont, Caroline Hoxby, Andreu Mas-Colell, André Sapir (2009). *The Governance and Performance of Research Universities: Evidence from Europe and the U.S.* NBER Working Paper No. 14851.
- Aidukaite, Jolanta (2009). "Old Welfare State Theories and New Welfare Regimes in Eastern Europe: Challenges and Implications". *Communist and Post-Communist Studies*. Vol. 42.
- Aidukaite, Jolanta (2010). "Welfare Reforms in Central and Eastern Europe: Socio-Economic Trends and Future Prospects". A paper presented at the Social Policy Association 2010 Conference, July 2010, Lincoln, the UK.
- Albrow, Martin (1996). *The Global Age. State and Society Beyond Modernity*. Oxford: Blackwell.

- Alcock, Pete, Martin Powell, eds. (2011). *Welfare Theory and Development. Volume IV*. London: SAGE.
- Aldrich, Howard (1999). *Organizations Evolving*. London: SAGE.
- Aldrich, Howard E. (2008). *Organizations and Environments*. Stanford: Stanford University Press.
- Aldrich, Howard E., Martin Ruef (2006). *Organizations Evolving*. Second Edition. London: SAGE.
- Alesina, Alberto, Francesco Giavazzi (2006). *The Future of Europe. Reform or Decline*. Cambridge: the MIT Press.
- Alexander, F. King, Ronald G. Ehrenberg, eds. (2003). *Maximizing Revenue in Higher Education. New Directions for Institutional Research*. San Francisco, California: A Wiley Periodicals.
- Alexander, Jeffrey C., Paul Colomy, eds. (1990). *Differentiation Theory and Social Change: Comparative and Historical Perspectives*. New York: Columbia University Press.
- Allen, Jim, Rolf van der Velden (2007). "Transitions from Higher Education to Work". In: Ulrich Teichler (ed.), *Careers of University Graduates. Views and Experiences in Comparative Perspectives*. Dordrecht: Springer. 55-78.
- Allen, Jim, Rolf van der Velden, eds. (2011). *The Flexible Professional in the Knowledge Society: New Challenges for Higher Education*. Dordrecht: Springer.
- Altbach, Philip G. (1987). *The Knowledge Context: Comparative Perspectives on the Distribution of Knowledge*. New York: State University of New York Press.
- Altbach, Philip G. (1997). "Research on Higher Education: Global Perspectives". In: Jan Sadlak, Philip G. Altbach (eds.), *Higher Education Research at the Turn of the New Century: Structures, Issues, and Trends*. Paris: UNESCO Publishing. 3-23.
- Altbach, Philip G., ed. (1996). *The International Academic Profession. Portraits of Fourteen Countries*. Princeton: The Carnegie Foundation.
- Altbach, Philip G., ed. (2000). *The Changing Academic Workplace: Comparative Perspectives*. Chestnut Hill: CIHE Boston College.
- Altbach, Philip G., ed. (2002). *The Decline of the Guru: The Academic Profession in Developing and Middle-Income Countries*. Chestnut Hill: CIHE Boston College.
- Altbach, Philip G. (2007a). *Tradition and Transition: The International Imperative in Higher Education*. Rotterdam: Sense Publishers.
- Altbach, Philip G. (2009). "Higher Education: An Emerging Field of Research and Policy". In: Roberta Malee Bassett, Alma Maldonado-Maldonado (eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge. 9-25.
- Altbach, Philip G. (2011a). "The Academic Profession: The Realities of Developing Countries". In: Philip G. Altbach (ed.), *Leadership for World-Class Universities: Challenges for Developing Countries*. New York: Routledge. 205-223.
- Altbach, Philip G. (2011b). "The Past, Present, and Future of the Research University". In: Philip G. Altbach, Jamil Salmi (eds.), *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington, D.C.: The World Bank. 11-32.

- Altbach, Philip G. (2012). "The Academic Profession". In: Philip G. Altbach (ed.), *International Higher Education. An Encyclopedia: Volume 1*. New York and London: Garland Publishing. 23-45.
- Altbach, Philip G., Jorge Balán, eds. (2007). *World Class Worldwide. Transforming Research Universities in Asia and Latin America*. Baltimore: Johns Hopkins University Press.
- Altbach, Philip G., Liz Reisberg, Laura E. Rumbley (2010). *Trends in Global Higher Education: Tracking an Academic Revolution*. Paris: UNESCO Publishing.
- Altbach, Philip G., Jamil Salmi, eds. (2011). *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington, D.C.: The World Bank.
- Altbach, Philip G., Liz Reisberg, Iván F. Pacheco (2012). "Academic Remuneration and Contracts: Global Trends and Realities". In: Philip G. Altbach, Liz Reisberg, Maria Yudkevich, Gregory Androushchak, Iván F. Pacheco (eds.), *Paying the Professoriate: A Global Comparison of Compensation and Contracts*. New York: Routledge. 3-20.
- Alvarez, Sharon A., Rajshree Agarwal, Olav Sorenson, eds. (2005). *Handbook of Entrepreneurship Research. Interdisciplinary Perspectives*. Dordrecht: Springer.
- Amable, Bruno (2009). *The Diversity of Modern Capitalism*. Oxford: Oxford University Press.
- Amaral, Alberto, António Magalhães (2003). "The Emergent Role of External Stakeholders in European Higher Education Governance". In: Alberto Amaral, Glen A. Jones, Berit Karseth (eds.), *Governing Higher Education: National Perspectives on Institutional Governance*. Dordrecht: Kluwer Academic Publishers. 1-21.
- Amaral, Alberto, António Magalhães (2007). "Implementation of Higher Education Policies: A Portuguese Example". In: Åse Gornitzka, Maurice Kogan and Alberto Amaral (eds.), *Reform and Change in Higher Education. Analysing Policy Implementation*. Dordrecht: Springer. 117-134.
- Amaral, Alberto, Glen A. Jones, Berit Karseth, eds. (2003). *Governing Higher Education: National Perspectives on Institutional Governance*. Dordrecht: Kluwer Academic Publishers.
- Amaral, Alberto, V. Lynn Meek, Ingvild M. Larsen, eds. (2003). *The Higher Education Managerial Revolution?* Dordrecht: Kluwer Academic Publishers.
- Amaral, Alberto, Ivar Bleiklie, Christine Musselin, eds. (2008). *From Governance to Identity: A Festschrift for Mary Henkel*. Dordrecht: Springer.
- Amaral, Alberto, Guy Neave, Christine Musselin, Peter Maassen, eds. (2009). *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer.
- Antonelli, Cristiano, Dominique Foray, Bronwyn H. Hall, W. Edward Steinmueller, eds. (2006). *New Frontiers in the Economics of Innovation and New Technology*. Cheltenham: Edward Elgar Publishing.
- Antonelli, Cristiano, Chiara Franzoni, Aldo Geuna (2011). "The Contributions of Economics to a Science of Science Policy". In: M.G. Colombo, L. Grilli, L. Piscitello, C. Rossi-Lamastra (eds.), *Science and Innovation Policy for the New Knowledge Economy*. Cheltenham: Edward Elgar Publishing. 19-36

- Antonowicz, Dominik (2012a). "External Influences and Local Responses. Changes in Polish Higher Education 1990-2005". In: Marek Kwiek, Peter Maassen (eds.), *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway*. Frankfurt and New York: Peter Lang. 87-110.
- Antonowicz, Dominik (2012b). "Europe 2050. New Europeans and Higher Education". In: Marek Kwiek, Andrzej Kurkiewicz (eds.), *The Modernisation of European Universities. Cross-National Academic Perspectives*. Frankfurt and New York: Peter Lang. 113-126.
- Antonowicz, Dominik, Ben Jongbloed (2012). *University governance reform in the Netherlands, Austria, and Portugal: Lessons for Poland*. Warsaw: Ernst and Young.
- Arbo, Peter, Paul Benneworth (2006). *Understanding the Regional Contribution of Higher Education Institutions*. Paris: OECD/IMHE.
- Archer, Louise, Merryn Hutchings, Alistair Ross (2003). "Higher Education and Social Class: Issues of Exclusion and Inclusion". London: RoutledgeFalmer.
- Arnold, Erik, Jasper Deuten, Rapela Zaman (2006). *Four Case Studies in University Modernisation: KU Leuven, Twente, Manchester and Loughborough*. Enschede: Technopolis.
- Arthur, James, Karen E. Bohlin, eds. (2005). *Citizenship and Higher Education: The Role of Universities in Communities and Society*. London: Routledge.
- Arum, Richard, Adam Gamoran, Yossi Shavit (2007). "More Inclusion than Diversion: Expansion, Differentiation, and Market Structure in Higher Education." In: Yossi Shavit, Richard Arum, Adam Gamoran (eds.), *Stratification in Higher Education: A Comparative Study*. Stanford: Stanford University Press. 1-35.
- Arum, Richard, Josipa Roksa (2011). *Academically Adrift: Limited Learning on College Campuses*. Chicago and London: The University of Chicago Press.
- Ash, Mitchell G. (2008). "From 'Humboldt' to 'Bologna': History as Discourse in Higher Education Reform Debates in German-Speaking Europe". In: Bob Jessop, Norman Fairclough, Ruth Wodak (eds.), *Education and the Knowledge-Based Economy in Europe*. Rotterdam/Taipei: Sense Publishers. 41-61.
- Ashby, Eric (1969). *The Academic Profession*. London: Oxford University Press.
- Åslund, Anders (1995). "The Case for Radical Reform". In: Larry Diamond, Marc F. Plattner (eds.), *Economic Reform and Democracy*. Baltimore: The John Hopkins University Press. 74-85.
- Atkinson, A. B. (2008). *The Changing Distribution of Earnings in OECD Countries*. Oxford: Oxford UP.
- Attewell, Paul, Catherine S. Newman, eds. (2010). *Growing Gaps. Educational Inequality Around the World*. Oxford: Oxford University Press.
- Bache, Ian, Matthew Flinders, eds. (2004). *Multi-level Governance*. Oxford: Oxford University Press.
- Baker, David P. (2012). "The Educational Transformation of Work: A Synthesis". In: Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin, John Lowe (eds.), *Educating for the Knowledge Economy? Critical Perspectives*. London: Routledge. 97-113.

- Balcerowicz, Leszek (1995a). "Understanding Postcommunist Transitions". In: Larry Diamond, Marc F. Plattner (eds.), *Economic Reform and Democracy*. Baltimore: The John Hopkins University Press. 86-100.
- Balcerowicz, Leszek (1995b). *Socialism. Capitalism. Transformation*. Budapest: Central European University Press.
- Balcerowicz, Leszek (2002). *Post-Communist Transition: Some Lessons*. London: The Institute of Economic Affairs.
- Baldrige, J. Victor (1971). *Power and Conflict in the University: Research in the Sociology of Complex Organizations*. New York: John Wiley & Sons.
- Baldrige, J. Victor, Terrence E. Deal, eds. (1975). *Managing Change in Educational Organizations: Sociological Perspectives, Strategies, and Case Studies*. Berkeley: McCutchan Publishing Corporation.
- Baranowska, Anna (2011). "Does Horizontal Differentiation Make Any Difference? Heterogeneity of Educational Degrees and Labor Market Entry in Poland". In: Irena Kogan, Clemens Noelke, Michael Gebel (eds.), *Making the Transition. Education and Labor Market Entry in Central and Eastern Europe*. Stanford: Stanford University Press. 216-239.
- Bardach, Eugene (1977). *The Implementation Game: What Happens After a Bill Becomes a Law*. Cambridge and London: The MIT Press.
- Barnett, Ronald (2008). "Being an Academic in a Time-Impoverished Age". In: Alberto Amaral, Ivar Bleiklie, Christine Musselin (eds.), *From Governance to Identity: A Festschrift for Mary Henkel*. Dordrecht: Springer. 7-17.
- Barnhouse Walters, Pamela (2006). "The Limits of Growth: School Expansion and School Reform in Historical Perspective". In: Maureen T. Hallinan (ed.), *Handbook of the Sociology of Education*. Dordrecht: Springer. 241-261.
- Barr, Nicholas, ed. (1994). *Labor Markets and Social Policy in Central and Eastern Europe. The Transition and Beyond*. Oxford: Oxford UP.
- Barr, Nicholas (2001a). *The Welfare State as Piggy Bank. Information, Risk, Uncertainty, and the Role of the State*. Oxford: Oxford UP.
- Barr, Nicholas, ed. (2001b). *Economic Theory and the Welfare State. Volume I: Theory*. Cheltenham: Edward Elgar.
- Barr, Nicholas, ed. (2001c). *Economic Theory and the Welfare State. Volume III: Benefits in Kind*. Cheltenham: Edward Elgar.
- Barr, Nicholas (2001d). "Introduction". In: Nicholas Barr (ed.), *Economic Theory and the Welfare State. Volume I: Theory*. Cheltenham: Edward Elgar. xiii-xl.
- Barr, Nicholas (2004). *Economics of the Welfare State*. (4th ed.) Oxford: Oxford University Press.
- Barr, Nicholas, ed. (2005). *Labor Markets and Social Policy in Central and Eastern Europe. The Accession and Beyond*. Oxford: Oxford UP.
- Barr, Nicholas and Iain Crawford (2005). *Financing Higher Education. Answers from the UK*. London and New York: Routledge.

- Barrier, Julien, Christine Musselin (2009). "The Rationalization of Academic Work and Careers: Ongoing Transformations of the Profession and Policy Challenges". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 203-221.
- Bassett, Roberta Malee, Alma Maldonado-Maldonado, eds. (2009). *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge.
- Bastedo, Michael N. (2007). "Sociological Frameworks for Higher Education Policy Research". In: Patricia J. Gumpert (ed.), *Sociology of Higher Education. Contributions and Their Contexts*. Baltimore: Johns Hopkins University Press. 295-316.
- Bastedo, Michael N., ed. (2012a). *The Organization of Higher Education: Managing Colleges for a New Era*. Baltimore: The John Hopkins University Press.
- Bastedo, Michael N. (2012b). "Organizing Higher Education: A Manifesto". In: Michael N. Bastedo (ed.), *The Organization of Higher Education: Managing Colleges for a New Era*. Baltimore: The John Hopkins University Press. 3-17.
- Batina, Raymond G., Toshihiro Ihori (2005). *Public Goods: Theories and Evidence*. Berlin: Springer.
- Bauer, Marianne, Berit Askling, Susan Gerard Marton, Ference Marton (1999). *Transforming Universities: Changing patterns of Governance, Structure and Learning in Swedish Higher Education*. London: Jessica Kingsley Publishers.
- Bauman, Paul C. (1996). *Governing Education: Public Sector Reform or Privatization*. Boston: Allyn and Bacon.
- Bazant, Ursula, Klaus Schubert (2009). "European Welfare Systems: Diversity Beyond Existing Categories". In: Klaus Schubert, Simon Hegelich, Ursula Bazant (eds.), *The Handbook of European Welfare Systems*. London: Routledge. 513-534.
- Becher, Tony, Maurice Kogan (1980). *Process and Structure in Higher Education*. London: Heinemann.
- Becher, Tony, Maurice Kogan (1992). *Process and Structure in Higher Education*. Second Edition. London: Routledge.
- Becher, Tony, Paul R. Trowler (2001). *Academic Tribes and Territories*. Second Edition. Berkshire and New York: SRHE and Open University Press and McGraw-Hill.
- Beck, Ulrich (1999). *World Risk Society*. Cambridge: Polity Press.
- Beck, Ulrich (2000a). *What Is Globalization?* Tr. P. Camiller. Cambridge: Polity.
- Beck, Ulrich (2000b). *The Brave New World of Work*. Tr. P. Camiller. Cambridge: Polity.
- Beck, Ulrich (2005). *Power in the Global Age. A New Global Political Economy*. Tr. K. Cross. Cambridge: Polity.
- Beck, Ulrich, Edgar Grande (2007). *Cosmopolitan Europe*. Cambridge: Polity.
- Becker, Gary S. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Third Edition. Chicago: The University of Chicago Press.
- Begg, Roddy, ed. (2003). *The Dialogue between Higher Education Research and Practice: 25 Years of EAIR*. Dordrecht: Kluwer Academic Publishers.

- Bekkers, Rudi, Isabel Maria Bodas Freitas (2008). "Analysing Knowledge Transfer Channels Between Universities and Industry: To What Degree Do Sectors Also Matter?" *Research Policy*. Vol. 37. 1837-1853.
- Béland, Daniel (2010). *What Is Social Policy? Understanding the Welfare State*. Cambridge and Malden: Polity.
- Béland, Daniel, Robert Henry Cox, eds. (2011). *Ideas and Politics in Social Science Research*. Oxford: Oxford University Press.
- Belfield, Clive R., H.M. Levin (2002). *Education Privatization: Causes, Consequences and Planning Implications*. Paris: UNESCO International Institute for Educational Planning.
- Belkhodja, Omar, Réjean Landry (2007). "The Triple-Helix Collaboration: Why Do Researchers Collaborate With Industry and the Government? What Are the Factors That Influence the Perceived Barriers?" *Scientometrics*. Vol. 70. No. 2. 301-332.
- Bell, Janice (2001). *The Political Economy of Reform in Post-Communist Poland*. Cheltenham: Edward Elgar.
- Ben-David, Joseph (1971). *The Scientist's Role in Society: A Comparative Study*. Englewood Cliffs: Prentice-Hall.
- Ben-David, Joseph (1972). *American Higher Education: Directions Old and New*. McGraw-Hill Book Company.
- Ben-David, Joseph (1992). *Centers of Learning: Britain, France, Germany, United States*. New Brunswick: Transaction Publishers.
- Benneworth, Paul (2012). "The Relationship of Regional Engagement to Universities' Core Purposes: Reflections from Engagement Efforts with Socially Excluded Communities". In: Rómulo Pinheiro, Paul Benneworth, Glen A. Jones (eds.), *Universities and Regional Development: A Critical Assessment of Tensions and Contradictions*. London: Routledge. 199-218.
- Benneworth, Paul, Ben W. Jongbloed (2010). "Who Matters to Universities? A Stakeholder Perspective on Humanities, Arts and Social Sciences Valorization". *Higher Education*. Vol. 59. 567-588.
- Bercovitz, Janet, Maryann Feldman (2007). "Academic Entrepreneurs and Technology Transfer: Who Participates and Why?" In: Franco Malerba, Stefano Brusoni (eds.), *Perspectives on Innovation*. Cambridge: Cambridge University Press. 381-398.
- Bercovitz, Janet, Maryann Feldman (2011). "The Mechanisms of Collaboration in Inventive Teams: Composition, Social Networks, and Geography". *Research Policy*. Vol. 40. 81-93.
- Berend, Ivan T. (2007). "Social Shock in Transforming Central and Eastern Europe". *Communist and Post-Communist Studies*. Vol. 40 (3). 269-280.
- Bergan, Sjur (2005). "Higher Education as a 'Public Good and Public Responsibility': What Does It Mean?" In: Luc E. Weber, Sjur Bergan (eds.), *The Public Responsibility for Higher Education and Research*. Strasbourg: Council of Europe Publishing. 13-28.
- Berman, Peter (1998). *National Health Insurance in Poland: A Coach without Horses?* Boston: Harvard School of Public Health.

- Bernardi, Fabrizio, Gabriele Ballarino (2011). "Higher Education Expansion, Equality of Opportunity and Credential Inflation: a European Comparative Analysis. A conference presentation at Human Capital and Employment in the European and Mediterranean Area". Bologna, 11th March 2011.
- Berryman, Sue E. (2000). *Hidden Challenges to Education Systems in Transition Economies*. Washington: World Bank.
- BFUG (2007). *European Higher Education in a Global Setting. A Strategy for the External Dimension of the Bologna Process*. Bologna Follow-Up Group Report.
- Birkland, Thomas A. (2005). *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making*. Second Edition. Armonk, NY: Sharpe.
- Birnbaum, Robert (1988). *How Colleges Work: The Cybernetics of Academic Organization and Leadership*. San Francisco: Jossey-Bass Publishers.
- Birnbaum, Robert (2000). *Management Fads in Higher Education: Where They Come From, What They Do, Why They Fail*. San Francisco: Jossey-Bass Publishers.
- Birtwistle, Tim (2009). "Towards 2010 (and then Beyond) – The Context of the Bologna Process". *Assessment in Education: Principles, Policy and Practice*. Vol. 16, No. 1, March. 55-65.
- Bjarnason, Svava, Kai-Ming Cheng, John Fielden, Maria-Jose Lemaitre, Daniel Levy, N.V. Varghese (2009). *A New Dynamic: Private Higher Education*. Paris: UNESCO.
- Blackmore, Jill, Marie Brennan, Lew Zipin, eds. (2010). *Re-Positioning University Governance and Academic Work*. Rotterdam: Sense Publishers.
- Blair, Margaret M. (2011). "An Economic Perspective on the Notion of 'Human Capital'". In: Alan Burton-Jones, J.-C. Spender (eds.), *The Oxford Handbook of Human Capital*. Oxford: Oxford University Press. 49-70.
- Blanchard, Olivier (1997). *The Economics of Post-Communist Transition*. Oxford: Clarendon Press.
- Blanchard, Olivier, Maxim Boycko, Marek Dąbrowski, Rudiger Dornbusch, Richard Layard, Andrei Shleifer (1993). *Post-Communist Reform: Pain and Progress*. Cambridge: The MIT Press.
- Blanchard, Olivier Jean, Kenneth A. Froot, Jeffrey D. Sachs, eds. (1994). *The Transition in Eastern Europe. Volume 2: Restructuring*. Chicago: The University of Chicago Press.
- Blau, Peter M. (1994). *The Organization of Academic Work*. New Brunswick: Transaction Publishers.
- Blau, Peter M., W. Richard Scott (2003). *Formal Organizations: A Comparative Approach*. Stanford: Stanford University Press.
- Blaug, Mark (1970). *An Introduction to the Economics of Education*. Middlesex, New York, Victoria, Markham, Auckland: Penguin Books.
- Blaug, Mark (1987). *The Economics of Education and the Education of an Economist*. Aldershot: Edward Elgar Publishing.
- Bleak, Jared L. (2005). *When For-Profit Meets Nonprofit: Educating Through the Market*. New York and London: Routledge.
- Bleiklie, Ivar (2002). "Explaining Change in Higher Education Policy". In: Paul R. Trowler (ed.), *Higher Education Policy and Institutional Change: Intentions and Outcomes in Turbulent Environments*. Buckingham: SRHE & Open University Press. 24-45.

- Bleiklie, Ivar (2011). "Excellence, Quality and the Diversity of Higher Education Systems". In: Michele Rostan, Massimiliano Vaira (eds.), *Questioning Excellence in Higher Education: Policies, Experiences and Challenges in National and Comparative Perspective*. Rotterdam/Boston/Taipei: Sense Publishers. 21-35.
- Bleiklie, Ivar, Roar Høstaker, Agnete Vabø (2000). *Policy and Practice in Higher Education: Reforming Norwegian Universities*. London: Jessica Kingsley Publishers.
- Bleiklie, Ivar, Maurice Kogan (2007). "Organization and Governance of Universities". *Higher Education Policy*. Vol. 20. 477-493.
- Bleiklie, Ivar, Mary Henkel, eds. (2005). *Governing Knowledge: A Study of Continuity and Change in Higher Education - A Festschrift in Honour of Maurice Kogan*. Dordrecht: Springer.
- Bloom, David E. (2005). "Raising the Pressure: Globalization and the Need for Higher Education Reform". In: G.A. Jones, P.L. McCarney, M.L. Skolnik (eds.), *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*. Toronto: University of Toronto Press. 21-41.
- Bloom, David E., Matthew Hartley, Henry Rosovsky (2006). "Beyond Private Gain: The Public Benefits of Higher Education". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education. Part I*. Dordrecht: Springer. 293-308.
- Blyth, Mark (2002). *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge: CUP.
- Boardman, P. Craig (2009). "Government Centrality to University-Industry Interactions: University Research Centers and the Industry Involvement of Academic Researchers". *Research Policy*. Vol. 38. 1505-1516.
- Boeri, Tito, Micael Castanheira, Riccardo Faini, Vincenzo Galasso, eds. (2006). *Structural Reforms Without Prejudices*. Oxford: Oxford University Press.
- Bohle, Dorothee and Béla Greskovits (2007). "Neoliberalism, Embedded Neoliberalism and Neocorporatism: Towards Transnational Capitalism in Central-Eastern Europe". *West European Politics*. Vol. 30. No. 3.
- Bok, Derek (2003). *Universities in the Marketplace. The Commercialization of Higher Education*. Princeton: Princeton University Press.
- Bok, Derek (2006). *Our Underachieving Colleges. A Candid Look at How Much Students Learn and Why They Should Be Learning More*. Princeton: Princeton University Press.
- Bolli, Thomas, Frank Somogyi (2011). "Do Competitively Acquired Funds Induce Universities to Increase Productivity?" *Research Policy*. Vol. 40. 136-147.
- Bologna (2009). "Bologna Process Stocktaking Report 2009". By Andrejs Rauhvargers, Cynthia Deane and Wilfried Pauwels. Leuven/ Louvain-la-Neuve.
- Bonaccorsi, Andrea (2009). "Division of Academic Labour is Limited by the Size of the Market: Strategy and Differentiation of European Universities in Doctoral Education". In: M. McKelvey, M. Holmén (eds.), *Learning to Compete in European Universities: From Social Institution to Knowledge Business*. Cheltenham: Edward Elgar Publishing. 90-127.

- Bonaccorsi, Andrea, Cinzia Daraio, Benedetto Lepori (2007). "Indicators for the Analysis of Higher Education Systems: Some Methodological Reflections". In: A. Bonaccorsi, C. Daraio (eds.), *Universities and Strategic Knowledge Creation: Specialization and Performance in Europe*. Cheltenham: Edward Elgar Publishing. 405-432.
- Bonaccorsi, Andrea, Cinzia Daraio, Léopold Simar (2007). "Efficiency and Productivity in European Universities: Exploring Trade-offs in the Strategic Profile". In: Andrea Bonaccorsi, Cinzia Daraio (eds.), *Universities and Strategic Knowledge Creation. Specialization and Performance in Europe*. Cheltenham: Edward Elgar. 144-207.
- Bonaccorsi, Andrea, Cinzia Daraio (2009). "Characterizing the European university system: a preliminary classification using census microdata". *Science and Public Policy*. Vol. 36. No. 1. 763-775.
- Bonaccorsi, Andrea, Cinzia Daraio, Aldo Geuna (2010). "Universities in the New Knowledge Landscape: Tensions, Challenges, Change – An Introduction". *Minerva*. Vol. 48. 1-4.
- Bonaccorsi, Andrea, Cinzia Daraio, eds. (2007). *Universities and Strategic Knowledge Creation. Specialization and Performance in Europe*. Cheltenham: Edward Elgar.
- Bonoli, Giuliano (2000). *The Politics of Pension Reform. Institutions and Policy Change in Western Europe*. Cambridge: Cambridge University Press.
- Bonoli, Giuliano, Vic George, Peter Taylor-Gooby (2000). *European Welfare Futures. Towards a Theory of Retrenchment*. Cambridge: Polity Press.
- Borrás, Susana (2012). "Three Tensions in the Governance of Science and Technology". In: David Levi-Faur (ed.), *The Oxford Handbook of Governance*. New York: Oxford University Press. 429-439.
- Bowen, Howard R. (1997). *Investment in Learning: The Individual and Social Value of American Higher Education*. London: The John Hopkins University Press.
- Bowen, Howard R., Jack H. Schuster (1986). *American Professors. A National Resource Imperiled*. New York and Oxford: Oxford University Press.
- Bowles, Samuel, Herbert Gintis, Melissa Osborne Groves, eds. (2005). *Unequal Chances: Family Background and Economic Success*. Princeton: Princeton University Press.
- Box-Steffensmeier, Janet M., Henry E. Brady, David Collier, eds. (2008). *The Oxford Handbook of Political Methodology*. New York: Oxford University Press.
- Boyer, Ernest L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. San Francisco: Jossey-Bass.
- Boyer, Ernest L., Philip G. Altbach and Mary Jean Whitelaw (1994). *The Academic Profession. An International Perspective*. Princeton: The Carnegie Foundation.
- Boyer, Robert, J. Rogers Hollingsworth (1997). "From National Embeddedness to Spatial and Institutional Nestedness". In: Rogers Hollingsworth, Robert Boyer (eds.), *Contemporary Capitalism: The Embeddedness of Institutions*. Cambridge: CUP. 433-484.
- Branscomb, Lewis M., Fumio Kodama, Richard Florida, eds. (1999). *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. Cambridge, Massachusetts: The MIT Press.
- Braunerhjelm, Pontus (2007). "Academic Entrepreneurship: Social Norms, University Culture and Policies". *Science and Public Policy*. Vol. 34. No. 9. 619-631.

- Bray, Mark, Bob Adamson, Mark Mason, eds. (2007). *Comparative Education Research: Approaches and Methods*. Hong Kong : Comparative Education Research Centre, The Univ. of Hong Kong.
- Breen, Richard (2004a). "The Comparative Study of Social Mobility". In: Richard Breen (ed.), *Social Mobility in Europe*. New York: Oxford University Press. 1-16.
- Breen, Richard, ed. (2004b). *Social Mobility in Europe*. New York: Oxford University Press.
- Breneman, David W. (2006). "The University of Phoenix. Icon of For-Profit Higher Education". In: D.W. Breneman, B. Pusser and S. E. Turner (eds.), *Earnings from Learning. The Rise of For-Profit Universities*. Albany: SUNY Press.
- Breneman, David W., Chester E. Finn, Jr., eds. (1978). *Public Policy and Private Higher Education*. Washington, D.C.: The Brookings Institution.
- Breneman, David W., Brian Pusser, Sarah E. Turner, eds. (2006). *Earnings from Learning. The Rise of For-Profit Universities*. Albany: SUNY Press.
- Brennan, John (2002). "Transformation or Reproduction? Contradictions in the Social Role of the Contemporary University". In: Jürgen Enders, Oliver Fulton (eds.), *Higher Education in a Globalising World. International Trends and Mutual Observations: A Festschrift in Honour of Ulrich Teichler*. Dordrecht: Kluwer Academic Publishers. 73-86.
- Brennan, John (2005). "Reform and Transformation Following Regime Change". In: Ivar Bleiklie, Mary Henkel (eds.), *Governing Knowledge: A Study of Continuity and Change in Higher Education - A Festschrift in Honour of Maurice Kogan*. Dordrecht: Springer. 49-63.
- Brennan, John (2007). "The Academic Profession and Increasing Expectations of Relevance". In: Maurice Kogan, Ulrich Teichler (eds.), *Key Challenges to the Academic Profession*. Kassel: INCHER. 19-28.
- Brennan, John (2008). "Higher Education and Social Change". *Higher education*. Vol. 56. 381-393.
- Brennan, John (2010). "Burton Clark's *The Higher Education System: Academic Organization in Cross-National Perspective*". *London Review of Education*. Vol. 8. No. 3. 229-237.
- Brennan, John, Maurice Kogan, Ulrich Teichler (1996). *Higher Education and Work*. London: Jessica Kingsley.
- Brennan, John, Ulrich Teichler (2008). "The future of higher education and of higher education research". *Higher Education*. Vol. 56. 259-264.
- Brewer, Dominic J., Susan M. Gates, Charles A. Goldman (2002). *In Pursuit of Prestige: Strategy and Competition in U.S. Higher Education*. New Jersey: Transaction Publishers.
- Brighouse, Harry, Ingrid Robeyns, eds. (2010). *Measuring Justice: Primary Goods and Capabilities*. Cambridge: Cambridge University Press.
- Brint, Steven (2007). "Can Public Research Universities Compete?". In: Geiger, Roger. L., Carol L. Colbeck, Roger L. Williams, Christian K. Anderson (eds.), *Future of the American Public Research University*. Rotterdam/Taipei: Sense. 91-120.
- Brown, Phillip, Hugh Lauder (2001). *Capitalism and Social Progress. The Future of Society in a Global Economy*. New York: Palgrave.

- Brown, Phillip, Andy Green, Hugh Lauder (2001). *High Skills. Globalization, Competitiveness, and Skill Formation*. Oxford: Oxford University Press.
- Brown, Phillip, Anthony Hesketh (2004). *The Mismanagement of Talent. Employability and Jobs in the Knowledge Economy*. Oxford: Oxford University Press.
- Brown, Philip, Hugh Lauder (2006). "Globalization, Knowledge and the Myth of the Magnet Economy". In: Hugh Lauder *et al.*, *Education, Globalization and Social Change*. Oxford: Oxford University Press.
- Brown, Phillip, Hugh Lauder, David Ashton (2008). "Education, Globalisation and the Future of the Knowledge Economy". *European Educational Research Journal*. Vol. 7. No. 2. 131-156.
- Brown, Phillip, Hugh Lauder (2010). "Economic Globalisation, Skill Formation and the Consequences for Higher Education". In: Michael W. Apple, Stephen J. Ball, Luis Armando Gandin (eds.), *The Routledge International Handbook of the Sociology of Education*. London: Routledge. 229-240.
- Brown, Phillip, Hugh Lauder, David Ashton (2011). *The Global Auction: The Broken Promises of Education, Jobs and Incomes*. New York: Oxford University Press.
- Brown, Trevor A. (2010). "Organisational Identification of Academic Staff and Its Relationship to the Third Stream". In: R. J. Howlett (ed.), *Innovation through Knowledge Transfer 2010*. SIST 9. 95-112.
- Bruneel, Johan, Pablo D'Este, Ammon Salter (2010). "Investigating the Factors That Diminish the Barriers to University-Industry Collaboration". *Research Policy*. Vol. 39. 858-868.
- Brunsson, Nils (2003). "Organized Hypocrisy". In: Barbara Czarniawska, Guje Sevón (eds.), *The Northern Lights - Organization theory in Scandinavia*. Malmö: Liber. 201-222.
- Brunsson, Nils (2006a). *Mechanisms of Hope: Maintaining the Dream of the Rational Organization*. Liber: Universitetsforlaget.
- Brunsson, Nils (2006b). *The Organization of Hypocrisy: Talk, Decisions and Actions in Organizations*. Liber: Universitetsforlaget.
- Brunsson, Nils (2007). *The Consequences of Decision-Making*. Oxford: Oxford University Press.
- Brunsson, Nils (2009). *Reform as Routine: Organizational Change and Stability in the Modern World*. New York: Oxford University Press.
- Brunsson, Nils, Johan P. Olsen (1993). *The Reforming Organization*. Copenhagen: Fagbokforlaget.
- Brunsson, Nils, Johan P. Olsen, eds. (1998a). *Organizing Organizations*. Bergen-Sandviken: Fagbokforlaget.
- Brunsson, Nils, Johan P. Olsen (1998b). "Organizational Theory: Thirty Years of Dismantling, and then...?". In: N. Brunsson, J. P. Olsen (eds.), *Organizing Organizations*. Copenhagen: Fagbokforlaget.
- Brunsson, Nils, Kerstin Sahlin-Andersson (2000). "Constructing Organizations: The Example of Public Sector Reform". *Organization Studies*. Vol. 21. No. 4. 721-746.
- Brunsson, Nils, Bengt Jacobsson, and Associates (2000). *A World of Standards*. New York: Oxford University Press.

- Burbules, Nicholas C. and Torres, Carlos Alberto, eds. (2000). *Globalization and Education. Critical Perspectives*. London: Routledge.
- Busemeyer, Marius R., Rita Nikolai (2010). "Education". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 494-508.
- Bush, Vannevar (1945). *Science: The Endless Frontier*. A Report to the President on a Program for Postwar Scientific Research. Reprinted July 1960, Washington DC: National Science Foundation.
- Büthe, Tim, Walter Mattli (2011). *The New Global Rulers: The Privatization of Regulation in the World Economy*. Princeton: Princeton University Press.
- Butler, Tim, Paul Watt (2007). *Understanding Social Inequality*. London: SAGE Publications.
- Cahuc, Pierre, André Zylberberg (2004). *Labor Economics*. Cambridge: The MIT Press.
- Cain, Michael, Nida Gelazis and Tomasz Inglot, eds. (2005). *Fighting Poverty and Reforming Social Security: What Can Post-Soviet States Learn From the New Democracies of Central Europe?* Washington DC: Woodrow Wilson Center.
- Calhoun, Craig (2006). "The University and the Public Good". *Thesis Eleven*. No. 84. February 2006.
- Calhoun, Craig (2011). "The Public Mission of the Research University". In: Diana Rhoten, Craig (eds.), *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press. 1-33.
- Calhoun, Craig, Georgi Derluguian (2011). "Introduction". In: Craig Calhoun, Georgi Derluguian (eds.), *The Deepening Crisis: Governance Challenges after Neoliberalism*. New York and London: Social Science Research Council and New York University Press. 7-18.
- Calhoun, Craig, ed. (2010). *Robert K. Merton: Sociology of Science and Sociology as Science*. New York: Columbia University Press.
- Callan, Partick M., Joni E. Finney, Kathy Reeves Bracco, William R. Doyle, eds. (1997). *Public and Private Financing of Higher Education: Shaping Public Policy for the Future*. Phoenix: Oryx Press.
- Campbell, John L. (2004). *Institutional Change and Globalization*. Princeton: Princeton University Press.
- Campbell, John L. (2010). "Institutional Reproduction and Change". In: Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen, Richard Whitley (eds.), *The Oxford Handbook of Comparative Institutional Analysis*. New York: Oxford University Press. 87-115.
- Campbell, John L., Ove K. Pedersen, eds. (1996a). *Legacies of Change: Transformations of Postcommunist European Economies*. New York: Aldine de Gruyter.
- Campbell, John L., Ove K. Pedersen (1996b). "Theories of Institutional Change in the Postcommunist Context". In: John L. Campbell, Ove K. Pedersen (eds.), *Legacies of Change: Transformations of Postcommunist European Economies*. New York: Aldine de Gruyter. 3-26.

- Campbell, John L., Ove K. Pedersen (1996c). "The Evolutionary Nature of Revolutionary Change in Postcommunist Europe". In: John L. Campbell, Ove K. Pedersen (eds.), *Legacies of Change: Transformations of Postcommunist European Economies*. New York: Aldine de Gruyter. 207-249.
- Campbell, John L., Ove K. Pedersen, eds. (2001). *The Rise of Neoliberalism and Institutional Analysis*. Princeton: Princeton University Press.
- Canning, Mary, Martin Godfrey, Dorota Holzer-Zelazewska (2007). *Higher Education Financing in the New EU Member States: Leveling the Playing Field*. World Bank Working Paper No. 112. Washington, D.C.: World Bank.
- Carnegie Foundation for the Advancement of Teaching, The (1975). *More Than Survival: Prospects for Higher Education in a Period of Uncertainty*. San Francisco: Jossey-Bass.
- Carnegie Foundation for the Advancement of Teaching, The (1980). *Three Thousand Futures: The Next Twenty Years for Higher Education*. San Francisco: Jossey-Bass.
- Carnes, Matthew E., Isabela Mares (2007). "The Welfare State in Global Perspective". In: Charles Boix, Susan C. Stokes (eds.), *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press. 868-885.
- Carnoy, Martin (1999). *Globalization and Educational Reform: What Planners Need to Know*. Paris: UNESCO, International Institute for Educational Planning.
- Carnoy, Martin, Diana Rhoten (2002). "What Does Globalization Mean for Educational Change? A Comparative Approach". *Comparative Education Review*. Vol. 46. No. 1.
- Carnoy, Martin, ed. (1995). *International Encyclopedia of Economics of Education*. Second Edition. Oxford: Pergamon.
- Carroll, Glenn R., Michael T. Hannan (2000). *The Demography of Corporations and Industries*. Princeton: Princeton University Press.
- Carter, David S.G., Marnie H. O'Neill, eds. (1995). *International Perspectives on Educational Reform and Policy Implementation*. London: RoutledgeFalmer.
- Casazza, Martha E., Laura Bauer (2006). *Access, Opportunity, and Success: Keeping the Promise of Higher Education*. Westport: Praeger Publishers.
- Castanheira, Micael, Vincenzo Galasso, Stéphane Carcillo, Giuseppe Nicoletti, Enrico Perotti, Lidia Tsyganok (2006). "How to Reform: Pulling the Strings". In: Tito Boeri, Micael Castanheira, Riccardo Faini, Vincenzo Galasso (eds.), *Structural Reforms Without Prejudices*. Oxford: Oxford University Press. 249-254.
- Castellacci, Fulvio, Daniele Archibugi (2008). "The Technology Clubs: The Distribution of Knowledge Across Nations". *Research Policy*. Vol. 37. 1659-1673.
- Castles, Francis G., ed. (1989a). *The Comparative History of Public Policy*. Cambridge: Polity Press.
- Castles, Francis G. (1989b). "Introduction: Puzzles of Political Economy". In: Francis G. Castles (ed.), *The Comparative History of Public Policy*. Cambridge: Polity Press. 1-15.
- Castles, Francis G. (1993a). "Introduction". In: Francis G. Castles (ed.), *Families of Nations: Patterns of Public Policy in Western Democracies*. Aldershot: Dartmouth Publishing Company. xiii-xxiii.

- Castles, Francis G. (1993b). "Changing Course in Economic Policy: The English-Speaking Nations in the 1980s". In: Francis G. Castles (ed.), *Families of Nations: Patterns of Public Policy in Western Democracies*. Aldershot: Dartmouth Publishing Company. 3-34.
- Castles, Francis G., ed. (1993c). *Families of Nations: Patterns of Public Policy in Western Democracies*. Aldershot: Dartmouth Publishing Company.
- Castles, Francis G. (2007a). "Introduction". In: Francis G. Castles (ed.), *The Disappearing State? Retrenchment Realities in an Age of Globalisation*. Cheltenham: Edward Elgar. 1-18.
- Castles, Francis G. (2007b). "Testing the Retrenchment Hypothesis: An Aggregate Overview". In: Francis G. Castles (ed.), *The Disappearing State? Retrenchment Realities in an Age of Globalisation*. Cheltenham: Edward Elgar. 19-43.
- Castles, Francis G., ed. (2007c). *The Disappearing State? Retrenchment Realities in an Age of Globalisation*. Cheltenham: Edward Elgar.
- Castles, Francis G., Deborah Mitchell (1993). "Worlds of Welfare and Families of Nations". In: Francis G. Castles (ed.), *Families of Nations: Patterns of Public Policy in Western Democracies*. Aldershot: Dartmouth Publishing Company. 93-128.
- Castles, Francis G., Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson, eds. (2010a). *The Oxford Handbook of the Welfare State*. New York: Oxford University Press.
- Castles, Francis G., Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (2010b). "Introduction". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 1-15.
- Causa, Orsetta, Sophie Dantan, Åsa Johansson (2009a). "Intergenerational Social Mobility". *Economics Department Working Papers* no. 707. Paris: OECD.
- Causa, Orsetta, Sophie Dantan, Åsa Johansson (2009b). "Intergenerational Social Mobility in European OECD Countries". *Economics Department Working Papers* no. 709. Paris: OECD.
- Cavalli, Alessandro and Roberto Moscati (2010). "Academic Systems and Professional Conditions in Five European Countries". *European Review*. Vol. 18. Supplement no. 1. 35-53.
- CEGES (2007). *Rates of Return and Funding Models in Europe*. Valencia: CEGES.
- Centre for Higher Education Policy Studies (2010). *Progress in Higher Education Reform Across Europe. Funding Reform. Volume 1: Executive Summary and Main Report*. Enschede: Centre for Higher Education Policy Studies, University of Twente.
- Cerami, Alfio (2006). *Social Policy in Central and Eastern Europe: the Emergence of a New European Welfare Regime*. Münster: LIT.
- Cerami, Alfio (2010). "The Politics of Social Security Reforms in the Czech Republic, Hungary, Poland and Slovakia". In: Bruno Palier (ed.), *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press. 233-253.
- Cerami, Alfio, P. Vanhuysse, eds. (2009). *Post-Communist Welfare Pathways*. New York: Palgrave.

- Cerny, Philip G. (1995). "Globalization and the Changing Logic of Collective Action". *International Organization*. Vol. 49. No. 4. Autumn 1995.
- Cerny, Philip G. (2010). *Rethinking World Politics: A Theory of Transnational Neopluralism*. Oxford: Oxford University Press.
- Cerych, Ladislav (1984). "The Policy Perspective". In: Burton R. Clark (ed.), *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press. 233-255.
- Cerych, Ladislav, Paul Sabatier (1986). *Great Expectations and Mixed Performance: The Implementation of Higher Education Reforms in Europe*. Trentham: European Institute of Education and Social Policy.
- Chambers, Tony C. (2005). "The Special Role of Higher Education in Society: As a Public Good for the Public Good". In: Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt (eds.), *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass. 3-22.
- Checchi, Daniele (2006). *The Economics of Education. Human Capital, Family Background and Inequality*. Cambridge: Cambridge University Press.
- CHEPS (2007). *Towards a Cartography of Higher Education Policy Change. A Festschrift in Honour of Guy Neave*. CHEPS: Enschede.
- CHEPS (2010a). *Progress in Higher Education Reform Across Europe. Governance Reform. Volume 1: Executive Summary and Main Report*. Enschede: CHEPS.
- CHEPS (2010b). *Progress in Higher Education Reform Across Europe. Funding Reform. Volume 1: Executive Summary and Main Report*. Enschede: CHEPS.
- CHEPS (2010c). *Progress in Higher Education Reform Across Europe. Governance and Funding Reform. Volume 2: Methodology, Performance Data, Literature Survey, National System Analyses and Case Studies*. Enschede: CHEPS.
- CHEPS (2010d). *Progress in Higher Education Reform Across Europe. Governance and Funding Reform. Volume 1: Executive Summary and Main Report*. Enschede: CHEPS.
- Cheslock, John J., Cecilia Rios-Aguilar (2002). "Multilevel Analysis in Higher Education Research: A Multidisciplinary Approach". In: John C. Smart, Michael B. Paulsen (eds.), *Higher Education: Handbook of Theory and Research. Volume 26*. Dordrecht: Springer. 85-123.
- Christensen, Tom, Per Laegreid, Paul G. Roness, Kjell Arne Røvik (2007). *Organization Theory and the Public Sector: Instrument, Culture and Myth*. London: Routledge.
- Christensen, Tom, Per Laegreid, eds. (2007). *Transcending New Public Management: The Transformation of Public Sector Reforms*. Aldershot: Ashgate.
- Christensen, Tom, Per Laegreid (2012). "Governance and Administrative Reforms". In: David Levi-Faur (ed.), *The Oxford Handbook of Governance*. New York: Oxford University Press. 255-267.
- Cipollone, Piero (1995). "Education and Earnings". In: Martin Carnoy (ed.), *International Encyclopedia of Economics of Education*. New York: Elsevier. 145-149.
- Claire, Wallace (2006). "Family Forms and the Young Generation in the New Europe: Future Trends". In: Wolfgang Lutz, Rudolf Richter, Chris Wilson (eds.), *The New Generations of Europeans: Demography and Families in the Enlarged European Union*. 177-187.

- Clancy, Patrick, David D. Dill, eds. (2009a). *The Research Mission of the University. Policy Reforms and Institutional Response*. Rotterdam/Boston/Taipei: Sense.
- Clancy, Patrick, David D. Dill (2009b). "The Research Mission of the University: An Introduction". In: Patrick Clancy, David D. Dill (eds.), *The Research Mission of the University. Policy Reforms and Institutional Response*. Rotterdam/Boston/Taipei: Sense. 3-17.
- Clark, Burton R. (1970). *The Distinctive College: Antioch, Reed and Swarthmore*. Chicago: Aldine Publishing Company.
- Clark, Burton R. (1983a). *The Higher Education System. Academic Organization in Cross-National Perspective*. Berkeley: University of California Press.
- Clark, Burton R. (1983b). "The Contradictions of Change in Academic Systems". *Higher Education*. Vol. 12. 101-116.
- Clark, Burton R. (1984a). "Conclusions". In: Burton R. Clark (ed.), *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press. 256-274.
- Clark, Burton R. (1984b). "The Organizational Conception". In: Burton R. Clark (ed.), *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press. 106-131.
- Clark, Burton R., ed. (1984c). *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press.
- Clark, Burton R. (1987). *The Academic Life. Small Worlds, Different Worlds*. Princeton: The Carnegie Foundation for the Advancement of Teaching.
- Clark, Burton R. (1995a). *Places of Inquiry. Research and Advanced Education in Modern Universities*. Berkeley: University of California Press.
- Clark, Burton R. (1995b). "Complexity and Differentiation: The Deepening Problem of University Integration". In: David D. Dill, Barbara Sporn (eds.), *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly*. New York: Pergamon. 159-169.
- Clark, Burton R. (1996). "Case Studies of Innovative Universities: A Progress Report". *Tertiary Education and Management*. Vol. 2. No. 1. 52-61.
- Clark, Burton R. (1997). "Higher Education as a Self-Guiding Society". *Tertiary Education and Management*. Vol. 3. No. 2. 91-99.
- Clark, Burton R. (1998a). *Creating Entrepreneurial Universities. Organizational Pathways of Transformation*. New York: Pergamon Press.
- Clark, Burton R. (1998b). "The Entrepreneurial University: Demand and Response". *Tertiary Education and Management*. Vol. 4. No. 1. 5-16.
- Clark, Burton R. (2000a). "Collegial Entrepreneurialism in Proactive Universities". *Change*. Jan/Feb. 200. Vol. 32. Issue 1.
- Clark, Burton R. (2000b). *Creating Entrepreneurial Universities. Organizational Pathways of Transformation*. New York: Pergamon Press.
- Clark, Burton R. (2001). "The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement". *Higher Education Management*. Vol. 13. No. 2. 9-24

- Clark, Burton R. (2003). "Sustaining Change in Universities: Continuities in Case Studies and Concepts". *Tertiary Education and Management*. Vol. 9. 99-116.
- Clark, Burton R. (2004a). *Sustaining Change in Universities. Continuities in Case Studies and Concepts*. Maidenhead: Open University Press
- Clark, Burton R. (2004b). "Delineating the Character of the Entrepreneurial University". *Higher Education Policy*. Vol. 17. 355-370
- Clark, Burton R. (2005). "The Character of the Entrepreneurial University". *International Higher Education*. Vol. 38. 2-3
- Clark, Burton R. (2007). "A Note on Pursuing Things That Work". In: Patricia J. Gumpert (ed.), *Sociology of Higher Education. Contributions and Their Contexts*. Baltimore: Johns Hopkins University Press. 319-324.
- Clark, Burton R. (2008a). *On Higher Education. Selected Writings, 1956-2006*. Baltimore: Johns Hopkins University Press.
- Clark, Burton R. (2008b). "Diversification of Higher Education: Viability and Change". In: V. Lynn Meek, Leo Goedegebuure, Osmo Kivinen, Risto Rinne (eds.), *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Bingley: Emerald Group Publishing. 16-25.
- Clarke, John (2008). "Reconstructing Nation, State and Welfare: The Transformation of Welfare States". In: Martin Seeleib-Kaiser (ed.), *Welfare State Transformations: Comparative Perspectives*. Basingstoke: Palgrave Macmillan. 197-209.
- Clarke, John, Janet Newman, Nick Smith, Elizabeth Vidler, Louise Westmarland (2007). *Creating Citizen-Consumers: Changing Publics and Changing Public Services*. London: SAGE.
- Clarysse, Bart, Valentina Tartari, Ammon Salter (2011). "The Impact of Entrepreneurial Capacity, Experience and Organizational Support on Academic Entrepreneurship". *Research Policy*. Vol. 40. 1084-1093.
- Clayton, Richard, Jonas Pontusson (1998). "Welfare-State Retrenchment Revised: Entitlement Cuts, Public Sector Restructuring, and Inegalitarian Trends in Advanced Capitalist Societies". *Worlds Politics*. Vol. 57.
- Cloete, Nico, Peter Maassen, Richard Fehnel, Teboho Moja, Trish Gibbon, Helene Perold, eds. (2006). *Transformation in Higher Education. Global Pressures and Local Realities*. Dordrecht: Springer.
- Clotfelter, Charles T., Ronald G. Ehrenberg (1991). *Economic Challenges in Higher Education*. Chicago: The University of Chicago Press.
- Clotfelter, Charles T., Michael Rothschild, eds. (1993). *Studies of Supply and Demand in Higher Education*. Chicago: The University of Chicago Press.
- Cohen, Wesley M., Richard R. Nelson, John P. Walsh (2003). "Links and Impacts: The Influence of Public Research on Industrial R&D". In: Aldo Geuna, Ammon J. Salter, W. Edward Steinmueller (eds.), *Science and Innovation: Rethinking the Rationales for Funding and Governance*. Cheltenham: Edward Elgar. 109-146.
- Cohen, Arthur M., Carrie B. Kisker (2010). *The Shaping of American Higher Education. Emergence and Growth of the Contemporary System* (2<sup>nd</sup> edition). San Francisco: Jossey-Bass.

- Coleman, James, Richard Vedder (2010). "For-Profit Education in the USA: A Primer". In: Joshua C. Hall (ed.), *Doing More with Less: Making Colleges Work Better*. Dordrecht: Springer. 139-163.
- Collier, Ruth Berins, David Collier (2002). *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*. Notre Dame: University of Notre Dame Press.
- Collins, Randall (1979). *The Credential Society. An Historical Sociology of Education and Stratification*. New York: Academic Press
- Colombo, Massimo G., Luca Grilli, Lucia Piscitello, Cristina Rossi-Lamastra, eds. (2011). *Science and Innovation Policy for the New Knowledge Economy*. Cheltenham: Edward Elgar Publishing.
- Connelly, James (2012). "Conclusion: Remaining the Welfare State?" In: James Connelly, Jack Hayward (eds.), *The Withering of the Welfare State: Regression*. Basingstoke: Palgrave Macmillan. 208-217.
- Connelly, James, Jack Hayward, eds. (2012). *The Withering of the Welfare State: Regression*. Basingstoke: Palgrave Macmillan.
- Connor, Helen, Wendy Hirsh (2008). "Influence through Collaboration: Employer Demand for Higher Learning and Engagement with Higher Education". Report from the research conducted by Council for Industry and Higher Education. London: CIHE.
- Cook, Linda J. (2007). *Postcommunist Welfare States: Reform Politics in Russia and Eastern Europe*. Ithaca and London: Cornell University Press.
- Cook, Linda J. (2010). "Eastern Europe and Russia". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 671-686.
- Corak, Miles, ed. (2004). *Generational Income Mobility in North America and Europe*. New York: Cambridge University Press.
- Corbett, Anne (2005). *Universities and the Europe of Knowledge: Ideas, Institutions and Policy Entrepreneurship in European Union Higher Education Policy, 1955-2005*. Basingstoke: Palgrave Macmillan.
- Court, Stephen (2006). "Academic Staff in a Mass Higher Education System: The State We're in". In: Ian McNay (ed.), *Beyond Mass Higher Education: Building On Experience*. Maidenhead: SRHE and Open University Press. 171-184.
- Cousins, Mel (2005). *European Welfare States: Comparative Perspectives*. London: SAGE Publications.
- Crespi, Gustavo, Aldo Geuna (2007). "Modelling and Measuring Scientific Production: A First Estimation for a Panel of OECD Countries". In: Franco Malerba, Stefano Brusoni (eds.), *Perspectives on Innovation*. Cambridge: Cambridge University Press. 399-429.
- Crespi, Gustavo, Pablo D'Este, Roberto Fontana, Aldo Geuna (2011). "The Impact of Academic Patenting on University Research and Its Transfer". *Research Policy*. Vol. 40. 55-68.
- Crossley, Michael, Keith Watson (2011). "Comparative and International Education: Policy Transfer, Context Sensitivity and Professional Development". In: John Furlong, Martin Lawn (eds.), *Disciplines of Education: Their Role in the Future of Education Research*. London: Routledge. 103-121.

- Crouch, Colin (2005). *Capitalist Diversity and Change: Recombinant Governance and Institutional Entrepreneurs*. Oxford: Oxford University Press.
- Crouch, Colin, Wolfgang Streeck, eds. (1997). *Political Economy of Modern Capitalism: Mapping Convergence and Diversity*. London, Thousand Oaks, New Delhi: SAGE Publications.
- Cunning, Mary, Martin Godfrey, Dorota Holzer-Zelazewska (2007). *Vocational Education in the New EU Member States*. Washington, DC: The World Bank.
- Cunning, Mary, Martin Godfrey, Dorota Holzer-Zelazewska (2007). *Higher Education Financing in the New EU Member States. Leveling the Playing Field*. World Bank Working Paper no. 112.
- Curaj, Adrian, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson, eds. (2012a). *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part 1*. Dordrecht: Springer.
- Curaj, Adrian, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson, eds. (2012b). *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part 2*. Dordrecht: Springer.
- Currie, Jan (2003). "Globalization and Universities". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XVIII*. Dordrecht: Kluwer Academic Publishers. 473-530.
- Currie, Jan, Richard DeAngelis, Harry de Boer, Jeroen Huisman, Claude Lacotte (2003). *Globalizing Practices and University Responses: European and Anglo-American Differences*. London: Praeger.
- Currie, Jan, Lesley Vidovich (2009). "The Changing Nature of Academic Work". In: Malcolm Tight, Ka Ho Mok, Jeroen Huisman, Christopher C. Morphet (eds.), *The Routledge International Handbook of Higher Education*. New York: Routledge. 441-452.
- Curzio, Alberto Quadrio, Marco Fortis, eds. (2005). *Research and Technological Innovation. The Challenge for a New Europe*. Heidelberg: Physica-Verlag.
- D'Este, Pablo, Pari Patel (2007). "University-Industry Linkages in the UK: What Are the Factors Underlying the Variety of Interactions With Industry?" *Research Policy*. Vol. 2007. 1295-313.
- Dahrendorf, Ralf (2000). *Universities After Communism*. Hamburg: Körber-Stiftung.
- Dahrendorf, Ralf (2005). *Reflections on the Revolution in Europe*. New Brunswick: Transaction Publishers.
- Dale, Roger (1989). *The State and Education Policy*. Milton Keynes: Open University Press.
- Dale, Roger (1999). "Specifying Globalization Effects on National Policy: a Focus on the Mechanisms". *Journal of Education Policy*. Vol. 14. No. 1.
- Dale, Roger (2007). "The Emergence of Parallel Discourses in Higher Education in Europe". In: Debbie Epstein, Rebecca Boden, Rosemary Deem, Fazal Rizvi, Susan Wright (eds.), *Geographies of Knowledge, Geometries of Power: Framing the Future of Higher Education. World Yearbook of Education 2008*. New York: Routledge. 14-31.
- Dale, Roger (2008a). "Changing Meanings of 'the Europe of Knowledge' and 'Modernizing the University', from Bologna to the 'New Lisbon'". *European Education*. Vol. 39. No. 4. 27-42.

- Dale, Roger (2008b). "Conclusion: Shifting Discourses and Mediating Structures in the Co-Construction of Europe, Knowledge and Universities". In: Bob Jessop, Norman Fairclough, Ruth Wodak (eds.), *Education and the Knowledge-Based Economy in Europe*. Rotterdam/Taipei: Sense Publishers. 193-205.
- Dale, Roger (2009a). "Constructing Europe Through Constructing a European Education Space". In: Simons, Maarten, Mark Olssen, Michael A. Peters (eds.), *Re-Reading Education Policies. A Handbook Studying the Policy Agenda of the 21st Century*. Rotterdam/Boston/Taipei: Sense Publishers.
- Dale, Roger (2009b). "Contexts, Constraints and Resources in the Development of European Education Space and European Education Policy". In: Roger Dale, Susan Robertson (eds.), *Globalisation & Europeanisation in Education*. Oxford: Symposium Books. 23-43.
- Dale, Roger (2009c). "Studying Globalisation and Europeanisation in Education: Lisbon, the Open Method of Coordination and Beyond". In: Roger Dale, Susan Robertson (eds.), *Globalisation & Europeanisation in Education*. Oxford: Symposium Books. 121-140.
- Dale, Roger, Susan Robertson, eds. (2009). *Globalisation and Europeanisation in Education*. Oxford: Symposium Books.
- Daniels, Harry, Hugh Lauder, Jill Porter, ed. (2009a). *Knowledge, Values and Educational Policy: A Critical Perspective*. London: Routledge.
- Daniels, Harry, Hugh Lauder, Jill Porter, eds. (2009b). *Educational Theories, Cultures and Learning: A Critical Perspective*. London: Routledge.
- Dasgupta, Partha, Paul A. David (2002). "Toward a New Economics of Science". In: Philip Mirowski, Esther-Mirjam Sent (eds.), *Science: Bought and Sold. Essays in the Economics of Science*. Chicago and London: The University of Chicago Press. 219-248.
- David, Paul A. (1975). *Technical Choice Innovation and Economic Growth: Essays on American and British Experience in the Nineteenth Century*. Cambridge: CUP.
- David, Paul A. (2007). "Path Dependence, Its Critics and the Quest for 'Historical Economics'". In: Geoffrey M. Hodgson (ed.), *The Evolution of Economic Institutions: A Critical Reader*. Cheltenham: Edward Elgar. 120-142.
- David, Paul, Dominique Foray, W. Edward Steinmueller (1999). "The Research Network and the New Economics of Science: From Metaphors to Organizational Behaviors". In: Alfonso Gambardella, Franco Malerba (ed.), *The Organization of Economic Innovation in Europe*. Cambridge: CUP. 303-342.
- David, Paul A., J. Stanley Metcalfe (2010). "'Only Connect': Academic-Business Research Collaborations and the Formation of Ecologies of Innovation". In: R. Viale, H. Etzkowitz (eds.), *The Capitalization of Knowledge. A Triple Helix of University-Industry-Government*. Cheltenham: Edward Elgar Publishing. 74-97
- Dawisha, Karen, Bruce Parrott, eds. (1997). *The Consolidation of Democracy in East-Central Europe*. Cambridge: Cambridge University Press.
- de Boer, Harry, Leo Goedegebuure, V. Lynn Meek (2010). "The Changing Nature of Academic Middle Management: A Framework for Analysis". In: V. Lynn Meek, Leo Goedegebuure, Rui Santiago, Teresa Carvalho (eds.), *The Changing Dynamics of Higher Education Middle Management*. Dordrecht: Springer. 229-241.

- de Boer, Harry, Ben Jongbloed (2012). "A Cross-National Comparison of Higher Education Markets in Western Europe". In: Adrian Curaj, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part 2*. Dordrecht: Springer. 553-571.
- de Ridder-Symoens, Hilde, ed. (1996). *A History of the University in Europe. Vol. II. Universities in Early Modern Europe (1500-1800)*. Cambridge: CUP.
- de Weert, Egbert (2007). "Graduate Employment in Europe: The Employers' Perspective". In: Ulrich Teichler (ed.), *Careers of University Graduates. Views and Experiences in Comparative Perspectives*. Dordrecht: Springer. 225-246.
- de Weert, Egbert (2009). "The Organised Contradictions of Teaching and Research: Reshaping the Academic Profession". In: Jürgen Enders and Egbert de Weert (eds.), *The Changing Face of Academic Life. Analytical and Comparative Perspectives*. New York: Palgrave. 134-154.
- Deacon, Bob (2000). "Eastern European Welfare States: the Impact of the Politics of Globalization". *Journal of European Social Policy*. Vol. 10. No. 2.
- Deacon, Bob (2000). "Global Social Policy Actors and the Shaping of East European Welfare". In: Robert E. Goodin, Deborah Mitchell (eds.), *The Foundations of the Welfare State. Volume III*. Cheltenham: Edward Elgar. 595-635.
- Deacon, Bob, Michelle Hulse, Paul Stubbs (1997). *Global Social Policy International Organizations and the Future of Welfare*. London: SAGE.
- Deacon, Bob, Michelle Hulse (2011). "The Making of Post-communist Social Policy: The Role of International Agencies". In: Pete Alcock, Martin Powell (eds.), *Welfare Theory and Development. Volume IV*. London: SAGE. 259-276.
- Dearden, Lorraine, Stephen Machin, Anna Vignoles (2011). "The Contribution of the Economics of Education to Education". In: John Furlong, Martin Lawn (eds.), *Disciplines of Education: Their Role in the Future of Education Research*. London: Routledge. 85-102.
- Deem, Rosemary (2001). "Globalisation, New Managerialism, Academic Capitalism and Entrepreneurialism in Universities: Is the Local Dimension Still Important?" *Comparative Education*. Vol. 37. No. 1.
- Deem, Rosemary (2006a). "Conceptions of Contemporary European Universities: To Do Research or Not to Do Research?" *European Journal of Education*. Vol. 41. No. 2.
- Deem, Rosemary (2006b). "Changing Research Perspectives on the Management of Higher Education: Can Research Permeate the Activities of Manager-Academics?" *Higher Education Quarterly*. Vol. 60. No. 3.
- Deem, Rosemary, Kevin J. Brehony (2005). "Management as Ideology: The Case of 'New Managerialism' in Higher Education". *Oxford Review of Education*. Vol. 31. No. 2. June 2005.
- Deem, Rosemary, Lisa Lucas (2007a). "Research and Teaching Cultures in Two Contrasting UK Policy Contexts: Academic Life in Education Departments in Five English and Scottish Universities". *Higher Education*. Vol. 54.
- Deem, Rosemary, Sam Hillyard, Mike Reed, eds. (2007b). *Knowledge, Higher Education, and the New Managerialism. The Changing Management of UK Universities*. Oxford: Oxford University Press.

- Deephouse, David L., Mark Suchman (2008). "Legitimacy in Organizational Institutionalism". In: Royston Greenwood, Christine Oliver, Kerstin Sahlin, Roy Suddaby (eds.), *The SAGE Handbook of Organizational Institutionalism*. Los Angeles: SAGE. 49-77.
- Deiaco, Enrico, Ana M. Gren, Göran Melin (2009). "Exploring University Alliances and Comparable Academic Cooperation Structures". In: M. McKelvey, M. Holmén (eds.), *Learning to Compete in European Universities: From Social Institution to Knowledge Business*. Cheltenham: Edward Elgar Publishing. 19-47.
- Delanty, Gerard (2001). *Challenging Knowledge. The University in the Knowledge Society*. Buckingham: SRHE and Open University Press.
- della Porta, Donatella, Michael Keating, eds. (2008). *Approaches and Methodologies in the Social Sciences: A Pluralist Perspective*. New York: Cambridge University Press.
- DeShano da Silva, Carol, James Philip Huguley, Zenub Kakli, Radhika Rao, eds. (2007). *The Opportunity Gap: Achievement and Inequality in Education*. Cambridge: Harvard Educational Review.
- Dewatripont, Mathias, Gérard Roland (1998). "The Design of Reform Packages under Uncertainty". In: Federico Sturzenegger, Mariano Tommasi (eds.), *The Political Economy of Reform*. Cambridge & London: The MIT Press. 243-267.
- Dill, David D. (2005). "The Degradation of the Academic Ethic: Teaching, Research and the Renewal of Professional Self-Regulation". In: R. Barnett (ed.), *Reshaping the University. New Relationships between Research, Scholarship and Teaching*. Maidenhead: Open University Press. 178-191.
- Dill, David D., Barbara Sporn (1995a). "The Implications of a Postindustrial Environment for the University: An Introduction". In: David D. Dill, Barbara Sporn (eds.), *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly*. New York: Pergamon. 1-19.
- Dill, David D., Barbara Sporn (1995b). "University 2001: What Will the University of the Twenty-First Century Look Like?" In: David D. Dill, Barbara Sporn (eds.), *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly*. New York: Pergamon. 212-236.
- Dill, David D., Barbara Sporn, eds. (1995c). *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly*. New York: Pergamon.
- Dill, David D., F. A. van Vught, eds. (2010a). *National Innovation and the Academic Research Enterprise: Public Policy in Global Perspective*. Baltimore: The Johns Hopkins University Press.
- Dill, David D., Frans A. van Vught (2010b). "Introduction". In: D.D. Dill, F.A. van Vught (eds.), *National Innovation and the Academic Research Enterprise: Public Policy in Global Perspective*. Baltimore: The Johns Hopkins University Press. 1-26
- Dill, David D., Maarja Beerkens, eds. (2010). *Public Policy for Academic Quality: Analyses of Innovative Policy Instruments*. Dordrecht: Springer.
- DiMaggio, Paul J., Walter W. Powell (1991). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields". In: Walter W. Powell, Paul J. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press. 63-82.

- Djelic, Marie-Laure, Sigrid Quack, eds. (2003). *Globalization and Institutions: Redefining the Rule of the Economic Game*. Cheltenham: Edward Elgar.
- Djelic, Marie-Laure, Sigrid Quack (2008). "Institutions and Transnationalization". In: Royston Greenwood, Christine Oliver, Roy Suddaby, Kerstin Sahlin (eds.), *The Sage Handbook of Organizational Institutionalism*. London: Sage. 299-323.
- Djelic, Marie-Laure, Sigrid Quack, eds. (2010a). *Transnational Communities: Shaping Global Economic Governance*. Cambridge: CUP.
- Djelic, Marie-Laure, Sigrid Quack (2010b). "Transnational Communities and Governance". In: Marie-Laure Djelic, Sigrid Quack (eds.), *Transnational Communities: Shaping Global Economic Governance*. Cambridge: CUP. 3-36.
- Djelic, Marie-Laure, Sigrid Quack (2012). "Transnational Governance through Standard Setting: The Role of Transnational Communities". In: Glenn Morgan, Richard Whitley (eds.), *Capitalisms & Capitalism in the Twenty-First Century*. Oxford: Oxford University Press. 166-189.
- Djelic, Marie-Laure, Kerstin Sahlin (2012). "Reordering the World: Transnational Regulatory Regulatory Governance and Its Challenges". In: David Levi-Faur (ed.), *The Oxford Handbook of Governance*. New York: Oxford University Press. 745-758.
- Djelic, Marie-Laure, Kerstin Sahlin-Andersson, eds. (2006). *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge: Cambridge University Press.
- Dobbins, Michael (2010). "Comparing Higher Education Policies in Central and Eastern Europe". In: Anja P. Jakobi, Kerstin Martens, Klaus Dieter Wolf (eds.), *Education in Political Science: Discovering a neglected field*. London: Routledge. 38-55.
- Dobbins, Michael (2011). *Higher Education Policies in Central and Eastern Europe: Convergence towards a Common Model?* London: Palgrave Macmillan.
- Domański, Henryk (1996). *On the Verge of Convergence: Social Stratification in Eastern Europe*. Budapest: CEU Press.
- Dore, Ronald (1976). *The Diploma Disease. Education, Qualifications and Development*. London: George Allen & Unwin.
- Dorling, Daniel (2010). *Injustice. Why Social Inequality Persists*. Bristol: the Policy Press.
- Drazen, Allan (1998). "The Political Economy of Delayed Reform". In: Federico Sturzenegger, Mariano Tommasi (eds.), *The Political Economy of Reform*. Cambridge & London: The MIT Press. 39-60.
- Drazen, Allan, Vittorio Grilli (1998). "The Benefit of Crises for Economic Reforms". In: Federico Sturzenegger, Mariano Tommasi (eds.), *The Political Economy of Reform*. Cambridge & London: The MIT Press. 127-141.
- Drori, Gili S., John W. Meyer, Hokyung Hwang, eds. (2006). *Globalization and Organization: World Society and Organizational Change*. Oxford: Oxford University Press.
- Dryzek, John S. (1996). "The Informal Logic of Institutional Design". In: Robert E. Goodin (ed.), *The Theory of Institutional Design*. Cambridge: Cambridge University Press. 103-125.
- Dryzek, John S. (2006). "Policy Analysis as Critique". In: Michael Moran, Martin Rein, Robert E. Goodin (eds.), *The Oxford Handbook of Public Policy*. New York: Oxford University Press. 190-203.

- Dryzek, John, Robert E. Goodin (2000). "Risk-Sharing and Social Justice: The Motivational Foundations of the Post-War Welfare State". In: Robert E. Goodin, Deborah Mitchell (eds.), *The Foundations of the Welfare State. Volume III*. Cheltenham: Edward Elgar. 41-72.
- Duberley, Joanne, Laurie Cohen, Elspeth Leeson (2007). "Entrepreneurial Academics: Developing Scientific Careers in Changing University Settings". *Higher Education Quarterly. Public Policy in Global Perspective*. Vol. 61. No. 4. 479-497.
- Duczmal, W. and B. Jongbloed (2007). "Private Higher Education in Poland: A Case of Public-Private Dynamics". In: J. Enders and B. Jongbloed (eds.), *Public-Private Dynamics in Higher Education. Expectations, Developments and Outcomes*. Bielefeld: transcript Verlag. 415-442.
- Duderstadt, James J. (2006). "University-Industry Government Partnerships for a 21<sup>st</sup> Century Global Knowledge-Driven Economy: An American Perspective". In: L.E. Weber, J.J. Duderstadt (eds.), *Universities and Business: Partnering for the Knowledge Society*. London: Economica. 19-29.
- Duderstadt, James J. (2008). "Higher Education in the 21st Century: Global Imperatives, Regional Challenges, National Responsibilities and Emerging Opportunities". In: Luc E. Weber, James J. Duderstadt (eds.), *The Globalization of Higher Education*. London: Economica. 195-206.
- Duderstadt, James J., Farris W. Womack (2003). *Beyond the Crossroads. The Future of the Public University in America*. Baltimore: the Johns Hopkins University Press.
- Dumas, A. and B. S. Turner (2009). "Aging in Post-Industrial Societies: Intergenerational conflict and solidarity". In: J. Powell and J. Hendrick (eds.). *The Welfare State and Postindustrial Society: A Global Analysis*. New York: Springer. 41-56.
- Dunlap, Michelle R., Nicole Webster (2009). "Enhancing Intercultural Competence Through Civic Engagement". In: Barbara Jacoby and Associates, *Civic Engagement In Higher Education: Concepts and Practices*. San Francisco: Jossey-Bass. 140-153.
- Easterlin, Richard A. (1987). *Birth and Fortune: The Impact of Numbers on Personal Welfare*. Second Edition. Chicago: The University of Chicago Press.
- Easterlin, R. A. (1989). "Demography Is Not Destiny in Higher Education". In: Levine, A. and Associates (eds.). *Shaping Higher Education Future: Demographic Realities and Opportunities, 1990-2000*. San Francisco: Jossey-Bass Publishers. 135-141.
- Easterlin, Richard A. (2010). *Happiness, Growth, and the Life Cycle*. Oxford: Oxford University Press.
- Eastman, Julia Antonia (2006). "Revenue Generation and Organisational Change in Higher Education: Insights from Canada". *Higher Education Management and Policy*. Vol. 18. No. 3. 55-81.
- Ebbinghaus, Bernhard (2009). "Can Path Dependence Explain Institutional Change? Two Approaches Applied to Welfare State Reform". In: Lars Magnusson, Jan Ottosson (eds.), *The Evolution of Path Dependence*. Cheltenham: Edward Elgar. 191-218.
- EC. European Commission (2003). "The Role of the Universities in the Europe of Knowledge". Brussels: European Commission. COM(2003) 58 final.

- EC. European Commission (2005). "Mobilising the Brainpower of Europe: Enabling Universities to Make Their Full Contribution to the Lisbon Strategy". Brussels: European Commission. COM(2005) 152 final.
- EC. European Commission (2006). "Delivering on the Modernization Agenda for Universities: Education, Research and Innovation". Brussels: European Commission. COM(2006)208.
- EC. European Commission (2007a). "Improving Knowledge Transfer between Research Institutions and Industry across Europe". Brussels: European Commission. COM(2007)182.
- EC. European Commission (2007b). "Perceptions of Higher Education Reforms". Brussels: European Commission.
- EC. European Commission (2007c). "Remuneration of Researchers in the Public and Private Sectors". Brussels: European Commission.
- EC. European Commission (2008a). "Impact of External Project-Based Research Funding on Financial Management in Universities". Brussels: European Commission.
- EC. European Commission (2008b). Commission Staff Working Paper accompanying "New Skills for New Jobs. Anticipating and Matching Labour Market and Skills Needs". Brussels: European Commission. COM(2008) 868.
- EC. European Commission (2009a). "A New Partnership for the Modernization of Universities: The EU Forum for University Business Dialogue". Brussels: European Commission. COM(2009)158.
- EC. European Commission (2009b). "EU Youth Report". Brussels: European Commission.
- EC. European Commission (2009c). "Europe's Regional Research Systems: Current Trends and Structures". Brussels: European Commission.
- EC. European Commission (2009d). "Students and higher education reform". Brussels : European Commission.
- EC. European Commission (2010a). "Employers' Perception of Graduate Employability. Analytical Report". Brussels: European Commission.
- EC. European Commission (2010b). "Fifth Report on Economics, Social and Territorial Cohesion". Brussels: European Commission.
- EC. European Commission (2011a). "Supporting Growth and Jobs – an Agenda for the Modernisation of Europe's Higher Education Systems". Communication form the European Commission. Brussels. COM(2011) 567 final.
- EC. European Commission (2011b). Commission Staff Working Document accompanying the document "Supporting Growth and Jobs – an Agenda for the Modernisation of Europe's Higher Education". Brussels: SEC(2011) 1063 final.
- EC. European Commission (2011c). "Modernising Higher Education – Facts and Figures". MEMO/11/615.
- EC. European Commission (2011d). "An EU Strategy for Modernising Higher Education – Questions and Answers". Brussels: Memo/11/615.
- Eckel, Peter D., Adrianna Kezar (2003). *Taking the Reins: Institutional Transformation in Higher Education*. Westport: Praeger.

- Eckel, Peter D., Christopher C. Morphey (2009). "The Organizational Dynamics of Privatization in Public Research Universities". In: Christopher C. Morphey, Peter D. Eckel (eds.), *Privatizing the Public University. Perspectives from Across the Academy*. Baltimore: The Johns Hopkins University Press. 88-108.
- Eggins, Heather, ed. (2003). *Globalization and Reform in Higher Education*. Berkshire: SRHE & Open University Press.
- Ehrenberg, Ronald G., Robert S. Smith (2009). *Modern Labor Economics: Theory and Public Policy*. Tenth Edition. Boston/ Munich: Pearson/Addison Wesley.
- Ehrenberg, Ronald G., Harriet Zuckerman, Jeffrey A. Groen, Sharon M. Brucker (2010). *Educating Scholars. Doctoral Education in the Humanities*. Princeton: Princeton University Press.
- Ehrenberg, Ronald G., ed. (2006). *What's Happening to Public Higher Education? The Shifting Financial Burden*. Baltimore: Johns Hopkins University Press.
- Ekiert, Grzegorz, Stephen E. Hanson, eds. (2003). *Capitalism and Democracy in Central and Eastern Europe. Assessing the Legacy of Communist Rule*. Cambridge: Cambridge University Press.
- El-Khawas, Elaine (2000a). "Patterns of Communication and Miscommunication between Research and Policy". In: Stefanie Schwarz, Ulrich Teichler (eds.), *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer Academic Publishers. 45-56.
- El-Khawas, Elaine (2000b). "Research, Policy and Practice: Assessing Their Actual and Potential Linkages". In: Ulrich Teichler, Jan Sadlak (eds.), *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press. 37-46.
- Elster, Jon, Claus Offe and Ulrich K. Preuss (1998). *Institutional Design in Post-Communist Societies: Rebuilding the Ship at Sea*. Cambridge: Cambridge University Press.
- Emmenegger, Patrick, Silja Häusermann, Bruno Palier, Martin Seeleib-Kaiser, eds. (2012a). *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Emmenegger, Patrick, Silja Häusermann, Bruno Palier, Martin Seeleib-Kaiser (2012b). "How We Grow Unequal". In: Patrick Emmenegger, Silja Häusermann, Bruno Palier, Martin Seeleib-Kaiser (eds.), *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press. 3-26.
- Emmenegger, Patrick, Silja Häusermann, Bruno Palier, Martin Seeleib-Kaiser (2012c). "How Rich Countries Cope With Deindustrialization". In: Patrick Emmenegger, Silja Häusermann, Bruno Palier, Martin Seeleib-Kaiser (eds.), *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press. 304-320.
- Enders, Jürgen (2006). "The Academic Profession". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education. Part 1*. Dordrecht: Springer. 5-21.
- Enders, Jürgen (2010). "Political Science and Educational Research: Windows of Opportunity for a Neglected Relationship". In: Anja P. Jakobi, Kerstin Martens, Klaus Dieter Wolf (eds.), *Education in Political Science: Discovering a neglected field*. London: Routledge. 205-217.

- Enders, Jürgen, Ulrich Teichler (1997). "A Victim of Their Own Success? Employment and Working Conditions of Academic Staff in Comparative Perspective". *Higher Education*. Vol. 34. 347-374.
- Enders, Jürgen, Egbert de Weert, eds. (2004). *The International Attractiveness of the Academic Workplace in Europe*. Frankfurt: GEW.
- Enders, Jürgen, Christine Musselin (2008). "Back to the Future? The Academic Professions in the 21st Century". In: *OECD, Higher Education to 2030. Volume 1. Demography*. Paris: OECD. 125-150.
- Enders, Jürgen, Egbert de Weert, eds. (2009a). *The Changing Face of Academic Life: Analytical and Comparative Perspectives*. New York: Palgrave Macmillan.
- Enders, Jürgen, Egbert de Weert (2009b). "Towards a T-shaped Profession: Academic Work and Career in the Knowledge Society". In: Jürgen Enders, Egbert de Weert (eds.), *The Changing Face of Academic Life: Analytical and Comparative Perspectives*. New York: Palgrave Macmillan. 251-272.
- Enders, Jürgen, ed. (2000). *Employment and Working Conditions of Academic Staff in Europe*. Frankfurt: GEW.
- Enders, Jürgen, ed. (2001). *Academic Staff in Europe. Changing Contexts and Conditions*. Westport and London: Greenwood Press.
- Enders, Jürgen, Oliver Fulton, eds. (2002). *Higher Education in a Globalising World. International Trends and Mutual Observations: A Festschrift in Honour of Ulrich Teichler*. Dordrecht: Kluwer Academic Publishers.
- Enders, Jürgen, Ben Jongbloed, eds. (2007). *Public-Private Dynamics in Higher Education. Expectations, Developments and Outcomes*. Bielefeld: Transcript Verlag.
- Epstein, Debbie, Rebecca Boden, Rosemary Deem, Fazal Rizvi, Susan Wright, eds. (2007). *Geographies of Knowledge, Geometries of Power: Framing the Future of Higher Education. World Yearbook of Education 2008*. New York: Routledge.
- Esping-Andersen, Gøsta (1990). *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- Esping-Andersen, Gøsta (1996a). "After the Golden Age? Welfare State Dilemmas in a Global Economy". In: Gøsta Esping-Andersen (ed.), *Welfare States in Transition: National Adaptations in Global Economies*. London: SAGE. 1-31.
- Esping-Andersen, Gøsta, ed. (1996b). *Welfare States in Transition. National Adaptations in Global Economies*. London: SAGE.
- Esping-Andersen, Gøsta (1999). *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.
- Esping-Andersen, Gøsta (2001). "A Welfare State for the 21st Century". In: Anthony Giddens (ed.), *The Global Third Way Debate*. Cambridge: Polity Press.
- Esping-Andersen, Gøsta (2005). "Inequality of Incomes and Opportunities". In: Anthony Giddens, Patrick Diamond (eds.), *The New Egalitarianism*. Cambridge, Malden: Polity Press. 8-38.
- Esping-Andersen, Gøsta (2008). "Childhood Investments and Skill Formation". *International Tax and Public Finance*. Vol. 15.
- Esping-Andersen, Gøsta (2009). *The Incomplete Revolution. Adapting to Women's New Roles*. Cambridge: Polity Press.

- Esping-Andersen, Gøsta (2010). "Prologue: What does it Mean to Break with Bismarck?" In: Bruno Palier (ed.), *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press. 11-18.
- Esping-Andersen, Gøsta, Duncan Gallie, Anton Hemerijck, John Myles (2002). *Why We Need a New Welfare State?* Oxford: Oxford University Press.
- Etzkowitz, Henry (1999). "Bridging the Gap: The Evolution of Industry-University Links in the United States". In: L. M. Branscomb, F. Kodama, R. Florida (eds.), *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. Cambridge, Massachusetts: The MIT Press. 203-233.
- Etzkowitz, Henry (2001). "The Entrepreneurial University and the Emergence of Democratic Corporatism". In: Henry Etzkowitz, Loet Leydesdorff (eds.), *Universities and Global Knowledge Economy: A Triple Helix of University-Industry-Government*. London and New York: Continuum. 141-152.
- Etzkowitz, Henry (2002). *MIT and the Rise of Entrepreneurial Science. Studies in Global Competition Series*. London, New York: Routledge.
- Etzkowitz, Henry (2003). "Research Groups As 'Quasi-Firms': The Invention of the Entrepreneurial University". *Science and Public Policy*. Vol. 32. 109-121.
- Etzkowitz, Henry (2008). *The Triple Helix: University-Industry-Government Innovation in Action*. London, New York: Routledge.
- Etzkowitz, Henry (2010). "A Company of Their Own: Entrepreneurial Scientists and the Capitalization of Knowledge". In: R. Viale, H. Etzkowitz (eds.), *The Capitalization of Knowledge. A Triple Helix of University-Industry-Government*. Cheltenham: Edward Elgar Publishing. 201-217
- Etzkowitz, Henry, Andrew Webster (1998a). "Entrepreneurial Science: The Second Academic Revolution". In: H. Etzkowitz, A. Webster, P. Healey (eds.), *Capitalizing Knowledge: New Intersections of Industry and Academia*. Albany: State University of New York Press. 21-46.
- Etzkowitz, Henry, Andrew Webster, Peter Healey, eds. (1998b). *Capitalizing Knowledge: New Intersections of Industry and Academia*. Albany: State University of New York Press.
- Etzkowitz, Henry, Andrew Webster, Peter Healey (1998). "Introduction". In: H. Etzkowitz, A. Webster, P. Healey (eds.), *Capitalizing Knowledge: New Intersections of Industry and Academia*. Albany: State University of New York Press. 1-17.
- Etzkowitz, Henry, Eugene Schuler Jr., Magnus Gulbrandsen (2000). "The Evolution of the Entrepreneurial University". In: Merle Jacob, Tomas Hellström (eds.), *The Future of Knowledge Production in the Academy*. Buckingham: The Society for Research into Higher Education and Open University Press. 40-60.
- Etzkowitz, Henry, Loet Leydesdorff (2000). "The Dynamics of Innovation: From National Systems and 'Mode 2' to a Triple Helix of University-Industry-Government Relations". *Research Policy*. Vol. 29. 109-123.
- Etzkowitz, Henry, Andrew Webster, Christiane Gebhardt, Branca Regina Cantisano Terra (2000). "The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm". *Research Policy*. Vol. 29. 313-330.

- Etzkowitz, Henry, Carol Kemelgor, Brian Uzzi (2000). *Athena Unbound: The Advancement of Women in Science and Technology*. Cambridge: Cambridge University Press.
- Etzkowitz, Henry, Chunyan Zhou (2008). "Introduction to Special Issue. Building the Entrepreneurial University: A Global Perspective". *Science and Public Policy*. Vol. 35. No. 9. 627-635.
- Etzkowitz, Henry, Marina Ranga, Mats Benner, Lucia Guarany, Anne Marie Maculan and Robert Kneller (2008). "Pathways to the Entrepreneurial University: Towards a Global Convergence". *Science and Public Policy*. Vol. 35. No. 9. 681-695.
- Etzkowitz, Henry, Marina Ranga (2009). "A Trans-Keynesian Vision of Innovation for the Contemporary Economic Crisis: 'Picking Winners' Revisited". *Science and Public Policy*. Vol. 36. No. 10. 799-808.
- Etzkowitz, Henry, Loet Leydesdorff, eds. (2001). *Universities and Global Knowledge Economy: A Triple Helix of University-Industry-Government*. London and New York: Continuum.
- EUA (2003). "Trends in Learning Structures in European Higher Education III". A report by Sybille Reichert and Christian Tauch. Brussels: European University Association.
- EUA (2007). "Trends V: Universities Shaping the European Higher Education Area". By David Crosier *et al.*, Brussels: European University Association.
- EUROBAROMETER (2007). *Perceptions of Higher Education Reforms. Survey among Teaching Professionals in Higher Education Institutions, in the 27 Member States, and Croatia, Iceland, Norway and Turkey*. Brussels: the European Commission.
- EUROBAROMETER (2009). *Students and Higher Education Reform. Survey among Students in Higher Education Institutions, in the EU Member States, Croatia, Iceland, Norway and Turkey*. Brussels: the European Commission.
- EUROSTUDENT (2011). *Social and Economic Conditions of Student Life in Europe*. Hannover: HIS.
- Evans, Peter (1997). "The Eclipse of the State? Reflections on Stateness in an Era of Globalization". *World Politics*. Vol. 30. No. 1.
- Ewell, Peter T. (2010). "The US National Survey of Student Engagement (NSSE)". In: David D. Dill, Maarja Beerkens (eds.), *Public Policy for Academic Quality: Analyses of Innovative Policy Instruments*. Dordrecht: Springer. 83-97.
- EY/IBNGR (2010). *Strategia rozwoju szkolnictwa wyższego do 2020 roku [Higher Education Development Strategy until 2020]*. Prepared for the Ministry of Science and Higher Education (MSHE). Warsaw: MSHE.
- Fairweather, James S. (1988). *Entrepreneurship and Higher Education: Lessons for Colleges, Universities, and Industry*. ASHE-ERIC Higher Education Report No. 6, 1988. Washington, D.C.: Association for the Study of Higher Education.
- Fallon, Daniel (1980). *The German University*. Boulder: Colorado Associated University Press.
- Feldmann, Magnus (2007). "The Origins of Varieties of Capitalism: Lessons from Post-Socialist Transition in Estonia and Slovenia". In: Bob Hancké, Martin Rhodes, Mark Thatcher (eds.), *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. New York: Oxford University Press. 328-350.

- Fender, Brian (2010). "Innovation and Knowledge Transfer the Role of the Individual". In: R.J. Howlett (ed.), *Innovation through Knowledge Transfer*. SIST 5. Dordrecht: Springer. 15-25.
- Fenger, H.J.M (2007). "Welfare Regimes in Central and Eastern Europe: Incorporating Post-Communist Countries in a Welfare Regime Typology". *Contemporary Issues and Ideas in Social Sciences*. Vol. 3. No. 2.
- Ferge, Zsuzsa (1997a). "The Perils of the Welfare State's Withdrawal". *Social Research*. Vol. 64. No. 4 (Winter 1997).
- Ferge, Zsuzsa (1997b). "Social Policy Challenges and Dilemmas in Ex-Socialist Systems". In: Nelson *et al.* (1997).
- Ferge, Zsuzsa (2001). "European Integration and the Reform of Social Security in the Accession Countries". *The European Journal of Social Quality*. Vol. 3. Issue 1&2.
- Ferge, Zsuzsa (2008). "Is There a Specific East-Central European Welfare Culture". In: Wim van Oorschot, Michael Opielka, Birgit Pfau-Effinger (eds.), *Culture and welfare state: values and social policy in comparative perspective*, Cheltenham: Edward Elgar.
- Ferge, Zsuzsa, Gabor Juhasz (2004). "Accession and Social Policy – The Case of Hungary". *Journal of European Social Policy*. Vol. 14. No. 3.
- Ferrera, Maurizio (2003). "Reforming the European Social Model: Dilemmas and Perspectives". *The European Legacy*. Vol. 8. No. 5.
- Ferrera, Maurizio (2005). *The Boundaries of Welfare: European Integration and the New Spatial Politics of Social Protection*. Oxford: Oxford University Press.
- File, Jon, Leo Goedegebuure, eds. (2003). *Real-Time Systems. Reflections on Higher Education in the Czech Republic, Hungary, Poland and Slovenia*. Enschede: CHEPS.
- Finkelstein, Martin J. (2006). "The Study of Academic Careers: Looking Back, Looking Forward". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XXI*. Dordrecht: Springer. 159-212.
- Finkelstein, Martin J. (2007). "The 'New' Look of Academic Careers in the United States". In: Maurice Kogan, Ulrich Teichler (eds.), *Key Challenges to the Academic Profession*. Kassel: INCHER. 145-158.
- Finkelstein, Martin J. (2010). "The Balance between Teaching and Research in the Work Life of American Academics, 1992-2007: Is It Changing?" In: *The Changing Academic Profession in International and Quantitative Perspectives: A Focus on Teaching and Research Activities*. RIHE: Hiroshima. 213-233.
- Finkelstein, Martin J. (2012). "The Power of Institutional and Disciplinary Markets". In: Philip G. Altbach, Liz Reisberg, Maria Yudkevich, Gregory Androushchak, Iván F. Pacheco (eds.), *Paying the Professoriate: A Global Comparison of Compensation and Contracts*. New York: Routledge. 318-328.
- Finkelstein, Martin J., Jesús F. Galaz-Fontes, Amy Scott Metcalfe (2009). "Changing Employment relationships in North America: Academic Work in the United States, Canada and Mexico". In: Jürgen Enders, Egbert de Weert (eds.), *The Changing Face of Academic Life: Analytical and Comparative Perspectives*. New York: Palgrave Macmillan. 218-247.

- Fischman, Gustavo E., Sarah E. Igo, Diana Rhoten (2011). "Great Expectations, Past Promises, and Golden Ages: Rethinking the 'Crisis' of Public Research Universities". In: Diana Rhoten, Craig (eds.), *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press. 34-66.
- Florida, Richard (2002). *The Rise of the Creative Class and How It's Transforming Work, Leisure, Community, and Everyday Life*. New York: Basic Books.
- Florida, Richard (2008). *Who's Your City? How The Creative Economy Is Making Where to Live the Most Important Decision of Your Life*. New York: Basic Books.
- Florida, Richard, Wesley M. Cohen (1999). "Engine or Infrastructure? The University Role in Economic Development". In: L. M. Branscomb, F. Kodama, R. Florida (eds.), *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. Cambridge, Massachusetts: The MIT Press. 589-610.
- Fontana, Roberto, Aldo Geuna, Mireille Matt (2006). "Factors Affecting University-Industry R&D Projects: The Importance of Searching, Screening and Signaling". *Research Policy*. Vol. 35. 309-323.
- Foray, Dominique (2006). *The Economics of Knowledge*. Cambridge, MA: the MIT Press.
- Foray, Dominique (2007). "University-Industry Knowledge Transfer in Switzerland". In: Shahid Yusuf, Kaoru Nabeshima (eds.), *How Universities Promote Economic Growth*. Washington, DC: The World Bank. 47-70.
- Foray, Dominique, ed. (2009). *The New Economics of Technology Policy*. Cheltenham: Edward Elgar.
- Foray, Dominique, Christopher Freeman, eds. (1993). *Technology and the Wealth of Nations: The Dynamics of Constructed Advantage*. London and New York: Pinter Publishers.
- Frackmann, Edgar (1997). "Research on Higher Education in Western Europe: From Policy Advice to Self-Reflection". In: Jan Sadlak, Philip G. Altbach (eds.), *Higher Education Research at the Turn of the New Century: Structures, Issues, and Trends*. Paris: UNESCO Publishing. 107-136.
- Frances, Carol (1989). "Uses and Misuses of Demographic Projections: Lessons for the 1990s". In: Levine, A. and Associates (eds.), *Shaping Higher Education Future: Demographic Realities and Opportunities, 1990-2000*. San Francisco: Jossey-Bass Publishers. 142-160.
- Frank, David John, Jay Gabler (2006). *Reconstructing the University: Worldwide Shifts in Academia in the 20th Century*. Stanford: Stanford University Press.
- Frank, Robert H. (1985). *Choosing the Right Pond: Human Behavior and the Quest for Status*. New York: Oxford University Press.
- Frank, Robert H. (1999). *Luxury Fever: Weighing the Cost of Excess*. Princeton: Princeton University Press.
- Frank, Robert H. (2007). *Falling Behind: How Rising Inequality Harms the Middle Class*. Berkeley: University of California Press.
- Frank, Robert H., Philip J. Cook (1995). *The Winner-Take-All Society: Why the Few at the Top Get So Much More Than the Rest of Us*. New York: Virgin Books.
- Freeman, R. Edward (2010). *Strategic Management: A Stakeholder Approach*. Cambridge: Cambridge University Press.

- Freeman, R. Edward, Jeffrey S. Harrison, Andrew C. Wicks, Bidhan L. Parmar, Simone de Colle (2010). *Stakeholder Theory: The State of the Art*. Cambridge: Cambridge University Press.
- Freeman, Richard B. (1976). *The Overeducated America*. New York: Academic Press.
- Freeman, Richard B. (2011). "The Economics of Science and Technology Policy". In: Kaye Husbands Fealing, Julia I. Lane, John H. Marburger III, Stephanie S. Shipp (eds.), *The Science of Science Policy: A Handbook*. Stanford: Stanford University Press. 85-103.
- Fried, Jochen, Anna Glass, Bernd Baumgartl (2007). "Shades of Privatness: Non-Public Higher Education in Europe". In: P.J. Wells, J. Sadlak, L. Vlasceanu (eds.), *The Rising Role and Relevance of Private Higher Education in Europe*. Bucharest: UNESCO-CEPES.
- Frye, Timothy (2007). "Economic Transformation and Comparative Politics". In: Charles Boix, Susan C. Stokes (eds.), *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press. 940-986.
- Frye, Timothy (2010). *Building States and Markets after Communism: the Perils of Polarized Democracy*. New York: Cambridge University Press.
- Fuchs, Gerhard, Philip Shapira, eds. (2005). *Rethinking Regional Innovation and Change: Path Dependency or Regional Breakthrough?* New York: Springer.
- Fullan, Michael, ed. (2005). *Fundamental Change. International Handbook of Educational Change*. Dordrecht: Springer.
- Fuller, Alison, Sue Heath, Brenda Johnston, eds. (2011). *Rethinking Widening Participation in Higher Education: The Role of Social Networks*. London: Routledge.
- Fulton, Oliver (2000). "Academic Staff in the United Kingdom". In: Jürgen Enders (ed.), *Employment and Working Conditions of Academic Staff in Europe*. Frankfurt a/Main: GEW.
- Fulton Oliver, Chris Holland (2001). "Profession or Proletariat: Academic Staff in the United Kingdom after Two Decades of Change". In: Jürgen Enders (ed.), *Academic Staff in Europe. Changing Contexts and Conditions*. Westport and London: Greenwood Press.
- Fulton, Oliver, Paulo Santiago, Charles Edquist, Elaine El-Khawas, Elsa Hackl (2007). *OECD Reviews of Tertiary Education*. Poland. Paris: OECD.
- Furlong, Andy, Fred Cartmel (2009). *Higher Education and Social Justice*. Maidenhead: Open University Press.
- Furlong, John, Martin Lawn (2011). "Disciplines of Education and Their Role in the Future of Educational Research: Concluding Reflections". In: John Furlong, Martin Lawn (eds.), *Disciplines of Education: Their Role in the Future of Education Research*. London: Routledge. 173-187.
- Gambardella, Alfonso, Franco Malerba, ed. (1999a). *The Organization of Economic Innovation in Europe*. Cambridge: CUP.
- Gambardella, Alfonso, Franco Malerba (1999b). "The Organization of Innovative Activity in Europe: Towards a Conceptual Framework". In: Alfonso Gambardella, Franco Malerba (ed.), *The Organization of Economic Innovation in Europe*. Cambridge: CUP. 1-12.

- Garfinkel, Irwin, Lee Rainwater, Timothy Smeeding (2010). *Wealth and Welfare States: Is America a Laggard or Leader?* Oxford: Oxford University Press.
- Garnsey, Elizabeth (2007). "The Entrepreneurial University: The Idea and Its Critics". In: Shahid Yusuf, Kaoru Nabeshima (eds.), *How Universities Promote Economic Growth*. Washington, DC: The World Bank. 227-238.
- Gasset, José Ortega y (1944). *Mission of the University*. Princeton: Princeton University Press.
- Geiger, Roger L. (1986). *Private Sectors in Higher Education. Structure, Function, and Change in Eight Countries*. Ann Arbor: The University of Michigan Press.
- Geiger, Roger L. (2004a). *Knowledge and Money. Research Universities and the Paradox of the Marketplace*. Stanford: Stanford University Press.
- Geiger, Roger L. (2004b). *Research and Relevant Knowledge. American Research Universities Since World War II*. New Brunswick: Transaction Publishers.
- Geiger, Roger L. (2007). "Expert and Elite: The Incongruous Missions of Public Research Universities". In: Roger L. Geiger, Carol L. Colbeck, Roger L. Williams, Christian K. Anderson (eds.), *Future of the American Public Research University*. Rotterdam/Taipei: Sense Publishers. 15-33.
- Geiger, Roger L. (2011). "Markets and the End of the Current Era in U.S. Higher Education". In: Pedro N. Teixeira, David D. Dill (eds.), *Public Vices, Private Virtues? Assessing the Effects of Marketization in Higher Education*. Rotterdam/Boston/Taipei: Sense Publishers. 3-17.
- Geiger, Roger L. (2012). "Private Higher Education". In: Philip G. Altbach (ed.), *International Higher Education. An Encyclopedia: Volume 1*. New York and London: Garland Publishing. 233-246.
- Geiger, Roger L., Carol L. Colbeck, Roger L. Williams, Christian K. Anderson, eds. (2007). *Future of the American Public Research University*. Rotterdam/Taipei: Sense Publishers.
- Geiger, Roger L., Cresco M. Sá (2008). *Tapping the Riches of Science. Universities and the Promise of Economic Growth*. Cambridge, MA: Harvard University Press.
- Gellert, Claudius (1993). "Changing Patterns of European Higher Education". In: Claudius Gellert (ed.), *Higher Education in Europe*. London: Jessica Kingsley Publishers. 9-20.
- Gellert, Claudius (1993). "Structures and Functional Differentiation: Remarks on Changing Paradigms of Tertiary Education in Europe". In: Claudius Gellert (ed.), *Higher Education in Europe*. London: Jessica Kingsley Publishers. 234-246.
- Gellert, Claudius, ed. (1993). *Higher Education in Europe*. London: Jessica Kingsley Publishers.
- Genschel, Philipp (2004). "Globalization and the Welfare State: a Retrospective". *Journal of European Public Policy*. Vol. 11. No. 4.
- Genschel, Philipp (2005). "Globalization and the Transformation of the Tax State". In: Stephan Leibfried, Michael Zürn (eds.), *Transformations of the State?* Cambridge: CUP. 53-71.
- George, Alexander L. and Andrew Bennett (2005). *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press.

- Gerrero Cano, Maribel, David Urbano Pulido (2007). "Entrepreneurial Universities: The Case of Autonomous University of Barcelona". Research work. Business Economic Department. Autonomous University of Barcelona.
- Gerring, John (2007). "The Case Study: What It Is and What It Does?" In: Carles Boix, Susan C. Stokes (eds.), *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press. 90-122.
- Geuna, Aldo (1999a). *The Economics of Knowledge Production. Funding and the Structure of University Research*. Cheltenham: Edward Elgar.
- Geuna, Aldo (1999b). "Patterns of University Research in Europe". In: Alfonso Gambardella, Franco Malerba (ed.), *The Organization of Economic Innovation in Europe*. Cambridge: CUP. 367-389.
- Geuna, Aldo (2001). "The Changing Rational for European University Research Funding: Are There Negative Unintended Consequences?". *Journal of Economic Issues*. Vol. XXXV, No. 3.
- Geuna, Aldo, Ben R. Martin (2003). "University Research Evaluation and Funding: An International Comparison". *Minerva*. Vol. 41. 277-304.
- Geuna, Aldo, Lionel J.J. Nesta (2006). "University Patenting and Its Effects on Academic Research: The Emerging European Evidence". *Research Policy*. Vol. 35. 790-807.
- Geuna, Aldo, Alessandro Muscio (2009). "The Governance of University Knowledge Transfer: A Critical Review of the Literature". *Minerva*. Vol. 47. 93-114.
- Geuna, Aldo, Ammon J. Salter, W. Edward Steinmueller, eds. (2003). *Science and Innovation: Rethinking the Rationales for Funding and Governance*. Cheltenham: Edward Elgar.
- Geuss, Raymond (2001). *Public Goods, Private Goods*. Princeton: Princeton University Press.
- Gibb, Alan (2012). "Exploring the Synergistic Potential in Entrepreneurial University Development: Towards the Building of a Strategic Framework". *Annals of Innovation & Entrepreneurship*. Vol. 3. 1-21.
- Gibbons, Michael (1992). "The Industrial-Academic Research Agenda". In: Thomas G. Whiston, Roger L. Geiger (eds.), *Research and Higher Education*. Buckingham: Open University Press. 89-101.
- Giberson, Tom, Greg Giberson, eds. (2009). *The Knowledge Economy Academic and the Commodification of Higher Education*. Cresskill: Hampton Press.
- Giddens, Anthony (1987). *The Nation-State and Violence*. Berkeley and Los Angeles: University of California Press.
- Giddens, Anthony (1999). *Runaway World. How Globalisation is Reshaping Our Lives*. London: Profile Books.
- Giddens, Anthony (2001). *Beyond Left and Right: the Future of Radical Politics*. Cambridge: Polity Press.
- Giddens, Anthony (2006). A Social Model for Europe? In: Anthony Giddens, Patrick Diamond, Roger Liddle (eds.), *Global Europe, Social Europe*. Cambridge: Polity.
- Giddens, Anthony, Patrick Diamond, Roger Liddle, eds. (2006). *Global Europe, Social Europe*. Cambridge: Polity.

- Giddens, Anthony, Patrick Diamond, eds. (2005). *The New Egalitarianism*. Cambridge, Malden: Polity Press.
- Gilbert, Neil (2004). *Transformation of the Welfare State: The Silent Surrender of Public Responsibility*. Oxford: Oxford University Press.
- Gingrich, Jane R. (2011). *Making Markets in the Welfare State: The Politics of Varying Market Reforms*. Cambridge: CUP.
- Girouard, Nathalie, Yutaka Imai (2000). *The Health Care System in Poland*. Paris: OECD.
- Gizelis, Theodora-Ismene (2005). "Globalization, Integration, and the European Welfare State". *International Interactions*. Vol. 31.
- Gjerding, Allan N., Celeste P.M. Wilderom, Shona P.B. Cameron, Adam Taylor, Klaus-Joachim Scheunert (2006). "Twenty Practices of an Entrepreneurial University". *Higher Education Management and Policy*. Vol. 18. No. 3. 83-110.
- Glatzer, Miguel, Dietrich Rueschemeyer, eds. (2005). *Globalization and the Future of the Welfare State*. Pittsburgh: University of Pittsburgh Press.
- Glennerster, Howard (1998). "Education: Reaping the Harvest?" In: Howard Glennerster, John Hills (eds.), *The State of Welfare: The Economics of Social Spending*. New York: Oxford University Press. 27-74.
- Glennerster, Howard (2009). *Understanding the Finance of Welfare: What Welfare Costs and How to Pay for It*. Bristol: The Policy Press.
- Glennerster, Howard (2010). "The Sustainability of Western Welfare States". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 689-702.
- Glennerster, Howard, John Hills, eds. (1998). *The State of Welfare: The Economics of Social Spending*. New York: Oxford University Press.
- Goddard, John (2000). *The Response of HEIs to Regional Needs*. Newcastle upon Tyne.
- Goddard, John, Jaana Puukka (2008). "The Engagement of Higher Education Institutions in Regional Development: An Overview of the Opportunities and Challenges". *Higher Education Management and Policy*. Vol. 20. No. 2. 11-41.
- Godin, Benoit, Yves Gingras (2000). "The Place of Universities in the System of Knowledge Production." *Research Policy*. Vol. 29. 273-278.
- Goedegebuure, Leo, Frans Kaiser, Peter Maassen, Egbert de Weert (1993). "Higher Education Policy in International Perspective: An Overview". In: Leo Goedegebuure, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, Egbert de Weert (eds.), *Higher Education Policy: An International Comparative Perspective*. Oxford: Pergamon Press. 1-12.
- Goedegebuure, Leo, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, Egbert de Weert (1993). "International Perspectives on Trends and Issues in Higher Education Policy". In: Leo Goedegebuure, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, Egbert de Weert (eds.), *Higher Education Policy: An International Comparative Perspective*. Oxford: Pergamon Press. 315-348.

- Goedegebuure, Leo, V. Lynn Meek, Osmo Kivinen, Risto Rinne (2008). "On Diversity, Differentiation and Convergence". In: V. Lynn Meek, Leo Goedegebuure, Osmo Kivinen, Risto Rinne (eds.), *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Bingley: Emerald Group Publishing. 2-13.
- Goedegebuure, Leo, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, Egbert de Weert, eds. (1993). *Higher Education Policy: An International Comparative Perspective*. Oxford: Pergamon Press.
- Goldstein, Harvey A. (2010). "The 'Entrepreneurial Turn' and Regional Economic Development Mission of Universities". *The Annals of Regional Science*. Vol. 44. 83-109.
- Goldthorpe, John H. (1987). *Social Mobility and Class Structure in Modern Britain*. Second Edition. Oxford: Clarendon Press.
- Goldthorpe, John H., David Lockwood, Frank Bechhofer, Jennifer Platt (1968). *The Affluent Worker: Political Attitudes and Behaviour*. Cambridge: Cambridge University Press.
- Golinowska, Stanislaw (2002). "Health Care Reform in Poland After 3 years: Challenges for New Authorities". Warsaw: CASE Foundation.
- Golinowska, Stanislaw, Peter Hengstenberg and Maciej Zukowski, eds. (2009). *Diversity and Commonality in European Social Policies: the Forging of a European Social Model*. Warsaw: Scholar and Friedrich-Ebert-Stiftung.
- Gomulka, Stanislaw (2000). "Pension Problems and Reforms in the Czech Republic, Hungary, Poland and Romania". London: LSE (Globalisation Programme).
- Goodin, Robert E. (1982). *Political Theory and Public Policy*. Chicago: The University of Chicago Press.
- Goodin, Robert E., ed. (1996a). *The Theory of Institutional Design*. Cambridge: Cambridge University Press.
- Goodin, Robert E. (1996a). "Institutions and Their Design". In: Robert E. Goodin (ed.), *The Theory of Institutional Design*. Cambridge: Cambridge University Press. 1-53.
- Goodin, Robert E., Bruce Headey, Ruud Muffels, Henk-Jan Dirven (1999). *The Real Worlds of Welfare Capitalism*. Cambridge: Cambridge University Press.
- Goodin, Robert E., Deborah Mitchell (2000). "Foundations of the Welfare State: An Overview". In: Robert E. Goodin, Deborah Mitchell (eds.), *The Foundations of the Welfare State. Volume I*. Cheltenham: Edward Elgar. ix-xxii.
- Goodin, Robert E., Deborah Mitchell, eds. (2000). *The Foundations of the Welfare State. Volume III*. Cheltenham: Edward Elgar.
- Goodin, Robert E., Charles Tilly, eds. (2006). *The Oxford Handbook of Contextual Political Analysis*. Oxford: Oxford University Press.
- Goodson, Ivor F., Sverker Lindblad, eds. (2011). *Professional Knowledge and Educational Restructuring in Europe*. Rotterdam: Sense Publishers.
- Göransson, Bo, Rasigan Maharajh, Ulrich Schmoch (2009a). "Introduction: New Challenges for Universities Beyond Education and Research". *Science and Public Policy*. Vol. 36. No. 2. 83-84.
- Göransson, Bo, Rasigan Maharajh, Ulrich Schmoch (2009b). "New Activities of Universities in Transfer and Extension: Multiple Requirements and Manifold Solutions". *Science and Public Policy*. Vol. 36. No. 2. 157-164.

- Göransson, Bo, Claes Brundenius, eds. (2011). *Universities in Transition: The Changing Role and Challenges for Academic Institutions*. Dordrecht: Springer.
- Gordon, George, Celia Whitchurch, eds. (2010). *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*. New York: Routledge.
- Gorga, Adriana (2008). "Where Are We With the Harmonization of European Higher Education? The Case of Central and East European Countries". *European Education*. Vol. 39. No. 4. Winter 2007-8. 58-68.
- Gornitzka, Åse (2005). "Coordinating Policies for a 'Europe of Knowledge'. Emerging Practices of the 'Open Method of Coordination' in Education and Research". ARENA Working Paper No. 16, March 2005.
- Gornitzka, Åse (2006). "What Is the Use of Bologna in National Reform? The Case of Norwegian Quality Reform in Higher Education". In: Voldemar Tomusk (ed.), *Creating the European Area of Higher Education. Voices from the Periphery*. Dordrecht: Springer. 19-41.
- Gornitzka, Åse (2007). "The Lisbon Process: A Supranational Policy Perspective". In: Peter Maassen, Johan P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 155-180.
- Gornitzka, Åse (2008). "The Internationalisation of Research and Higher Education: Changing Borders of Knowledge". In: Åse Gornitzka, Liv Langfeldt (eds.), *Borderless Knowledge: Understanding the 'New' Internationalisation of Research and Higher Education in Norway*. Dordrecht: Springer. 1-11.
- Gornitzka, Åse (2009a). "Networking Administration in Areas of National Sensitivity: The Commission and European Higher Education". In: Alberto Amaral, Guy Neave, Christine Musselin, Peter Maassen (eds.), *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer. 109-131.
- Gornitzka, Åse (2009b). "Research Policy and the European Union - Multi-layered Policy Change?" In: Patrick Clancy, David D. Dill (eds.), *The Research Mission of the University. Policy Reforms and Institutional Response*. Rotterdam/Boston/Taipei: Sense. 53-75.
- Gornitzka, Åse (2010). "Bologna in Context: A Horizontal Perspective on the Dynamics of Governance Sites for a Europe of Knowledge". *European Journal of Education*. Vol. 45. No. 4. 535-548.
- Gornitzka, Åse, Svein Kyvik, Bjørn Stensaker (2002). "Implementation Analysis in Higher Education". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XVII*. Dordrecht: Kluwer Academic Publishers. 381-423.
- Gornitzka, Åse, Peter Maassen (2007). "An Instrument for National Political Agendas: The Hierarchical Vision". In: Peter Maassen, Johan P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 81-98.
- Gornitzka, Åse, Peter Maassen, Johan P. Olsen, Ben Stensaker (2007). "'Europe of Knowledge': Search for a New Pact". In: P. Maassen, J. P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 181-214.

- Gornitzka, Åse, Svein Kyvik, Bjørn Stensaker (2007). "Implementation Analysis in Higher Education". In: Åse Gornitzka, Maurice Kogan and Alberto Amaral (eds.), *Reform and Change in Higher Education. Analysing Policy Implementation*. Dordrecht: Springer. 35-56.
- Gornitzka, Åse and Peter Maassen (2011). "University governance reforms, global scripts and the 'Nordic Model'. Accounting for policy change?" In: J. Schmid, K. Amos; J. Schrader and A. Thiel (eds.), *Welten der Bildung? Vergleichende Analysen von Bildungspolitik und Bildungssystemen*. Baden Baden: Nomos Verlagsgesellschaft. 149-177.
- Gornitzka, Åse, Maurice Kogan, Alberto Amaral, eds. (2007). *Reform and Change in Higher Education. Analysing Policy Implementation*. Dordrecht: Springer.
- Gough, Ian, Göran Therborn (2010). "The Global Future of Welfare States". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 703-720.
- Grabbe, Heather (2003). "Europeanization Goes East: Power and Uncertainty in the EU Accession Process". In: Kevin Featherstone, Claudio M. Radaelli (eds.), *The Politics of Europeanization*. Oxford: Oxford University Press. 303-327.
- Grace, Sue, Phil Gravestock (2009). *Inclusion and Diversity: Meeting the Needs of All Students*. New York: Routledge.
- Richards, Graham (2009). *Spin-Outs: Creating Businesses from University Intellectual Property*. Hampshire: Harriman House.
- Gray, Harry, ed. (1999). *Universities and the Creation of Wealth*. Buckingham: Open University Press.
- Graziano, Paolo, Maarten P. Vink, eds. (2007). *Europeanization: New Research Agendas*. Basingstoke, New York: Palgrave Macmillan.
- Green Cowles, Maria, James Caporaso, Thomas Risse, eds. (2001). *Transforming Europe: Europeanization and Domestic Change*. Ithaca: Cornell University Press.
- Green, Andy (1997). *Education, Globalization and the Nation-State*. London: McMillan Press.
- Green, Madeleine F., ed. (1997). *Transforming Higher Education: Views from Leaders Around the World*. Phoenix: The Oryx Press.
- Greene, Jennifer C. (2007). *Mixed Methods in Social Inquiry*. San Francisco: Jossey-Bass.
- Greene, Jennifer C., Valerie J. Caracelli, Wendy F. Graham (1989). "Toward a Conceptual Framework for Mixed-Method Evaluation Designs". *Educational Evaluation and Policy Analysis*. Vol. 11. No. 3. 255-274.
- Greenwald, Bruce C., Joseph E. Stiglitz (2001). "Externalities in Economies with Imperfect Information and Incomplete Markets". In: Nicholas Barr (ed.), *Economic Theory and the Welfare State. Volume I: Theory*. Cheltenham: Edward Elgar. 239-274.
- Greenwood, Royston, C.R. Hinings (2006). "Radical Organizational Change". In: Stewart R. Clegg, Cynthia Hardy, Thomas B. Lawrence, Walter R. Nord (ed.), *The SAGE Handbook of Organization Studies*. Second Edition. Los Angeles: SAGE Publications. 814-842.
- Greenwood, Royston, Christine Oliver, Kerstin Sahlin, Roy Suddaby, eds. (2008). *The SAGE Handbook of Organizational Institutionalism*. Los Angeles: SAGE.

- Greve, Bent, ed. (2012). *The Times They Are Changing? Crisis and the Welfare State*. Chichester: Wiley-Blackwell.
- Greve, Carsten (2008). "The Institutionalization of Market Mechanisms in Public Service Delivery". In: Peter Nedergaard, John L. Campbell (eds.), *Institutions and Politics: Festschrift in Honour of Ove K. Pedersen*. Copenhagen: DJØF Publishing. 93-110.
- Grindle, Merilee S., John W. Thomas (1991). *Public Choices and Policy Change: The Political Economy of Reform in Developing Countries*. Baltimore: The John Hopkins University Press.
- Groot, Wim, Henriëtte Maassen van den Brink (2007). "Overeducation in the Labour Market". In: Joop Hartog, Henriëtte Maassen van den Brink (eds.), *Human Capital: Theory and Evidence*. Cambridge: CUP. 101-112.
- Grotkowska, Gabriela (2011). "The Employability and Mobility of Bachelor Graduates in Poland". In: Harald Schomburg, Ulrich Teichler (eds.), *Employability and Mobility of Bachelor Graduates in Europe: Key Results of the Bologna Process*. Rotterdam: Sense Publishers. 209-227.
- Guerrero, Maribel, David Urbano (2010). "The Development of an Entrepreneurial University". *The Journal of Technology Transfer*. Vol. 35.
- Guerrero, Maribel, David Urbano (2012). *The Creation and Development of Entrepreneurial Universities in Spain*. New York: Nova.
- Guerrero-Cano, Maribel, David Kirby, David Urbano (2006). "A Literature Review on Entrepreneurial Universities: An Institutional Approach". Working paper presented at the 3<sup>rd</sup> Conference of Pre-communications to Congresses. Business Economic Department. Autonomous University of Barcelona.
- Gulbrandsen, Magnus (2001). "Universities and Industrial Competitive Advantage". In: Henry Etzkowitz, Loet Leydesdorff (eds.), *Universities and Global Knowledge Economy: A Triple Helix of University-Industry-Government*. London and New York: Continuum. 121-131.
- Gulbrandsen, Magnus, Stieg Slipsaeter (2007). "The Third Mission and the Entrepreneurial University Model". In: A. Bonaccorsi, C. Daraio (eds.), *Universities and Strategic Knowledge Creation: Specialization and Performance in Europe*. Cheltenham: Edward Elgar Publishing. 112-143
- Gulbrandsen, Magnus, David Mowery, Maryann Feldman (2011). "Introduction to the Special Section: Heterogeneity and University-Industry Relations". *Research Policy*. Vol. 40. 11-5.
- Gumport, Patricia J. (2002). *Academic Pathfinders: Knowledge Creation and Feminist Scholarship*. Westport: Greenwood Press.
- Gumport, Patricia J. (2005). "The Organisation of Knowledge: Imperatives for Continuity and Change in Higher Education". In: Ivar Bleiklie, Mary Henkel (eds.), *Governing Knowledge: A Study of Continuity and Change in Higher Education - A Festschrift in Honour of Maurice Kogan*. Dordrecht: Springer. 113-132.
- Gumport, Patricia J., ed. (2007). *Sociology of Higher Education. Contributions and Their Contexts*. Baltimore: Johns Hopkins University Press.

- Gumport, Patricia J. (2012). "Strategic Thinking in Higher Education Research". In: Michael N. Bastedo (ed.), *The Organization of Higher Education: Managing Colleges for a New Era*. Baltimore: The John Hopkins University Press. 18-41.
- Gumport, Patricia J., Brian Pusser (1997). "Restructuring the Academic Environment". In: Marvin W. Peterson, David D. Dill, Lisa A. Mets, and Associates (eds.), *Planning and Management for a Changing Environment*. San Francisco: Jossey-Bass. 453-478.
- Gumport, Patricia J., Barbara Sporn (1999). "Institutional Adaptation: Demands for Management Reform and University Administration". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XIV*. New York: Agathon Press. 103-145.
- Gumport, Patricia J., Brian Pusser (1999). "University Restructuring: The Role of Economic and Political Context". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XIV*. New York: Agathon Press. 146-200.
- GUS (2009). *Structure of Wages and Salaries by Occupations in October 2008*. Warsaw: GUS (Central Statistical Office).
- GUS (2010). *Higher Education Institutions and Their Finances in 2009*. Warsaw: GUS (Central Statistical Office).
- GUS (2011). *Higher Education Institutions and Their Finances in 2010*. Warsaw: GUS (Central Statistical Office).
- Guston, David H. (2000). *Between Politics and Science: Assuring the Integrity and Productivity of Research*. Cambridge: Cambridge University Press.
- Guston, David H., Kenneth Keniston, eds. (1994a). *The Fragile Contract: University Science and the federal Government*. Cambridge and London: The MIT Press.
- Guston, David H., Kenneth Keniston (1994b). "Introduction: The Social Contract for Science". In: David H. Guston, Kenneth Keniston (eds.), *The Fragile Contract: University Science and the Federal Government*. Cambridge and London: The MIT Press. 1-41.
- Habermas, Jürgen (2001). *The Postnational Constellation. Political Essays*. Transl. by Max Pensky. Cambridge: the MIT Press.
- Hacker, Jacob S. (2002). *The Divided Welfare State. The Battle over Public and Private Social Benefits in the United States*. Cambridge: CUP.
- Hacker, Jacob S. (2006a). *The Great Risk Shift. The Assault on American Jobs, Families, Health Care, and Retirement and How You Can Fight Back*. Oxford: Oxford University Press.
- Hacker, Jacob S. (2006b). "The Welfare State". In: R.A.W. Rhodes, Sarah A. Binder, Bert A. Rockman (eds.), *The Oxford Handbook of Political Institutions*. Oxford: Oxford University Press. 385-406.
- Hacker, Jacob S. (2012). "The Middle Class at Risk". In: Katherine Porter (ed.), *How Debt Bankrupts the Middle Class*. Stanford: Stanford University Press. 218-234.
- Hacker, Jacob S., Paul Pierson (2010). *Winner-Take-All Politics. How Washington Made the Rich Richer – And Turned Its Back on the Middle Class*. New York: Simon and Schuster.
- Haeussler, Carolin (2011). "Information-sharing in academia and the industry: A comparative study". *Research Policy*. Vol. 40. 105-122.

- Haeussler, Carolin, Jeannette A. Colyvas (2011). "Breaking the Ivory Tower: Academic Entrepreneurship in the Life Sciences in UK and Germany". *Research Policy*. Vol. 40. 41-54.
- Haggard, Stephan, Robert R. Kaufman (1995a). *The Political Economy of Democratic Transitions*. Princeton: Princeton University Press.
- Haggard, Stephan, Robert R. Kaufman (1995b). "The Challenges of Consolidation". In: Larry Diamond, Marc F. Plattner (eds.), *Economic Reform and Democracy*. Baltimore: The John Hopkins University Press. 1-12.
- Haggard, Stephan, Robert R. Kaufman (2008). *Development, Democracy and Welfare States: Latin America, East Asia, and Eastern Europe*. Princeton: Princeton University Press.
- Hale, Thomas, David Held, eds. (2011). *Handbook of Transnational Governance: Institutions and Innovations*. Cambridge, Malden: Polity Press.
- Hall, Peter A. (2007). "The Evolution of Varieties of Capitalism in Europe". In: Bob Hancké, Martin Rhodes, Mark Thatcher (eds.), *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. New York: Oxford University Press. 39-85.
- Hall, Peter A. (2010). "Historical Institutionalism in Rationalist and Sociological Perspective". In: J. Mahoney, D. Rueschmeyer (eds.), *Comparative Historical Analysis in the Social Sciences*. Cambridge: Cambridge University Press.
- Hall, Peter A. (2012). "Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain". In: Peter Hupe, Michael Hill (eds.), *Public Policy. Volume 4*. London: SAGE. 215-241.
- Hall, Peter A., David Soskice, eds. (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. New York: Oxford University Press.
- Haller, Max, Roger Jowell, Tom W. Smith, eds. (2009). *The International Social Survey Program, 1984-2009*. London: Routledge.
- Halliday, Terence C., Bruce G. Carruthers (2009). *Bankrupt: Global Lawmaking and Systemic Financial Crisis*. Stanford: Stanford University Press.
- Halliday, Terence C., Susan Block-Lieb, and Bruce G. Carruthers (2010). "Rhetorical Legitimation: Global Scripts as Strategic Devices of International Organizations". *Socio-Economic Review*. Vol. 8.
- Halsey, A. H. (1992). *Decline of Donnish Dominion: The British Academic Professions in the Twentieth Century*. Oxford: Clarendon Press.
- Halsey, A. H., Anthony Francis Heath, John Michael Ridge (1980). *Origins and Destinations: Family, Class, and Education in Modern Britain*. Oxford: Clarendon Press.
- Halsey, A.H., Hugh Lauder, Phillip Brown, Amy Stuart Wells, eds. (1997). *Education. Culture, Economy, and Society*. Oxford: Oxford University Press.
- Hancké, Bob, ed. (2009). *Debating Varieties of Capitalism: A Reader*. New York: Oxford University Press.
- Hancké, Bob, Martin Rhodes, Mark Thatcher, eds. (2007a). *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. New York: Oxford University Press.

- Hancké, Bob, Martin Rhodes, Mark Thatcher (2007b). "Introduction: Beyond Varieties of Capitalism". In: Bob Hancké, Martin Rhodes, Mark Thatcher (eds.), *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. New York: Oxford University Press. 3-38.
- Hancké, Bob, Martin Rhoades, Mark Thatcher (2009). "Beyond Varieties of Capitalism". In: Bob Hancké (ed.), *Debating Varieties of Capitalism: A Reader*. New York: Oxford University Press. 273-300.
- Hannan, Michael T., John Freeman (1989). *Organizational Ecology*. Cambridge, Mass: Harvard University Press.
- Hannan, Michael T., Lászlo Pólos, and Glenn R. Carroll (2007). *Logics of Organization Theory: Audiences, Codes, and Ecologies*. Princeton: Princeton University Press.
- Hannell T. and J. Neubauer (2006). *Geographies of Knowledge Production in Europe*. Stockholm: NORDREGIO.
- Hansen, W. Lee, ed. (1970). *Education, Income, and Human Capital*. New York: NBER.
- Hanson, Philip (2007). "The European Union's Influence on the Development of Capitalism in Central Europe". In: David Lane (ed.), *The Transformation of State Socialism: System Change, Capitalism or Something Else?* Basingstoke: Palgrave Macmillan. 95-112.
- Hansson, Bo (2007). *Effects of Tertiary Expansion. Crowding-Out Effects and Labour Market Matches for the Higher Educated*. OECD: Education WP No. 10.
- Hanushek, Eric A., Stephen Machin, Ludger Woessmann, eds. (2011). *Handbook of the Economics of Education. Volume 4*. Amsterdam, Oxford, Waltham: Elsevier.
- Harding, Alan, Alan Scott, Stephan Laske, Christian Burtcher, eds. (2007). *Bright Satanic Mills: Universities, Regional Development and the Knowledge Economy*. Aldershot: Ashgate.
- Harpur, John (2010). *Innovation, Profit and the Common Good in Higher Education: The New Alchemy*. Basingstoke: Palgrave Macmillan.
- Hartog, Joop, Hessel Oosterbeek (2007). "What Should You Know About the Private Returns to Education?" In: Joop Hartog, Henriëtte Maassen van den Brink (eds.), *Human Capital: Theory and Evidence*. Cambridge: CUP. 7-20.
- Hartog, Joop, Henriëtte Maassen van den Brink, eds. (2007). *Human Capital: Theory and Evidence*. Cambridge: CUP.
- Hauptman, Arthur M. (2006). "Higher Education Finance: Trends and Issues". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education. Part I*. Dordrecht: Springer. 83-106.
- Häusermann, Silja (2010). *The Politics of Welfare State Reform in Continental Europe: Modernization in Hard Times*. Cambridge: Cambridge University Press.
- Hay, Colin (2006). "Globalization and Public Policy". In: Michael Moran, Martin Rein, Robert E. Goodin (eds.), *The Oxford Handbook of Public Policy*. New York: Oxford University Press. 587-604.
- Hay, David B., Faith Butt, David A. Kirby (2003). "Academics as Entrepreneurs in a UK University". In: Gareth Williams (ed.), *The Enterprising University: Reform, Excellence and Equity*. Buckingham: SRHE & Open University Press. 132-141.

- Hay, Colin, Michael Lister (2006). "Introduction: Theories of the State". In: Colin Hay, Michael Lister, David Marsh (eds.), *The State: Theories and Issues*. Basingstoke: Palgrave Macmillan. 1-20.
- Hay, Colin, Michael Lister, David Marsh, eds. (2006). *The State: Theories and Issues*. Houndmills: Palgrave Macmillan.
- Hays, Jude C. (2009). *Globalization and the New Politics of Embedded Liberalism*. Oxford: Oxford University Press.
- Hayward, Jack (2012). "From Citizen Solidarity to Self-Serving Inequality: Social Solidarity, Market Economy and Welfare Statecraft". In: James Connelly, Jack Hayward (eds.), *The Withering of the Welfare State: Regression*. Basingstoke: Palgrave Macmillan. 1-18.
- Hazelkorn, Ellen (2011a). *Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence*. Houndmills: Palgrave Macmillan.
- Hazelkorn, Ellen (2011b). "Measuring World-Class Excellence and the Global Obsession With Rankings". In: Roger King, Simon Marginson, Rajani Naidoo (eds.), *Handbook on Globalization and Higher Education*. Cheltenham: Edward Elgar. 497-515.
- Hazelkorn, Ellen (2012). "‘Everyone Wants to Be Like Harvard’ - Or Do They? Cherishing All Missions Equally". In: Adrian Curaj, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part 2*. Dordrecht: Springer. 837-862.
- Hearn, James C. (2006). "Alternative Revenue Sources". In: Douglas M. Priest, Edward P. St. John (eds.), *Privatization and Public Universities*. Bloomington: Indiana University Press. 87-108.
- HEFCE (2003). *The Regional Mission. The Regional Contribution of Higher Education. The National Report*. Universities UK/HEFCE.
- Held, David (1989). *Political Theory and the Modern State*. Stanford: Stanford University Press.
- Held, David (1995). *Democracy and the Global Order*. Cambridge: Polity Press.
- Held, David, Anthony McGrew, David Goldblatt, Jonathan Perraton (1999). *Global Transformations: Politics, Economics and Culture*. Cambridge: Polity Press.
- Held, David, Kevin Young (2011). "Crises in Parallel Worlds: The Governance of Global Risks in Finance, Security, and the Environment". In: Craig Calhoun, Georgi Derluigan (eds.), *The Deepening Crisis: Governance Challenges after Neoliberalism*. New York and London: Social Science Research Council and New York University Press. 19-42.
- Held, David, ed. (2000). *A Globalizing World? Culture, Economics, Politics*. London: Routledge and Open University Press.
- Held, David, Anthony McGrew, eds. (2000). *The Global Transformations Reader. An Introduction to the Globalization Debate*. Oxford: Polity Press.
- Held, David, Anthony McGrew, eds. (2007). *Globalization Theory. Approaches and Controversies*. Cambridge: Polity Press.
- Heller, Donald E. (2001). *The States and Public Higher Education Policy. Affordability, Access and Accountability*. Baltimore: Johns Hopkins University Press.

- Heller, Donald E. (2006). "Shifting the Burden: Public and Private Financing of Higher Education in the United States and Implications for Europe". *Tertiary Education and Management*. Vol. 12.
- Henkel, Mary (2000). *Academic Identities and Policy Change in Higher Education*. London: Jessica Kingsley Publishers.
- Henkel, Mary (2007). "Shifting Boundaries and the Academic Profession". In: Maurice Kogan, Ulrich Teichler (eds.), *Key Challenges to the Academic Profession*. Kassel: INCHER. 191-204.
- Henkel, Mary (2010). "Introduction: Change and Continuity in Academic and Professional Identities". In: George Gordon, Celia Whitchurch (eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*. New York: Routledge. 3-12.
- Henkel, Mary, Brenda Little, eds. (1999a). *Changing Relationships Between Higher Education and the State*. London: Jessica Kingsley Publishers.
- Henkel, Mary, Brenda Little (1999b). "Introduction". In: Mary Henkel, Brenda Little (eds.), *Changing Relationships Between Higher Education and the State*. London: Jessica Kingsley Publishers. 9-22.
- Henry, Miriam and Bob Lingard, Fazal Rizvi, Sandra Taylor (2001). *The OECD, Globalisation and Education Policy*. Amsterdam: Pergamon.
- Héritier, Adrienne (2007). *Explaining Institutional Change in Europe*. Oxford: Oxford University Press.
- Héritier, Adrienne, ed. (2002). *Common Goods: Reinventing European and International Governance*. Lanham: Rowman & Littlefield Publishers.
- Herlitschka, Sabine (2008). *Diversified Funding Streams for University-Based Research: Impact of External Project-based Research Funding on Financial Management in Universities*. Expert Group Report for EC, DG Research.
- Hessels, Laurens K., Harro van Lente (2008). "Re-thinking New Knowledge Production: A Literature Review and a Research Agenda". *Research Policy*. Vol. 38. 740-760.
- Hewitt-Dundas, Nola (2012). "Research Intensity and Knowledge Transfer Activity in UK Universities". *Research Policy*. Vol. 41. 262-275.
- Hill, Michael (2009). *The Public Policy Process*. Fifth Edition. Harlow: Pearson.
- Hill, Michael, Peter Hupe (2009). *Implementing Public Policy*. Second Edition. London: SAGE.
- Hipps, G. Melvin, ed. (1982). *Effective Planned Change Strategies*. San Francisco: Jossey-Bass.
- Hirsch, Fred (1976). *Social Limits to Growth*. Cambridge: Harvard University Press.
- Hirschon Weiss, Carol, Björn Wittrock (1991). "Summing Up: Social Sciences and Modern States". In: Peter Wagner, Carol Hirschon Weiss, Björn Wittrock, Hellmut Wollmann (eds.), *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*. Cambridge: CUP. 356-368.
- Høj, Jens, Vincenzo Galasso, Giuseppe Nicoletti, Thai-Thanh Dang (2006). "The Political Economy of Structural Reforms. Empirical Evidence from OECD Countries". OECD Economics Department Working Papers No. 501.

- Hollingsworth, J. Rogers (2009). "The Role of Institutions and Organizations in Shaping Radical Scientific Innovations". In: Lars Magnusson, Jan Ottosson (eds.), *The Evolution of Path Dependence*. Cheltenham: Edward Elgar. 139-165.
- Hollingsworth, J. Rogers, Robert Boyer, eds. (1997). *Contemporary Capitalism: The Embeddedness of Institutions*. Cambridge: CUP.
- Holsinger, Donald B., W. James Jacob, eds. (2008). *Inequality in Education: Comparative and International Perspectives*. Dordrecht: Springer.
- Holzer, Harry J., Julia I. Lane, David B. Rosenblum, Fredrik Andersson (2011). *Where are All the Good Jobs Going? What National and Local Job Quality and Dynamics May Mean for US Workers*. New York: Russell Sage Foundation.
- Holzmann, Robert (2004). "Toward a Reformed and Coordinated Pension System in Europe: Rationale and Potential Structure". *Social Protection Discussion Papers Series*, No. 0407. Washington DC: the World Bank.
- Holzmann, Robert, Mitchell Orenstein, Michal Rutkowski (2003). *Pension Reform in Europe: Process and Progress*. Washington DC: the World Bank.
- Holzmann, Robert, Richard Hinz (2005). *Old Age Income Support in the 21st Century*. Washington DC: World Bank.
- Holzmann, Robert, Robert Palacios (2001). "Individual Accounts as Social Insurance: A World Bank Perspective". *Social Protection Discussion Paper Series* No. 0114. Washington DC: the World Bank.
- Hopkin, Jonathan (2010). "The Comparative Method". In: David Marsh, Gerry Stoker (eds.), *Theory and Methods in Political Science*. Third Edition. Basingstoke: Palgrave Macmillan. 285-307.
- Hoppe, Robert (2012). "Policy Analysis, Science and Politics: From 'Speaking Truth to Power' to 'Making Sense Together'". In: Peter Hupe, Michael Hill (eds.), *Public Policy. Volume 4*. London: SAGE. 29-46.
- Hovey, Harold (1999). "State Spending for Higher Education in the Next Decade. The Battle to Sustain Current Support". Report for the National Center for Public Policy and Higher Education.
- Howlett, Robert J., ed. (2011). *Innovation through Knowledge Transfer 2010*. Dordrecht: Springer.
- Huber, Evelyne, John D. Stephens (2001). *Development and Crisis of the Welfare State. Parties and Policies in Global Markets*. Chicago: University of Chicago Press.
- Huberty, Carl J., E. Michael Jordan, W. Christopher Brandt (2005). "Cluster Analysis in Higher Education Research". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XX*. Dordrecht: Springer. 437-457.
- Huisman, Jeroen (1998). "Differentiation and Diversity in Higher Education Systems". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XIII*. New York: Agathon Press. 75-110.
- Huisman, Jeroen (2009a). "Coming to Terms with Governance in Higher Education". In: Jeroen Huisman (ed.), *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*. New York: Routledge. 1-9.
- Huisman, Jeroen, ed. (2009b). *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*. New York: Routledge.

- Huisman, Jeroen, Peter Maassen, Guy Neave (2008). "Europe: The Pioneer or the Exception?" In: Jeroen Huisman, Peter Maassen, Guy Neave (eds.), *Higher Education and the Nation State: The International Dimension of Higher Education*. Bingley: Emerald Group Publishing. 1-12.
- Huisman, Jeroen, Frans A. van Vught (2009). "Diversity in European Higher Education: Historical Trends and Current Policies". In: Frans A. van Vught (ed.), *Mapping the Higher Education Landscape: Towards a European Classification of Higher Education*. Dordrecht: Springer. 17-37.
- Huisman, Jeroen, Peter Maassen, Guy Neave, eds. (2001). *Higher Education and the State. The International Dimension of Higher Education*. Amsterdam: Pergamon Press.
- Huisman, Jeroen, Peter Maassen, Guy Neave, eds. (2008). *Higher Education and the nation State: The International Dimension of Higher Education*. Bingley: Emerald Group Publishing.
- Hurrelmann, Achim, Stephan Leibfried, Kerstin Martens, Peter Mayer, eds. (2007a). *Transforming the Golden-Age Nation State*. Basingstoke: Palgrave Macmillan.
- Hurrelmann, Achim, Stephan Leibfried, Kerstin Martens, Peter Mayer (2007b). "The Golden-Age Nation State and its Transformation: A Framework for Analysis". In: Achim Hurrelmann, Stephan Leibfried, Kerstin Martens, Peter Mayer (eds.), *Transforming the Golden-Age Nation State*. Basingstoke: Palgrave Macmillan.
- Hurrelmann, Achim, Stephan Leibfried, Kerstin Martens, Peter Mayer (2007c). "The Transformation of the Golden-Age nation State: Findings and Perspectives". In: Achim Hurrelmann, Stephan Leibfried, Kerstin Martens, Peter Mayer (eds.), *Transforming the Golden-Age Nation State*. Basingstoke: Palgrave Macmillan.
- Hurrelmann, Achim, Steffen Schneider, Jens Steffek, eds. (2007d). *Legitimacy in an Age of Global Politics*. Basingstoke: Palgrave Macmillan.
- Hurrelmann, Achim, Zuzana Krell-Laluhova, Roland Lhotta, Frank Nullmeier, Steffen Schneider (2005). "Is There a Legitimation Crisis of the Nation-State?" In: Stephan Leibfried, Michael Zürn (eds.), *Transformations of the State?* Cambridge: CUP. 119-137.
- Husbands, Fealing, Kaye, Julia I. Lane, John H. Marburger III, Stephanie S. Shipp, eds. (2011). *The Science of Science Policy: A Handbook*. Stanford: Stanford University Press.
- Hutton, Will (2010). *Them and Us: Changing Britain - Why We Need a Fair Society*. London: Little, Brown Book Group.
- Hutton, Will (2011). "The Political Economy of the World's Capitalisms". In: Pete Alcock, Martin Powell (eds.), *Welfare Theory and Development. Volume IV*. London: SAGE. 3-24.
- Ichilov, Orit (2009). *The Retreat from Public Education. Global and Israeli Perspectives*. Dordrecht: Springer.
- ILO (2002). *Pension Reform in Central and Eastern Europe. Vol. 1. Restructuring and Privatization: Case Studies of Hungary and Poland*. Ed. by Elaine Fultz. ILO: Budapest.
- Immergut, Ellen M. (1992). "The rules of the game: The logic of health policy-making in France, Switzerland, and Sweden". In: Sven Steinmo, Kathleen Thelen, Frank Longstreth (eds.), *Structuring Politics: Historical institutionalism in comparative analysis*. New York: Cambridge University Press. 57-89.

- Immergut, Ellen M. (2008). "Institutions, Veto Points, and Policy Results: A Comparative Analysis of Health Care". In: Stephan Leibfried, Steffen Mau (eds.), *Welfare States: Construction, Deconstruction, Reconstruction. Volume I: Analytical Approaches*. Cheltenham: Edward Elgar. 583-608.
- Inglot, Tomasz (2008). *Welfare States in East Central Europe 1919-2004*. Cambridge: Cambridge University Press.
- Iversen, Torben (2005). *Capitalism, Democracy, and Welfare*. Cambridge: CUP.
- Jacob, Merle, Mats Lundqvist, Hans Hellsmark (2003). "Entrepreneurial transformations in the Swedish University system: the case of Chalmers University of Technology". *Research Policy*. Vol. 32. 1555-1568.
- Jacob, Merle, Tomas Hellström, eds. (2000). *The Future of Knowledge Production in the Academy*. Buckingham: The Society for Research into Higher Education and Open University Press.
- Jacoby, Barbara, and Associates (2009). *Civic Engagement In Higher Education: Concepts and Practices*. San Francisco: Jossey-Bass.
- Jacoby, Barbara, Elizabeth Hollander (2009). "Securing the Future of Civic Engagement in Higher Education". In: Barbara Jacoby and Associates, *Civic Engagement In Higher Education: Concepts and Practices*. San Francisco: Jossey-Bass. 227-248.
- Jakobi, Anja P. (2009). *International Organizations and Lifelong Learning: From Global Agendas to Policy Diffusion*. Basingstoke: Palgrave Macmillan.
- Jakobi, Anja P., Kerstin Martens (2010). "Expanding and Intensifying Governance: The OECD in Education Policy". In: Kerstin Martens, Anja P. Jakobi (eds.), *Mechanisms of OECD Governance: International Incentives for National Policy-Making?* Oxford: Oxford University Press. 163-179.
- Jakobi, Anja P., Kerstin Martens, Klaus Dieter Wolf, eds. (2010a). *Education in Political Science: Discovering a neglected field*. London: Routledge.
- Jakobi, Anja P., Kerstin Martens, Klaus Dieter Wolf (2010b). "Introduction: A Governance Perspective on Education Policy". In: Anja P. Jakobi, Kerstin Martens, Klaus Dieter Wolf (eds.), *Education in Political Science: Discovering a neglected field*. London: Routledge. 1-20.
- Jakobi Anja P., Kerstin Martens, Klaus Dieter Wolf (2010c). "Conclusion: Education Policy, Political Science and the State in Transition". In: Anja P. Jakobi, Kerstin Martens, Klaus Dieter Wolf (eds.), *Education in Political Science: Discovering a neglected field*. London: Routledge. 218-229.
- Jarzabkowski, Paula (2002). "Centralised or Decentralised? Strategic Implications of Resource Allocation Models". *Higher Education Quarterly*. Vol. 56. No. 1. 5-32.
- Jaspers, Karl (1959). *The Idea of the University*. (H.A.T. Reiche and H.F. Vanderschmidt, trans.). Boston: Beacon Press.
- Jessop, Bob (1999). "The Changing Governance of Welfare: Recent Trends in Its Primary Functions, Scale, and Modes of Coordination". *Social Policy & Administration*. Vol. 33. No. 4 (December).
- Jessop, Bob (2012). "Rethinking the Diversity and Variability of Capitalism: On Variegated Capitalism in the World". In: Christel Lane, Geoffrey T. Wood (eds.), *Capitalist Diversity and Diversity within Capitalism*. London: Routledge. 209-237.

- Jessop, Bob, Norman Fairclough, Ruth Wodak, eds. (2008). *Education and the Knowledge-Based Economy in Europe*. Rotterdam/Taipei: Sense Publishers.
- Johnstone, D. Bruce (1986). *Sharing the Costs of Higher Education: Student Financial Assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden, and the United States*. New York: College Entrance Examination Board.
- Johnstone, D. Bruce (1998). "The Financing and Management of Higher Education: A Status Report on Worldwide Reforms". Report to the UNESCO World Conference on Higher Education, Paris, October 5-9, 1998.
- Johnstone, D. Bruce (2006). *Financing Higher Education. Cost-Sharing in International Perspective*. Boston: CIHE.
- Johnstone, D. Bruce (2007a). "Privatization In and Of Higher Education". Paper presented at the International Comparative Higher Education Finance and Accessibility Project. Available from [www.gse.buffalo.edu](http://www.gse.buffalo.edu).
- Johnstone, D. Bruce (2007b). "Financing the American Public Research University: Lessons from an International Perspective". In: Roger L. Geiger, Carol L. Colbeck, Roger L. Williams, Christian K. Anderson (eds.), *Future of the American Public Research University*. Rotterdam/Taipei: Sense Publishers. 55-69.
- Johnstone, D. Bruce (2008). "The Fragile College or University: An International Perspective on the Financial Fragility of Institutions and Systems". Available from [www.gse.buffalo.edu](http://www.gse.buffalo.edu).
- Johnstone, D. Bruce (2009). *Financing Higher Education: Cost-Sharing in International Perspective*. Rotterdam: Sense Publishers.
- Johnstone, D. Bruce (2012). "The Costs of Higher Education". In: Philip G. Altbach (ed.), *International Higher Education. An Encyclopedia: Volume 1*. New York and London: Garland Publishing. 59-89.
- Johnstone, D. Bruce, Pamela Marcucci (2007). *Worldwide Trends in Higher Education Finance: Cost-Sharing, Student Loans, and the Support of Academic Research*. Prepared for the UNESCO Forum on Higher Education. Available from: [www.gse.buffalo.edu/org/IntHigherEdFinance.html](http://www.gse.buffalo.edu/org/IntHigherEdFinance.html)
- Johnstone, D. Bruce, Pedro Teixeira, Maria João Rosa, Hans Vossensteyn (2008). "Introduction". In: Pedro Teixeira, D. Bruce Johnstone, Maria J. Rosa, Hans Vossensteyn (eds.), *Cost-sharing and Accessibility in Higher Education: A Fairer Deal?* Dordrecht: Springer. 1-18.
- Johnstone, D. Bruce, Pamela Marcucci (2010). *Financing Higher Education Worldwide. Who Pays? Who Should Pay?* Baltimore: The Johns Hopkins University Press.
- Jones, Glen A., Patricia L. McCarney, Michael L. Skolnik, eds. (2005). *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*. Toronto: University of Toronto Press.
- Jongbloed, Ben (2003). "Marketisation in Higher Education, Clark's Triangle and the Essential Ingredients of Markets". *Higher Education Quarterly*. Vol. 57. No. 2. 110-135.
- Jongbloed, Ben (2010). "The Regional Relevance of Research in Universities of Applied Sciences". In: Svein Kyvik, Benedetto Lepori (eds.), *The Research Mission of Higher Education Institutions Outside the University Sector: Striving for Differentiation*. Dordrecht: Springer. 25-44.

- Jongbloed, Ben, Jürgen Enders, Carlo Salerno (2008). "Higher education and its communities: Interconnections, interdependencies and a research agenda". *Higher Education*. Vol. 56. 303-324.
- Jongbloed, Ben, Arend Zomer (2012). "Valorisation, Knowledge Transfer and IP Creating Value from Academic Knowledge". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 82-102.
- Kahin, Brian, Dominique Foray, eds. (2006). *Advancing Knowledge and the Knowledge Economy*. Cambridge: the MIT Press.
- Kaiser, Frans, Hans Vossensteyn, Jos Koelman (2002). *Public Funding of Higher Education. A Comparative Study of Funding Mechanisms in Ten Countries*. Enschede: CHEPS.
- Kaiser, Frans, Jeroen Huisman (2003). "Expansion and Diversification in Higher Education". In: Roddy Begg (ed.), *The Dialogue between Higher Education Research and Practice: 25 Years of EAIR*. Dordrecht: Kluwer Academic Publishers. 135-145.
- Kaneko, Motohisa (2000). "Higher Education Research, Policy and Practice: Context, Conflicts and the New Horizon". In: Ulrich Teichler, Jan Sadlak (eds.), *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press. 47-58.
- Kathrin, Leuze, Kerstin Martens, Alessandra Rusconi (2007). "New Arenas of Education Governance – The Impact of International Organizations and Markets on Educational Policy Making". In: Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (eds.), *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan. 3-15.
- Keeley, Brian (2007). *Human Capital: How What You Know Shapes Your Life*. Paris: OECD.
- Kehm, Barbara M., Bjørn Stensaker, eds. (2009). *University Rankings, Diversity, and the New Landscape of Higher Education*. Rotterdam/Boston/Taipei: Sense Publishers.
- Kehm, Barbara M., Jeroen Huisman, Bjørn Stensaker, eds. (2009). *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers.
- Kellstedt, Paul M., Guy D. Whitten (2009). *The Fundamentals of Political Science Research*. Cambridge: Cambridge University Press.
- Kempner, Ken, William G. Tierney, eds. (1996). *The Social Role of Higher Education: Comparative Perspectives*. New York: Garland Publishing.
- Kennedy, Donald (1997). *Academic Duty*. Cambridge: Harvard University Press.
- Kerr, Clark (2001). *The Uses of the University*. Cambridge: Harvard University Press.
- Kezar, Adrianna J. (2001). *Understanding and Facilitating Organizational Change in the 21st Century: recent Research and Conceptualizations*. ASHE-ERIC Higher Education Report. Vol. 28. No. 4. San Francisco: Jossey-Bass.
- Kezar, Adrianna J. (2005a). "Challenges for Higher Education in Serving the Public Good". In: Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt (eds.), *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass. 23-42.

- Kezar, Adrianna J. (2005b). "Creating a Metamovement: A Vision Toward Regaining the Public Social Charter". In: Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt (eds.), *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass. 43-53.
- Kezar, Adrianna J. (2005c). "Creating Dialogue: A New Charter and Vision of the Public Good". In: Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt (eds.), *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass. 317-325.
- Kezar, Adrianna J. (2006). "To Use or Not to Use Theory: Is that the Question?" In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XXI*. Dordrecht: Springer. 283-344.
- Kezar, Adrianna J. (2012). "Organizational Change in a Global, Postmodern World". In: Michael N. Bastedo (ed.), *The Organization of Higher Education: Managing Colleges for a New Era*. Baltimore: The John Hopkins University Press. 181-221.
- Kezar, Adrianna J., Tony C. Chambers, John C. Burkhardt, eds. (2005a). *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass.
- Kezar, Adrianna J., Tony C. Chambers, John C. Burkhardt, and Associates (2005b). *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass.
- King, Lawrence P. (2007). "Central European Capitalism in Comparative Perspective". In: Bob Hancké, Martin Rhodes, Mark Thatcher (eds.), *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. New York: Oxford University Press. 308-327.
- King, Roger (2004). *The University in the Global Age*. Basingstoke: Palgrave Macmillan.
- King, Roger (2009). *Governing Universities Globally: Organizations, Regulation and Rankings*. Cheltenham: Edward Elgar.
- King, Roger, Gavin Kendall (2004). *The State, Democracy and Globalization*. New York: Palgrave Macmillan.
- King, Roger, Simon Marginson, Rajani Naidoo, eds. (2011). *Handbook on Globalization and Higher Education*. Cheltenham: Edward Elgar.
- Kinsler, Kevin, Daniel C. Levy (2006). "For-Profit Higher Education: U.S. Tendencies, International Echoes". In: J. J. F. Forest, P. G. Altbach (eds.), *International Handbook of Higher Education. Part 1*. Dordrecht: Springer.
- Kinsler, Kevin, Daniel C. Levy, Juan Carlos, Silas Casillas, ANDRES Bernasconi, Snezana Slantcheva-Durst, Wycliffe Otieno, Jason E. Lane, Prachayani Praphamontipong, William Zumeta, Robin Lasota (2010). *The Global Growth of Private Higher Education*. ASHE Higher Education Report. Vol. 36. No. 3. San Francisco: Jossey-Bass.
- Kirby, David A., Maribel Guerrero, David Urbano (2011). "Making Universities More Entrepreneurial: Development of a Model". *Canadian Journal of Administrative Sciences*. Vol. 28. 302-316.
- Kitagawa, Fumi (2010). *Universities and Regional Advantage in the Knowledge Economy: Markets, Governance and Networks as Developing in English Regions*. Saarbrücken: VDM Verlag Dr. Müller.

- Kleiman, Mark A.R., Steven M. Teles (2006). "Market and Non-Market Failures". In: Michael Moran, Martin Rein, Robert E. Goodin (eds.), *The Oxford Handbook of Public Policy*. New York: Oxford University Press. 624-650.
- Knight, Jane, ed. (2009). *Financing Access and Equity in Higher Education*. Rotterdam and Taipei: Sense Publishers.
- Knill, Christoph (2001). *The Europeanisation of National Administrations: patterns of Institutional Change and Persistence*. Cambridge: Cambridge University Press.
- Knill, Christoph, Jale Tosun (2012). *Public Policy: A New Introduction*. Basingstoke: Palgrave Macmillan.
- Knoepfel, Peter, Corinne Larrue, Frédéric Varone, Michael Hill (2011). *Public Policy Analysis*. Bristol: The Policy Press.
- Knorr Cetina, Karin (1999). *Epistemic cultures: How the Sciences Make Knowledge*. London: Harvard University Press.
- Kodama, Fumio, Lewis M. Branscomb (1999). "University Research as an Engine for Growth: How Realistic Is the Vision?" In: L. M. Branscomb, F. Kodama, R. Florida (eds.), *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. Cambridge, Massachusetts: The MIT Press. 3-19.
- Kogan, Irena (2008). "Education Systems of Central and Eastern European Countries". In: Irena Kogan, Michael Gebel, Clemens Noelke (eds.), *Europe Enlarged: A Handbook of Education, Labour and Welfare Regimes in Central and Eastern Europe*. Bristol: The Polity Press. 7-34.
- Kogan, Irena, Clemens Noelke, Michael Gebel, eds. (2011a). *Making the Transition: Education and Labor Market Entry in Central and Eastern Europe*. Stanford: Stanford University Press.
- Kogan, Irena, Clemens Noelke, Michael Gebel (2011b). "Comparative Analysis of Social Transformation, Education Systems, and School-to-Work Transitions in Central and Eastern Europe". In: Irena Kogan, Clemens Noelke, Michael Gebel (eds.), *Making the Transition: Education and Labor Market Entry in Central and Eastern Europe*. Stanford: Stanford University Press. 320-351.
- Kogan, Irena, Michael Gebel, Clemens Noelke, eds. (2008). *Europe Enlarged: A Handbook of Education, Labour and Welfare Regimes in Central and Eastern Europe*. Bristol: The Polity Press.
- Kogan, Maurice (1999). "Academic and Administrative Interface". In: Mary Henkel, Brenda Little (eds.), *Changing Relationships Between Higher Education and the State*. London: Jessica Kingsley Publishers. 263-279.
- Kogan, Maurice (2002a). "National Characteristics and Policy Idiosyncrasies". In: Jürgen Enders, Oliver Fulton (eds.), *Higher Education in a Globalising World. International Trends and Mutual Observations: A Festschrift in Honour of Ulrich Teichler*. Dordrecht: Kluwer Academic Publishers. 39-52.
- Kogan, Maurice (2002b). "The Role of Different Groups in Policy-Making and Implementation: Institutional Politics and Policy-Making". In: Paul R. Trowler (ed.), *Higher Education Policy and Institutional Change: Intentions and Outcomes in Turbulent Environments*. Buckingham: SRHE & Open University Press. 46-63.

- Kogan, Maurice, Marianne Bauer, Ivar Bleiklie, Mary Henkel (2000). *Transforming Higher Education: A Comparative Study*. London: Jessica Kingsley Publishers.
- Kogan, Maurice, Mary Henkel (2000). "Future Directions for Higher Education Policy Research". In: Stefanie Schwarz, Ulrich Teichler (eds.), *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer Academic Publishers. 25-43.
- Kogan, Maurice, Stephen Hanney (2000). *Reforming Higher Education*. London: Jessica Kingsley Publishers.
- Kogan, Maurice, Mary Henkel, Steve Hanney (2006). *Government and Research: Thirty Years of Evolution*. Dordrecht: Springer.
- Kogan, Maurice, Marianne Bauer, Ivar Bleiklie, Mary Henkel (2006a). *Transforming Higher Education. A Comparative Study*. Dordrecht: Springer.
- Kogan, Maurice, Ulrich Teichler, eds. (2007a). *Key Challenges to the Academic Profession*. Kassel: INCHER.
- Kogan, Maurice, Ulrich Teichler (2007b). "Key Challenges to the Academic Profession and Its Interface with Management: Some Introductory Thoughts". In: Maurice Kogan, Ulrich Teichler (eds.), *Key Challenges to the Academic Profession*. Paris and Kassel: INCHER. 9-18.
- Kohlrausch, Bettina, Kathrin Leuze (2007). "Implications of Marketization for the Perception of Education as Public or Private Good". In: Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (eds.), *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan. 195-213.
- Kornai, János (1995). *Highway and Byways: Studies on Reform and Postcommunist Transition*. Cambridge: The MIT Press.
- Kornai, János (2008). *From Socialism to Capitalism*. Budapest: CEU Press.
- Kornai, János, Stephan Haggard, Robert R. Kaufman, eds. (2001). *Reforming the State: Fiscal and Welfare Reform in Post-Socialist Countries*. Cambridge: Cambridge University Press.
- Kovács, János Mátyás (2002). "Approaching the EU and Reaching the US? Rival Narratives on Transforming Welfare Regimes in East-Central Europe". *West European Politics*. Vol. 25. No. 2 (April 2002).
- Kraft, Michael E., Scott R. Furlong (2010). *Public Policy: Politics, Analysis, and Alternatives*. Third Edition. Washington: CQ Press.
- Kramer, Martin, ed. (2010). *The Stress of Change: Testing the Resilience of Institutions*. San Francisco: Jossey-Bass.
- Krasner, Stephen D. (1999). *Sovereignty: Organized Hypocrisy*. Princeton: Princeton University Press.
- KRASP (2009). *Polskie szkolnictwo wyższe. Stan, uwarunkowania i perspektywy*. Warszawa: Wydawnictwo UW.
- Kristensen, Bente (1999). "The Entrepreneurial University as a Learning University". *Higher education in Europe*. Vol. 24. No. 1. 35-46.
- Kritzer, Barbara E. (2005). "Individual Accounts in Other Countries". *Social Security Bulletin*. Vol. 66. No. 1.

- Krücken, Georg, Frank Meier (2006). "Turning the University into an Organizational Actor". In: Drori, G. S., J. W. Meyer and H. Hwang (eds.) *Globalization and Organization. World Society and Organizational Change*. Oxford: Oxford University Press.
- Krücken, Georg, Anna Kosmützky, Marc Torka, eds. (2007a). *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: Transcript Verlag.
- Krücken, Georg, Anna Kosmützky, Marc Torka (2007b). "Towards a Multiversity? Universities between Global Trends and National Traditions". In: Georg Krücken, Anna Kosmützky, Marc Torka (eds.), *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: Transcript Verlag. 7-16.
- Krücken, Georg, Frank Meier, Andre Müller (2009). "Linkages to the Civil Society as 'Leisure Time Activities'? Experiences at a German University". *Science and Public Policy*. Vol. 36. No. 2. 139-144.
- Krücken, Georg, Gili S. Drori, eds. (2009). *World Society: The Writings of John W. Meyer*. New York: Oxford University Press.
- Kuhnle, Stein, Anne Sander (2010). "The Emergence of the Western Welfare State". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 61-80.
- Kwiek, Marek (2000). "The Nation-State, Globalization and the Modern Institution of the University". *Theoria. A Journal of Social and Political Theory*. Vol. 96. Dec. 2000. 74-99.
- Kwiek, Marek (2001). "Globalization and Higher Education". *Higher Education in Europe*. Vol. XXVIII, 1/2001. 23-41.
- Kwiek, Marek, ed. (2003a). *The University, Globalization, Central Europe*. Frankfurt and New York: Peter Lang.
- Kwiek, Marek (2003b). "Academe in Transition: Transformations in the Polish Academic Profession". *Higher Education*. Vol. 45. No. 4. June 2003. 455-476.
- Kwiek, Marek (2004a). "Wolf Lepenies: Homo Europaeus Intellectualis Revisited". In: Marek Kwiek (ed.), *Intellectuals, Power, and Knowledge*. Frankfurt and New York: Peter Lang. 76-95.
- Kwiek, Marek (2004b). *Intellectuals, Power, and Knowledge. Studies in the Philosophy of Culture and Education*. Frankfurt and New York: Peter Lang.
- Kwiek, Marek (2005). "The University and the State in a Global Age: Renegotiating the Traditional Social Contract?" *European Educational Research Journal*. Vol. 4. No. 4. December 2005. 324-341.
- Kwiek, Marek (2006a). *The University and the State. A Study into Global Transformations*. Frankfurt a/Main and New York: Peter Lang.
- Kwiek, Marek (2006b). "The Emergent European Educational Policies Under Scrutiny. The Bologna Process From a Central European Perspective". In: Voldemar Tomusk (ed.), *Creating the European Area of Higher Education. Voices from the Periphery*. Dordrecht: Springer. 87-116.

- Kwiek, Marek (2007a). "The European Integration of Higher Education and the Role of Private Higher Education". In: Snejana Slantcheva, Daniel C. Levy, (eds.), *Private Higher Education in Post-Communist Europe. In Search of Legitimacy*. New York. Palgrave/ Macmillan. 119-132.
- Kwiek, Marek (2007b). "The Future of the Welfare State and Democracy: the Effects of Globalization from a European Perspective". In: Ewa Czerwinska-Schupp (ed.), *Globalisation and Ethical Norms*. Frankfurt – New York: Peter Lang. 2007.
- Kwiek, Marek (2007c). "The University and the Welfare State in Transition. Changing Public Services in a Wider Context". In: D. Epstein, R. Deem *et al.* (eds.), *World Yearbook of Education 2008*. New York: Routledge. 32-50.
- Kwiek, Marek (2008a). "Academic Entrepreneurship vs. Changing Governance and Institutional Management Structures at European Universities". *Policy Futures in Education*. Vol. 6. No. 6. 757-770.
- Kwiek, Marek (2008b). "Accessibility and Equity, Market Forces and Entrepreneurship: Developments in Higher Education in Central and Eastern Europe". *Higher Education Management and Policy*. Vol. 20. No. 1. March 2008. 89-110.
- Kwiek, Marek (2008c). "Revisiting the Classical German Idea of the University (on the Nationalization of a Modern Institution)". *Polish Journal of Philosophy*. Vol. 2. No. 1. 55-78.
- Kwiek, Marek (2009a). "Entrepreneurialism and Private Higher Education in Europe". In: Michael Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Maidenhead: Open University Press. 100-120.
- Kwiek, Marek (2009b). "Globalisation: Re-Reading Its Impact on the Nation-State, the University, and Educational Policies in Europe". In: M. Simons, M. Olssen, M. E. Peters (eds.), *Re-Reading Education Policies. A Handbook Studying the Policy Agenda of the 21st Century*. Rotterdam/Boston/Taipei: Sense Publishers.
- Kwiek, Marek (2009c). "The Changing Attractiveness of European Higher Education: Current Developments, Future Challenges, and Major Policy Issues". In: Barbara Kehm, Jeroen Huisman and Bjorn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 107-124.
- Kwiek, Marek (2009d). "The Two Decades of Privatization in Polish Higher Education. Cost-Sharing, Equity and Access". In: Jane Knight (ed.), *Financing Access and Equity in Higher Education*. Rotterdam/Boston/Taipei: Sense. 149-168.
- Kwiek, Marek (2010a). "Creeping Marketization: Where Polish Private and Public Higher Education Sectors Meet". In: Roger Brown (ed.), *Higher Education and the Market*. New York: Routledge. 135-146.
- Kwiek, Marek (2010b). *Transformacje uniwersytetu. Zmiany instytucjonalne i ewolucje polityki edukacyjnej w Europie*. Poznań: Wydawnictwo Naukowe UAM (in Polish).
- Kwiek, Marek (2011a). "Universities and Knowledge Production in Central Europe". In: P. Temple (ed.), *Universities in the Knowledge Economy. Higher Education Organisation and Global Change*. New York: Routledge. 176-195.

- Kwiek, Marek (2011b). "The Public-Private Dynamics in Polish Higher Education. Demand-Absorbing Private Growth and Its Implications". *Higher Education Forum*. No. 8. (3). 121-147.
- Kwiek, Marek (2012a). "Changing Higher Education Policies: From the Deinstitutionalization to the Reinstitutionalization of the Research Mission in Polish Universities". *Science and Public Policy*. Vol. 39. 1-14. (doi:10.1093/scipol/scs042)
- Kwiek, Marek (2012b). "Public-Private Intersectoral Competition: Fees and Declining Demographics". *Compare: A Journal of Comparative and International Education*. Vol. 42. No. 1. 153-157.
- Kwiek, Marek (2012c). "Universities, Regional Development and Economic Competitiveness: the Polish Case". In: R. Pinheiro, P. Benneworth and G.A. (eds.), *Universities and Regional Development. A Critical Assessment of Tensions and Contradictions*. New York: Routledge. 69-85.
- Kwiek, Marek (2012d). "Higher Education Reforms and Their Socio-Economic Contexts: Shifting Funding Regimes and Competing Social Narratives". In: Marek Kwiek, Peter Maassen (eds.), *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway*. Frankfurt and New York: Peter Lang. 155-178.
- Kwiek, Marek (2012e). "European Strategies and Higher Education". In: Marek Kwiek, Andrzej Kurkiewicz (eds.), *The Modernisation of European Universities. Cross-National Academic Perspectives*. Frankfurt and New York: Peter Lang. 333-360.
- Kwiek, Marek (forthcoming). "From System Expansion to System Contraction. Access to Higher Education in Poland". *Comparative Education Review*, 2013.
- Kwiek, Marek, Nina Arnhold (2011): "Enabling Smart Growth for Poland Through Education and Skills Supply". In: *Europe 2020 Poland. Fueling Growth and Competitiveness in Poland Through Employment, Skills, and Innovation. Volume 2. Technical Report*. Washington DC: World Bank. 97-130.
- Kwiek, Marek, Dominik Antonowicz (2012). "Changing Academic Work and Working Conditions in Europe from a Comparative Quantitative Perspective". In: U. Teichler, E. A. Höhle (eds.), *The Work Situation, the Views and the Activities of the Academic Profession: Findings of a Questionnaire Survey in Twelve European Countries*. Dordrecht: Springer.
- Kwiek, Marek, Peter Maassen, eds. (2012a). *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway*. Frankfurt and New York: Peter Lang.
- Kwiek Marek, Peter Maassen (2012b). "Changes in Higher Education in European Peripheries and Their Contexts: Poland, Norway, and Europe". In: Marek Kwiek, Peter Maassen (eds.), *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway*. Frankfurt and New York: Peter Lang. 11-40.
- Kwiek, Marek, Peter Maassen (2012c). "Higher Education in Turbulent Times. Concluding Reflections". In: Marek Kwiek, Peter Maassen (eds.), *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway*. Frankfurt and New York: Peter Lang. 227-242.

- Kwiek, Marek, Andrzej Kurkiewicz, eds. (2012). *The Modernisation of European Universities. Cross-National Academic Perspectives*. Frankfurt and New York: Peter Lang.
- Kyvik, Svein (2009). *The Dynamics of Change in Higher Education: Expansion and Contraction in an Organisational Field*. Dordrecht: Springer.
- Kyvik, Svein, Benedetto Lepori, eds. (2010). *The Research Mission of Higher Education Institutions Outside the University Sector: Striving for Differentiation*. Dordrecht: Springer.
- Ladrech, Robert (2010). *Europeanization and National Politics*. Basingstoke: Palgrave Macmillan.
- Lam, Alice (2011). "What Motivates Academic Scientists to Engage in Research Commercialization: 'Gold', 'Ribbon' or 'Puzzle'?" *Research Policy*. Vol. 40. 1354-1368.
- Lambert, Richard (2003). "Summary of Consultation Responses and Emerging Issues". Lambert Review of Business-University Collaboration.
- Lambert, Richard (2006). "Best Practice in Business-University Collaboration". In: L.E. Weber, J.J. Duderstadt (eds.), *Universities and Business: Partnering for the Knowledge Society*. London: Economica. 161-170.
- Landry, Réjean (2010). "Evidence on How Academics Manage Their Portfolio of Knowledge Transfer Activities". *Research Policy*. Vol. 39. 1387-1403.
- Lane, Christel, Geoffrey T. Wood, eds. (2012). *Capitalist Diversity and Diversity within Capitalism*. London: Routledge.
- Lane, David, ed. (2007a). *The Transformation of State Socialism: System Change, Capitalism or Something Else?* Basingstoke: Palgrave Macmillan.
- Lane, David (2007b). "Introduction: Outcomes of Transformation". In: David Lane (ed.), *The Transformation of State Socialism: System Change, Capitalism or Something Else?* Basingstoke: Palgrave Macmillan. 1-32.
- Lane, David (2007c). "Post-State Socialism: A Diversity of Capitalisms?" In: Lane, David, Martin Myant (eds.), *Varieties of capitalism in Post-Communist Countries*. Basingstoke: Palgrave Macmillan. 13-39.
- Lane, David, Martin Myant, eds. (2007). *Varieties of capitalism in Post-Communist Countries*. Basingstoke: Palgrave Macmillan.
- Lane, Jan-Erik (2000). *The Public Sector: Concepts, Models and Approaches*. London: SAGE.
- Lane, Jan-Erik (2008). *Comparative Politics: The principal-agent perspective*. London: Routledge.
- Lane, Jan-Erik, ed. (1997). *Public Sector Reform: Rationale, Trends and Problems*. London: SAGE.
- Lange, Stefan, Georg Krücken (2011). "German Universities in the New Knowledge Ecology: Current Changes in Research Conditions and University-Industry Relations". In: Diana Rhoten, Craig (eds.), *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press. 342-376.
- Larédo, Philippe (2007). "Revisiting the Third Mission of Universities: Toward a Renewed Categorization of University Activities?" *Higher Education Policy*. Vol. 20. 441-456.

- Larédo, Philippe, Philippe Mustar, eds. (2001a). *Research and Innovation Policies in the New Global Economy: An International Comparative Analysis*. Cheltenham: Edward Elgar.
- Larédo, Philippe, Philippe Mustar (2001b). "General Conclusion: Three Major Trends in Research and Innovation Policies". In: Philippe Larédo, Philippe Mustar (eds.), *Research and Innovation Policies in the New Global Economy: An International Comparative Analysis*. Cheltenham: Edward Elgar. 497-509.
- Larsen, Maria Theresa (2011). "The Implications of Academic Enterprise for Public Science: An Overview of the Empirical Evidence". *Research Policy*. Vol. 40. 6-19.
- Lauder, Hugh, Phillip Brown (2011). "The Standardization of Higher Education, Positional Competition and the Global Labor Market". In: Roger King, Simon Marginson, Rajani Naidoo (eds.), *Handbook on Globalization and Higher Education*. Cheltenham: Edward Elgar. 485-496.
- Lauder, Hugh, Phillip Brown, A.H. Halsey (2011). "The Sociology of Education as 'Redemption': A Critical History". In: John Furlong, Martin Lawn (eds.), *Disciplines of Education: Their Role in the Future of Education Research*. London: Routledge. 13-30.
- Lauder, Hugh, Michael Young, Harry Daniels, Maria Balarin, John Lowe, eds. (2012a). *Educating for the Knowledge Economy? Critical Perspectives*. London: Routledge.
- Lauder, Hugh, Michael Young, Harry Daniels, Maria Balarin, John Lowe (2012b). "Introduction. Educating for the Knowledge Economy? Critical Perspectives". In: Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin, John Lowe (eds.), *Educating for the Knowledge Economy? Critical Perspectives*. London: Routledge. 1-24.
- Lauder, Hugh, Phillip Brown, Gerbrand Tholen (2012). "The Global Auction Model, Skill Bias Theory and Graduate Incomes: Reflections on Methodology". In: Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin, John Lowe (eds.), *Educating for the Knowledge Economy? Critical Perspectives*. London: Routledge. 43-65.
- Lauder, Hugh, Phillip Brown, Jo-Anne Dillabough, A.H. Halsey, eds. (2006). *Education, Globalization, and Social Change*. Oxford: Oxford University Press.
- Lavigne, Marie (1999). *The Economics of Transition: From Socialist Economy to Market Economy*. Second Edition. Basingstoke: Palgrave Macmillan.
- Lawn, Martin (2001). "Borderless Education: Imagining a European Education Space in a Time of Brands and Networks". *Discourse: Studies in the Cultural Politics of Education*. Vol. 22. No. 2.
- Lawn, Martin (2002). "Constructing a European Policy Space in Educational Governance: the Role of Transnational Policy Actors". *European Educational Research Journal*. Vol. 1. No. 2.
- Lawn, Martin (2003). "The 'Usefulness' of Learning: the Struggle over Governance, Meaning and the European Education Space". *Discourse: Studies in the Cultural Politics of Education*. Vol. 24. No. 3.
- Lawrence, Thomas B., Roy Suddaby, Bernard Leca, eds. (2009). *Institutional Work: Actors and Agency in Institutional Studies of Organizations*. Cambridge: Cambridge University Press.

- Lawton-Smith, Helen (2006). *Universities, Innovation and the Economy*. London: Routledge.
- Le Bras, Hervé (2008a). *The Nature of Demography*. Princeton: Princeton University Press.
- Le Bras, Hervé (2008b). "Are Long-term Demographic Forecasts Possible? Turning Points and Trends". In: *OECD, Higher Education to 2030. Volume I. Demography*. Paris: OECD. 19-39.
- Le Grand, Julian (2000). "Quasi-markets and Social Policy". In: Robert E. Goodin, Deborah Mitchell (eds.), *The Foundations of the Welfare State. Volume I*. Cheltenham: Edward Elgar. 433-444.
- Le Grand, Julian, Will Bartlett, eds. (1993). *Quasi-Markets and Social Policy*. Basingstoke: The Macmillan Press.
- Lee Kleinman, Daniel (1995). *Politics on the Endless Frontier: Postwar Research Policy in the United States*. Durham and London: Duke University Press.
- Lee, Jenny J., John Cheslock, Alma Maldonado-Maldonado, Gary Rhoades (2005). "Professors as Knowledge Workers in the New, Global Economy". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XX*. Dordrecht: Springer. 55-132.
- Lee, Simon, Richard Woodward (2012). "From Financing Social Insurance to Insuring Financial Markets: The Socialisation of Risk and the Privatisation of Profit in an Age of Irresponsibility". In: James Connelly, Jack Hayward (eds.), *The Withering of the Welfare State: Regression*. Basingstoke: Palgrave Macmillan. 121-136.
- Leibfried, Stephan, ed. (2001). *Welfare State Futures*. Cambridge: Cambridge University Press.
- Leibfried, Stephan, Herbert Obinger (2001). "Welfare State Futures. An Introduction". In: Stephan Leibfried (ed.), *Welfare State Futures*. Cambridge: Cambridge University Press. 1-13.
- Leibfried, Stephan, Michael Zürn, eds. (2005). *Transformations of the State?* Cambridge: CUP.
- Leibfried, Stephan, Steffen Mau (2008a). "Welfare States: Construction, Deconstruction, Reconstruction". In: Stephan Leibfried, Steffen Mau (eds.), *Welfare States: Construction, Deconstruction, Reconstruction. Volume I: Analytical Approaches*. Cheltenham: Edward Elgar. xi-lxiv.
- Leibfried, Stephan, Steffen Mau, eds. (2008b). *Welfare States: Construction, Deconstruction, Reconstruction. Volume I: Analytical Approaches*. Cheltenham: Edward Elgar.
- Leibfried, Stephan, Steffen Mau, eds. (2008c). *Welfare States: Construction, Deconstruction, Reconstruction. Volume II: Varieties and Transformations*. Cheltenham: Edward Elgar.
- Leibfried, Stephan, Steffen Mau, eds. (2008d). *Welfare States: Construction, Deconstruction, Reconstruction. Volume III: Legitimation, Achievement and Integration*. Cheltenham: Edward Elgar.
- Leisering, Lutz, Stephan Leibfried (1999). *Time and Poverty in Western Welfare States: United Germany in Perspective*. Cambridge: Cambridge University Press.

- Lendel, Iryna, Phil Allen, Maryann Feldman (2009). "University-based Economic Growth". In: Malcolm Tight, Ka Ho Mok, Jeroen Huisman, Christopher C. Morphey (eds.), *The Routledge International Handbook of Higher Education*. New York: Routledge. 381-396.
- Lendvai, Noémi (2004). "The Weakest Link? EU Accession and Enlargement: Dialoguing EU and Post-Communist Social Policy". *Journal of European Social Policy*. Vol. 14. No. 3.
- Lenoir, Timothy (1997). *Instituting Science: The Cultural Production of Scientific Disciplines*. Stanford: Stanford University Press.
- Lepori, Benedetto, Emanuela Reale, Stig Slipersaeter (2011). "The Construction of New Indicators for Science and Innovation Policies: The Case of Project Funding Indicators". In: M.G. Colombo, L. Grilli, L. Piscitello, C. Rossi-Lamastra (eds.), *Science and Innovation Policy for the New Knowledge Economy*. Cheltenham: Edward Elgar Publishing. 37-59
- Leuven, Edwin, Hessel Oosterbeek (2011). "Overeducation and Mismatch in the Labor Market". In: Eric A. Hanushek, Stephen Machin, Ludger Woessmann (eds.), *Economics of Education. Volume 4*. Amsterdam; Heidelberg: North-Holland. 283-326.
- Leuze, Kathrin, Kerstin Martens, Alessandra Rusconi (2007). "New Arenas of Education Governance – The Impact of International Organizations and Markets on Education Policy Making". In: Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (eds.), *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan.
- Levi-Faur, David (2012). "From 'Big Government' to 'Big Governance'?" In: David Levi-Faur (ed.), *The Oxford Handbook of Governance*. New York: Oxford University Press. 3-18.
- Levin, Morten (2007). "Knowledge and Technology Transfer: Can Universities Promote Regional Development?" In: Alan Harding, Alan Scott, Stephan Laske, Christian Burtcher (eds.), *Bright Satanic Mills: Universities, Regional Development and the Knowledge Economy*. Aldershot: Ashgate. 39-51.
- Levine, Arthur, and Associates (1989). *Shaping Higher Education Future.: Demographic Realities and Opportunities, 1990-2000*. San Francisco: Jossey-Bass Publishers.
- Levy, Daniel C. (1986a). "'Private' and 'Public': Analysis Amid Ambiguity in Higher Education". In: Daniel C. Levy (ed.), *Private Education. Studies in Choice and Public Policy*. Oxford: Oxford University Press.
- Levy, Daniel C. (1986b). *Higher Education and the State in Latin America. Private Challenges to Public Dominance*. Chicago: The University of Chicago Press.
- Levy, Daniel C. (2002a). "Unanticipated Development: Perspectives on Private Higher Education's Emerging Roles". *PROPHE Working Paper Series no. 1*.
- Levy, Daniel C. (2002b). "Profits and Practicality: How South Africa Epitomizes the Global Surge in Commercial Private Higher Education." *PROPHE Program for Research on Private Higher Education Working Papers Series*. No. 2.
- Levy, Daniel C. (2004). "The New Institutionalism: Mismatches with Private Higher Education's Global Growth". *PROPHE Working Paper Series no. 3*.

- Levy, Daniel C. (2006a). "An Introductory Global Overview. The Private Fit to Salient Higher Education Tendencies". *PROPHE Working Paper Series* no. 7.
- Levy, Daniel C. (2006b). "The Private Fit in the Higher Education Landscape". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education. Part I*. Dordrecht: Springer. 281-291.
- Levy, Daniel C. (2007). "Legitimacy and Privateness: Central and Eastern European Higher Education in a Global Context". In Snejana Slantcheva, Daniel C. Levy (eds.), *Private Higher Education in Post-Communist Europe: In Search of Legitimacy*. New York: Palgrave.
- Levy, Daniel C. (2008). "Access through Private Higher Education: Global Patterns and Indian Illustrations". *PROPHE Working Paper Series* no. 11. April 2008.
- Levy, Daniel C. (2009). "Growth and Typology". In: Svava Bjarnason *et al.* (eds.), *A New Dynamic: Private Higher Education*. Paris: UNESCO.
- Levy, Daniel C. (2010). "An International Exploration of Decline in Private Higher Education". *International Higher Education*. No. 61. Fall 2010. 10-12.
- Lewis, Darrell R., William E. Becker, Jr., eds. (1979). *Academic Rewards in Higher Education*. Cambridge: Ballinger.
- Leydesdorff, Loet (2006). *The Knowledge-Based Economy: Modeled, Measured, Simulated*. Boca Raton: Universal Publishers.
- Leydesdorff, Loet, Henry Etzkowitz (2001). "A Triple Helix of University-Industry-Government Relations". In: Henry Etzkowitz, Loet Leydesdorff (eds.), *Universities and Global Knowledge Economy: A Triple Helix of University-Industry-Government*. London and New York: Continuum. 155-162.
- Leydesdorff, Loet, Martin Meyer (2003). "The Triple Helix of University-Industry-Government Relations". *Scientometrics*. Vol. 58. No. 2. 191-203.
- Lichbach, Mark Irving, Alan S. Zuckerman, eds. (2009). *Comparative Politics: Rationality, Culture, and Structure*. Cambridge: Cambridge University Press.
- Lieberman, Robert C. (2012). "Ideas, Institutions, and Political Order: Explaining Political Change". In: Peter Hupe, Michael Hill (eds.), *Public Policy. Volume 4*. London: SAGE. 243-274.
- Liesner, Andrea (2006). "Education or Service? Remarks on Teaching and Learning in the Entrepreneurial University". *Educational Philosophy and Theory*. Vol. 38. No. 4. 483-495.
- Lindahl, Mikael, Erik Canton (2007). "The Social Returns to Education". In: Joop Hartog, Henriëtte Maassen van den Brink (eds.), *Human Capital: Theory and Evidence*. Cambridge: CUP. 21-37.
- Lindblad, Sverker (2006). "A European Perspective on International Arenas for Educational Research". In: Jenny Ozga, Terri Seddon, Thomas S. Popkewitz (eds.), *World Yearbook of Education 2006. Education research and policy: steering the knowledge-based economy*. London: Routledge. 91-102.
- Lindblom, Charles E. (1977). *Politics and Markets: The World's Political Economic Systems*. New York: Basic Books Publishers.
- Lindblom, Charles E. (1990). *Inquiry and Change: The Troubled Attempt to Understand and Shape Society*. New York: Yale University Press.

- Lindblom, Charles E. (2001). *The Market System: What It Is, How It Works, and What To Make of It*. New Haven: Yale University Press.
- Lindblom, Charles E., David K. Cohen (1979). *Usable Knowledge: Social Science and Social Problem Solving*. New Haven: Yale University Press.
- Lindert, Peter H. (2004). *Growing Public. Social Spending and Economic Growth Since the Eighteenth Century*. Cambridge: CUP.
- Lingard, Bob, Jenny Ozga, eds. (2007). *The RoutledgeFalmer Reader in Education Policy and Politics*. London: RoutledgeFalmer.
- Linz, Juan J., Alfred Stephan (1996a). *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*. Baltimore and London: The John Hopkins University Press.
- Linz, Juan J., Alfred Stephan (1996b). "Post-Communist Europe: Concluding Comparative Reflections". In: Juan J. Linz, Alfred Stephan, *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*. Baltimore and London: The John Hopkins University Press. 434-457.
- Lippitt, Ronald, Jeanne Watson, Bruce Westley (1958). *Planned Change: A comparative study of principles and techniques*. New York: Harcourt, Brace and Company.
- Liu, Nian Cai, Qi Wang, Ying Cheng, eds. (2011). *Paths to a World-Class University: Lessons from Practices and Experiences*. Rotterdam: Sense Publishers.
- Lochner, Lance (2011). "Nonproduction Benefits of Education: Crime, Health, and Good Citizenship". In: Eric A. Hanushek, Stephen Machin, Ludger Woessmann (eds.), *Economics of Education. Volume 4*. Amsterdam: North-Holland. 183-282.
- Locke, William (2010). "The Academic Life: Small Worlds, Different Worlds". *London Review of Education*. Vol. 8. No. 3. 251-261.
- Locke, William (2011). "The International Study of the Changing Academic Profession: A Unique Source for Examining the Academy's Perception of Governance and Management in Comparative Perspective". In: William Locke, William K. Cummings, Donald Fisher (eds.), *Changing Governance and Management in Higher Education: The Perspective of the Academy*. Dordrecht: Springer. 381-383.
- Locke, William, William K. Cummings, Donald Fisher, eds. (2011). *Changing Governance and Management in Higher Education: The Perspective of the Academy*. Dordrecht: Springer.
- London Communiqué (2007). *Towards the European Higher Education Area: responding to challenges in a globalised world*. London. May 18, 2007.
- Lucas, Samuel R. (2001). "Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects". *The American Journal of Sociology*. Vol. 106. No. 6.
- Lundström, Anders, Lois A. Stevenson (2005). *Entrepreneurship Policy: Theory and Practice*. Dordrecht: Kluwer.
- Lutz, Wolfgang (2006). "Alternative Paths for Future European Fertility: Will the Birth Rate Recover or Continue to Decline?" In: Wolfgang Lutz, Rudolf Richter, Chris Wilson (eds.), *The New Generations of Europeans: Demography and Families in the Enlarged European Union*. 83-100.

- Lutz, Wolfgang, Chris Wilson (2006). "Introduction". In: Wolfgang Lutz, Rudolf Richter, Chris Wilson (eds.), *The New Generations of Europeans: Demography and Families in the Enlarged European Union*. London: Earthscan. 3-17.
- Maassen, Peter (1996). *Governmental Steering and the Academic Culture: The intangibility of the human factor in Dutch and German universities*. Utrecht: De Tijdstroom.
- Maassen, Peter (2000). "Higher Education Research: The Hourglass Structure and Its Implication". In: Ulrich Teichler, Jan Sadlak (eds.), *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press. 59-67.
- Maassen, Peter (2003). "Shifts in Governance Arrangements". In: Alberto Amaral, V. Lynn Meek, Ingvild M. Larsen (eds.), *The Higher Education Managerial Revolution?* Dordrecht: Kluwer Academic Publishers. 31-53.
- Maassen, Peter (2009). "European Higher Education in Search of Institutional Order". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 281-293.
- Maassen, Peter (2012). "System Diversity in European Higher Education". In: Marek Kwiek and Andrzej Kurkiewicz (eds.), *The Modernisation of European Universities. Cross-National Academic Perspectives*. Frankfurt: Peter Lang. 79-96.
- Maassen, Peter, Bjørn Stensaker (2003). "Interpretations of Self-Regulation: The Changing State-Higher Education Relationship in Europe". In: Roddy Begg (ed.), *The Dialogue between Higher Education Research and Practice: 25 Years of EAIR*. Dordrecht: Kluwer Academic Publishers. 85-95.
- Maassen, Peter, Bjørn Stensaker (2005). "The Black Box Revisited: The Relevance of Theory-Driven Research in the Field of Higher Education Studies". In: Ivar Bleiklie, Mary Henkel (eds.), *Governing Knowledge: A Study of Continuity and Change in Higher Education - A Festschrift in Honour of Maurice Kogan*. Dordrecht: Springer. 213-226.
- Maassen, Peter, Nico Cloete (2007). "Global Reform Trends in Higher Education". In: Nico Cloete, Peter Maassen, Richard Fehnel, Teboho Moja, Trish Gibbon, Helene Perold (eds.), *Transformation in Higher Education: Global Pressures and Local Realities*. Dordrecht: Springer. 7-33.
- Maassen, Peter, Agnete Vabø, Bjørn Stensaker (2008). "Translation of Globalisation and Regionalisation in Nordic Cooperation in Higher Education". In: Åse Gornitzka, Liv Langfeldt (eds.), *Borderless Knowledge: Understanding the 'New' Internationalisation of Research and Higher Education in Norway*. Dordrecht: Springer. 125-139.
- Maassen, Peter, Christine Musselin (2009). "European Integration and the Europeanisation of Higher Education". In: Alberto Amaral, Guy Neave, Christine Musselin, Peter Maassen (eds.), *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer. 3-14.
- Maassen, Peter, Frans A. van Vught, eds. (1996). *Inside Academia. New Challenges for the Academic Profession*. Enschede: CHEPS.
- Maassen, Peter, Johan P. Olsen, eds. (2007). *University Dynamics and European Integration*. Dordrecht: Springer.

- Macfarlane, Bruce (2007). *The Academic Citizen: The virtue of service in university life*. London: Routledge.
- Macfarlane, Bruce (2012). *Intellectual Leadership in Higher Education: Renewing the Role of the University Professor*. London: Routledge.
- Mach, Bogdan W. (2004). "Intergenerational Mobility in Poland: 1972-88-94". In: Richard Breen (ed.), *Social Mobility in Europe*. New York: Oxford University Press. 269-286.
- Machin, Stephen (2004). "Skill-biased Technical Change and Educational Outcomes". In: G. Johnes and J. Johnes (eds.), *International Handbook on the Economics of Education*, Cheltenham: Edward Elgar. 189-211.
- Machin, Stephen, Anna Vignoles, eds. (2005). *What's the Good of Education? The Economics of Education in the UK*. Princeton: Princeton University Press.
- Magnusson, Lars, Jan Ottosson, eds. (2009). *The Evolution of Path Dependence*. Cheltenham: Edward Elgar.
- Magnusson, Mats, Maureen McKelvey, Matteo Versiglioni (2009). "The Forgotten Individuals: Attitudes and Skills in Academic Commercialization in Sweden". In: M. McKelvey, M. Holmén (eds.), *Learning to Compete in European Universities: From Social Institution to Knowledge Business*. Cheltenham: Edward Elgar Publishing. 219-250.
- Mahoney James (2000). "Path Dependence in Historical Sociology". *Theory and Society*. Vol. 29.
- Mahoney, James (2001). "Explaining Political Development in Central America". In: James Mahoney, *The Legacies of Liberalism: Path Dependence and Political Regimes in Central America*. Baltimore: The John Hopkins University. 3-28.
- Mahoney, James, Daniel Schensul (2006). "Historical Context and Path Dependence". In: Robert E. Goodin, Charles Tilly (eds.), *The Oxford Handbook of Contextual Political Analysis*. Oxford: Oxford University Press. 454-471.
- Mahoney, James, Celso M. Villegas (2007). "Historical Enquiry and Comparative Politics". In: Carles Boix, Susan C. Stokes (eds.), *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press. 73-89.
- Mahoney, James, Dietrich Rueschemeyer, eds. (2003). *Comparative Historical Analysis in the Social Sciences*. Cambridge: CUP.
- Mahoney, James, Kathleen Thelen, eds. (2010). *Explaining Institutional Change. Ambiguity, Agency, and Power*. Cambridge: Cambridge University Press.
- Malerba, Franco, ed. (2010). *Knowledge-Intensive Entrepreneurship and Innovation Systems: Evidence from Europe*. London: Routledge.
- Malerba, Franco, Stefano Brusoni, eds. (2007). *Perspectives on Innovation*. Cambridge: Cambridge University Press.
- Mallard, Grégoire, Catherine Paradeise, Ashveen Peerbaye, eds. (2009). *Global Science and National Sovereignty: Studies in Historical Sociology of Science*. New York: Routledge.
- Manjarrés-Henríquez, Liney, Antonio Gutiérrez-Gracia, Jaider Vega-Jurado (2008). "Coexistence of university–industry relations and academic research: Barrier to or incentive for scientific productivity". *Scientometrics*. Vol. 76. No. 3. 561-576.

- Manow, Philip (2010). "Trajectories of Fiscal Adjustment in Bismarckian Welfare Systems". In: Bruno Palier (ed.), *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press. 279-299.
- March, James G. (2008). *Explorations in Organizations*. Stanford: Stanford University Press.
- March, James G. (2010). *The Ambiguities of Experience*. Ithaca: Cornell University Press.
- March, James G., Johan P. Olsen (1976). *Ambiguity and Choice in Organizations*. Bergen: Universitetsforlaget.
- March, James G., Johan P. Olsen (1989). *Rediscovering Institutions. The Organizational Basis of Politics*. New York: The Free Press.
- March, James G., Johan P. Olsen (2006a). "Elaborating the 'New Institutionalism'". In: R.A.W. Rhodes, Sarah A. Binder, Bert A. Rockman (eds.), *The Oxford Handbook of Political Institutions*. Oxford: Oxford University Press. 3-20.
- March, James G., Johan P. Olsen (2006b). "The Logic of Appropriateness". In: Michael Moran, Martin Rein, Robert E. Goodin (eds.), *The Oxford Handbook of Public Policy*. New York: Oxford University Press. 689-708.
- March, James G., Johan P. Olsen (2012). "Institutional Perspectives on Political Institutions". In: Peter Hupe, Michael Hill (eds.), *Public Policy. Volume 1*. London: SAGE. 53-70.
- Marcucci, Pamela N., D. Bruce Johnstone (2009). "Tuition Fee Policies in a Comparative Perspective: Theoretical and Political Rationales". In: Malcolm Tight, Ka Ho Mok, Jeroen Huisman, Christopher C. Morphet (eds.), *The Routledge International Handbook of Higher Education*. New York: Routledge. 151-163.
- Mares, Isabela (2009). "The Comparative Political Economy of the Welfare State". In: Mark Irving Lichbach, Alan S. Zuckerman (eds.), *Comparative Politics: Rationality, Culture, and Structure*. Cambridge: Cambridge University Press. 358-375.
- Marga, Andrei (1997). "Reforming the Postcommunist University". *Journal of Democracy*. Vol. 8. No. 2.
- Marginson, Simon (1993). *Education and Public Policy in Australia*. Cambridge, New York, Melbourne: Cambridge University Press.
- Marginson, Simon (1997a). *Educating Australia: Government, Economy and Citizen Since 1960*. New York: Cambridge University Press.
- Marginson, Simon (1997b). *Markets in Education*. St Leonards: Allen & Unwin.
- Marginson, Simon (2000). *Monash: Remaking the University*. St Leonards: Allen & Unwin.
- Marginson, Simon (2006a). "Putting 'Public' Back into the Public University". *Thesis Eleven*. No. 84. February 2006.
- Marginson, Simon (2006b). "The Anglo-American University at its Global High Tide". *Minerva*. Vol. 44.
- Marginson, Simon (2007a). "The New Higher Education Landscape". In: Simon Marginson (ed.), *Prospects of Higher Education: Globalization, Market Competition, Public Goods and the Future of the University*. Rotterdam: Sense Publishers. 29-77.
- Marginson, Simon (2007b). "The Public/Private Divide in Higher Education: A Global Revision". *Higher Education*. No. 53.

- Marginson, Simon, ed. (2007c). *Prospects of Higher Educations: Globalization, Market Competition, Public Goods and the Future of the University*. Rotterdam: Sense Publishers.
- Marginson, Simon (2010). "How Universities Have Been Positioned as Teams in a Knowledge Economy World Cup". In: Jill Blackmore, Marie Brennan, Lew Zipin (eds.), *Re-Positioning University Governance and Academic Work*. Rotterdam: Sense Publishers. 17-33.
- Marginson, Simon (2011). "Higher Education and Public Good". *Higher Education Quarterly*. First published online. doi: 10.1111/j.1468-2273.2011.00496.x
- Marginson, Simon (2012). "The 'Public' Contribution of Universities in an Increasingly Global World". In: Brian Pusser, Ken Kempner, Simon Marginson, Imanol Ordoika (eds.), *Universities and the Public Sphere: Knowledge Creation and State Building in the Era of Globalization*. New York: Routledge. 7-25.
- Marginson, Simon, Mark Considine (2000). *The Enterprise University. Power, Governance and Reinvention in Australia*. Cambridge: Cambridge University Press.
- Marginson, Simon, Gary Rhoades (2002). "Beyond National States, Markets, and Systems of Higher Education: A Glonacal Agency Heuristic". *Higher Education*. Vol. 43.
- Marginson, Simon, Marijk van der Wende (2007). *Globalisation and Higher Education*. OECD Education Working Papers No. 8.
- Marsh, David, Nicola J. Smith, Nicola Hothi (2006). "Globalization and the State". In: Colin Hay, Michael Lister, David Marsh (eds.), *The State: Theories and Issues*. Basingstoke: Palgrave Macmillan. 172-189.
- Marsh, David, Gerry Stoker, eds. (2010). *Theory and Methods in Political Science*. Third Edition. Basingstoke: Palgrave Macmillan.
- Martens, Kerstin (2007). "How to Become an Influential Actor - The 'Comparative Turn' in OECD Education Policy". In: Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (eds.), *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan. 40-56.
- Martens, Kerstin, Ansgar Weymann (2007). "The Internationalization of Education Policy: Towards Convergence of National Paths?" In: Achim Hurrelmann, Stephan Leibfried, Kerstin Martens, Peter Mayer (eds.), *Transforming the Golden-Age Nation State*. Basingstoke: Palgrave Macmillan.
- Martens, Kerstin, Alexander-Kenneth Nagel, Michael Windzio, Ansgar Weymann, eds. (2010). *Transformation of Education Policy*. Basingstoke: Palgrave Macmillan.
- Martens, Kerstin, Anja P. Jakobi, eds. (2010a). *Mechanisms of OECD Governance: International Incentives for National Policy-Making?* Oxford: Oxford University Press.
- Martens, Kerstin, Anja P. Jakobi (2010b). "Introduction: The OECD as an Actor in International Politics". In: Kerstin Martens, Anja P. Jakobi (eds.), *Mechanisms of OECD Governance: International Incentives for National Policy-Making?* Oxford: Oxford University Press. 1-25.

- Martens, Kerstin, Alessandra Rusconi, Kathrin Leuze, eds. (2007). *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan.
- Martin, Ben R. (2003). "The Changing Social Contract for Science and the Evolution of the University". In: Aldo Geuna, Ammon J. Salter, W. Edward Steinmueller (eds.), *Science and Innovation: Rethinking the Rationales for Funding and Governance*. Cheltenham: Edward Elgar. 7-29.
- Martin, Ben R., Henry Etzkowitz (2000). "The Origin and Evolution of the University System". *SPRU Electronic Working Paper Series*. No. 59. December.
- Martinelli, Arianna, Martin Meyer, Nick von Tunzelmann (2008). "Becoming an Entrepreneurial University? A Case Study of Knowledge Exchange Relationships and Faculty Attitudes in a Medium-sized, Research-oriented University". *Journal of Technology Transfer*. Vol. 33. 259-283.
- Massy, W. F. (2003). *Honoring the Trust. Quality and Cost Containment in Higher Education*. Bolton: Anker Publishing Company.
- Massy, William F., Joel W. Meyerson, eds. (1994). *Measuring Institutional Performance in Higher Education*. Princeton: Peterson's Guides.
- Massy, William F., ed. (1996). *Resource Allocation in Higher Education*. Ann Arbor: The University of Michigan Press.
- Mateju, Petr, Blanka Rehakova and Natalie Simonova (2007). "The Czech Republic: Structural Growth of Inequality in Access to Higher Education". In: Shavit, Y., R. Arum, A. Gamoran (eds.), *Stratification in Higher Education. A Comparative Study*. Stanford: Stanford University Press. 374-399.
- Mathieu, Azèle, Martin Meyer, Bruno van Pottelsberghe de la Potterie (2008). "Turning Science Into Business: A Case Study of a Major European Research University". *Science and Public Policy*. Vol. 35. No. 9. 669-679.
- Mazmanian, Daniel A., Paul A. Sabatier (1989). *Implementation and Public Policy*. Lanham: University Press of America.
- Mazza, Carmelo, Paolo Quattrone, Angelo Riccaboni, eds. (2008). *European Universities in Transition: Issues, Models and Cases*. Cheltenham: Edward Elgar Publishing Limited.
- McClelland, Charles E. (1980). *State, Society and University in Germany 1700-1914*. Cambridge: Cambridge University Press.
- McCormick, John P. (2007). *Weber, Habermas, and Transformations of the European State: Constitutional, Social, and Supranational Democracy*. Cambridge: Cambridge University Press.
- McDowell, Moore, Rodney Thom, Robert Frank, Ben Bernanke (2009). *Principles of Economics*. Second European Edition. Maidenhead: McGraw-Hill.
- McKelvey, Maureen, Magnus Holmén, eds. (2009). *Learning to Compete in European Universities: From Social Institution to Knowledge Business*. Cheltenham: Edward Elgar Publishing.
- McMahon, Walter W. (1999). *Education and Development: Measuring the Social Benefits*. Oxford: Oxford University Press.
- McMahon, Walter W. (2009). *Higher Learning, Greater Good. The Private and Social Benefits of Higher Education*. Baltimore: The Johns Hopkins UP.

- McNamee, Stephen J., Robert K. Miller Jr. (2009). *The Meritocracy Myth*. Lanham: Rowman & Littlefield Publishers.
- McNay, Ian, ed. (2006). *Beyond Mass Higher Education: Building On Experience*. Maidenhead: SRHE and Open University Press.
- Meek, V. Lynn, Dianne Davies (2009). "Policy Dynamics in Higher Education and Research: Concepts and Observations". In: V. Lynn Meek, Ulrich Teichler, Mary-Louise Kearney (eds.), *Higher Education, Research and Innovation: Changing Dynamics*. Kassel: INCHER. 41-84.
- Meek, V. Lynn, Ulrich Teichler, Mary-Louise Kearney, eds. (2009). *Higher Education, Research and Innovation: Changing Dynamics*. Kassel: INCHER.
- Meek, V. Lynn, Leo Goedegebuure, Rui Santiago, Teresa Carvalho, eds. (2010). *The Changing Dynamics of Higher Education Middle Management*. Dordrecht: Springer.
- Meek, L. V., L. Goedegebuure, O. Kivinen and R. Rinne, eds. (1996a). *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Oxford: Pergamon/IAU Press.
- Meek, V. L., L. Goedegebuure, O. Kivinen, R. Rinne (1996b). "Conclusion". In: V. L. Meek, L. Goedegebuure, O. Kivinen, R. Rinne (eds.) *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Bingley: Emerald. 206-236.
- Mertaugh, Michael, Eric Hanushek (2005). "Education and Training". In: Nicholas Barr (ed.), *Labor Markets and Social Policy in Central and Eastern Europe. The Accession and Beyond*. Oxford: Oxford UP.
- Merton, Robert K. (1973). *The Sociology of Science: Theoretical and Empirical Investigations*. Chicago: The University of Chicago Press.
- Metcalfe, J. Stanley (2007). "Instituted Economic Processes, Increasing Returns and Endogenous Growth". In: Geoffrey M. Hodgson (ed.), *The Evolution of Economic Institutions: A Critical Reader*. Cheltenham: Edward Elgar. 98-119.
- Metcalfe, J. Stanley (2010). "University and Business Relations: Connecting the Knowledge Economy". *Minerva*. Vol. 48. No. 1. 5-33.
- Meyer, Heinz-Dieter, Brian Rowan, eds. (2006). *The New Institutionalism in Education*. Albany: State University of New York.
- Meyer, John W., Brian Rowan (1991). "Institutionalized Organizations: Formal Structure as Myth and Ceremony". In: Walter W. Powell, Paul J. Dimaggio (eds.), *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press. 41-62.
- Meyer, John W., Evan Schofer (2007). "The University in Europe and the World: Twentieth Century Expansion". In: Georg Krücken, Anna Kosmützky, Marc Torka (eds.), *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: Transcript Verlag. 45-62.
- Meyer, John W., Francisco O. Ramirez, David John Frank, Evan Schofer (2007). "Higher Education as an Institution". In: Patricia J. Gumpert (ed.), *Sociology of Higher Education. Contributions and Their Contexts*. Baltimore: Johns Hopkins University Press. 187-221.

- Meyer, Martin (2003). "Academic Entrepreneurs or Entrepreneurial Academics? Research-Based Ventures and Public Support Mechanisms". *R&D Management*. Vol. 33. No. 2. 107-115.
- Michels, Nicolette (2010). "A Conceptual Approach towards Understanding Issues in the Third Stream: Conceptions of Valid Knowledge and Transfer in UK Policy". In: R.J. Howlett (ed.), *Innovation through Knowledge Transfer 2010*. SIST 9. 43-61.
- Milanovic, Branko (2005). *Worlds Apart: Measuring International and Global Inequality*. Princeton: Princeton University Press.
- Milanovic, Branko (2011). *The Haves and the Have-Nots. A Brief and Idiosyncratic History of Global Inequality*. New York: Basic Books.
- Miller, Robert C., Bernard J. Le Boeuf, eds. (2009). *Developing University-Industry Relations: Pathways to Innovation from the West Coast*. San Francisco: Jossey – Bass A Wiley Imprint.
- Millett, John David (1962). *The Academic Community. An Essay on Organization*. McGraw-Hill: New York.
- Mirowski, Philip, Esther-Mirjam Sent (2002a). "Introduction". In: Philip Mirowski, Esther-Mirjam Sent (eds.), *Science: Bought and Sold. Essays in the Economics of Science*. Chicago and London: The University of Chicago Press. 1-66.
- Mirowski, Philip, Esther-Mirjam Sent, eds. (2002b). *Science: Bought and Sold. Essays in the Economics of Science*. Chicago and London: The University of Chicago Press.
- Mishel, Lawrence, Jared Bernstein, Sylvia Allegretto (2007). *The State of Working America 2006/2007*. Ithaca: ILR Press.
- Mishra, Ramesh (1999). *Globalization and the Welfare State*. Cheltenham UK: Edward Elgar.
- Mishra, Ramesh (2011). "The Logic of Globalization: The Changing Context of the Welfare State". In: Pete Alcock, Martin Powell (eds.), *Welfare Theory and Development. Volume IV*. London: SAGE. 55-73.
- Mitra, Jay (2008). "Towards an Analytical Framework for Policy Development". In: J. Potter (ed.), *Entrepreneurship and Higher Education*. Paris: OECD Publishing. 17-44
- MNISW (2006). *The barriers to the cooperation between entrepreneurs and research centers*. Warsaw: Ministry of Science and Higher Education (in Polish).
- Molas-Gallart, Jordi, Ammon Salter, Pari Patel, Alister Scot, Xavier Duran (2002). "Measuring Third Stream Activities". Final Report to the Russell Group of Universities. SPRU Science and Technology Policy Research.
- Molas-Gallart, Jordi (2004). "Measuring and Funding the 'Third Mission': The UK Policy Debate". In: R. Wink (ed.), *Academia-Business Links: European Policy Strategies and Lessons Learnt*. New York: Palgrave Macmillan. 74-89.
- Molesworth, Mike, Richard Scullion, Elizabeth Nixon, eds. (2011). *The Marketisation of Higher Education and the Student as Consumer*. London: Routledge.
- Mooney, Nan (2008). *(Not) Keeping Up With Our Parents: The Decline of the Professional Middle Class*. Boston: Beacon Press.

- Mora, José-Ginés, Maria-Jose Vieira (2009). "Governance, Organizational Change, and Entrepreneurialism: Is There a Connection?" In: Michael Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Berkshire: SRHE & Open University Press. 74-99.
- Mora, José Ginés, Juan Felix (2009). "European Multinational Regimes and Higher Education Policy". In: Roberta Malee Bassett, Alma Maldonado-Maldonado (eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge. 192-211.
- Mora, José Ginés, Andrea Detmer, Maria- José Vieira, eds. (2010). *Good Practices in University-Enterprise Partnerships GOODUEP*. Valencia: CEGES.
- Mora, José Ginés, Maria-José Vieira, Andrea Detmer (2012). "Managing University-Enterprise Partnerships". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 63-81
- Morgan, Glenn (1986). *Images of Organization*. Beverly Hills: Sage.
- Morgan, Glenn (1990). "Organizations and Environments". In: Glenn Morgan, *Organizations in Society*. Basingstoke: Palgrave Macmillan. 155-194.
- Morgan, Glenn, Richard Whitley, Eli Moen, eds. (2005). *Changing Capitalisms? Internationalization, Institutional Change, and Systems of Economic Organization*. Oxford: Oxford University Press.
- Morgan, Glenn, Richard Whitley, eds. (2012). *Capitalisms and Capitalism in the Twenty-First Century*. Oxford: Oxford University Press.
- Morgan, Stephen L., David B. Grusky, Gary S. Fields, eds. (2006). *Mobility and Inequality: Frontiers of Research in Sociology and Economics*. Stanford: Stanford University Press.
- Morphew, Christopher C. and Peter D. Eckel, eds. (2009). *Privatizing the Public University. Perspectives from Across the Academy*. Baltimore: The Johns Hopkins University Press.
- Morrow, Raymond A. and Carlos Alberto Torres (2000). "The State, Globalization, and Educational Policy". In: Nicholas C. Burbules, Carlos Alberto Torres (eds.), *Globalization and Education. Critical Perspectives*. London: Routledge.
- Mosley, Layna (2003). *Global Capital and National Governments*. Cambridge: Cambridge University Press.
- Mowery, David C. (2001). "The United States National Innovation System After the Cold War". In: Philippe Larédo, Philippe Mustar (eds.), *Research and Innovation Policies in the New Global Economy: An International Comparative Analysis*. Cheltenham: Edward Elgar. 15-46.
- Mowery, David C., Richard R. Nelson, Bhaven N. Sampat, Arvids A. Ziedonis (1999). "The Effects of the Bayh-Dole Act on U.S. University Research and Technology Transfer". In: L. M. Branscomb, F. Kodama, R. Florida (eds.), *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. Cambridge, Massachusetts: The MIT Press. 269-306.

- Mowery, David C., Richard R. Nelson, Bhaven N. Sampat, Arvids A. Ziedonis (2004). *Ivory Tower and Industrial Innovation: University-Industry Technology Transfer Before and After the Bayh-Dole Act*. Stanford: Stanford University Press.
- Mullen, Ann L. (2010). *Degrees of Inequality: Culture, Class, and Gender in American Higher Education*. Baltimore: The John Hopkins University Press.
- Müller, Detlef K., Fritz Ringer, Brian Simon, eds. (1987). *The Rise of the Modern Educational System: Structural Change and Social Reproduction 1870-1920*. Cambridge: Cambridge University Press.
- Müller, Klaus (2006). "University-Industry Collaborations: a Source of Continuous Mutual Stimulation and Inspiration". In: L. E. Weber, J. J. Duderstadt (eds.), *Universities and Business: Partnering for the Knowledge Society*. London: Economica. 177-184.
- Musselin, Christine (2004a). "Towards a European Academic Labour Market? Some Lessons Drawn From Empirical Studies on Academic Mobility". *Higher Education*. Vol. 48.
- Musselin, Christine (2004b). *The Long March of French Universities*. New York: RoutledgeFalmer.
- Musselin, Christine (2005a). "Change or Continuity in Higher Education Governance? Lessons Drawn From Twenty Years of National Reforms in European Countries". In: Ivar Bleiklie, Mary Henkel (eds.), *Governing Knowledge: A Study of Continuity and Change in Higher Education - A Festschrift in Honour of Maurice Kogan*. Dordrecht: Springer. 65-79.
- Musselin, Christine (2005b). "European Academic Labour Market in Transition". *Higher Education*. Vol. 49.
- Musselin, Christine (2007a). "Are Universities Specific Organizations?" In: G. Krücken, A. Kosmützky, M. Torka (eds.), *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: transcript Verlag. 63-86.
- Musselin, Christine (2007b). "Transformation of Academic Work: Facts and Analysis". In: Maurice Kogan and Ulrich Teichler, eds. (2007). *Key Challenges to the Academic Profession*. Paris and Kassel: INCHER. 175-190.
- Musselin, Christine (2010). *The Market for Academics*. New York: Routledge.
- Musselin, Christine (2011). "The Academic Workplace: What We Already Know, What We Still Do Not Know, and What We Would Like to Know". In: Diana Rhoten, Craig (eds.), *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press. 423-456.
- Nagel, Kenneth-Alexander, Kerstin Martens, Michael Windzio (2010). "Introduction – Education Policy in Transformation". In: Kerstin Martens, Alexander-Kenneth Nagel, Michael Windzio, Ansgar Weymann (eds.), *Transformation of Education Policy*. Basingstoke: Palgrave Macmillan.
- Nagel, Kenneth-Alexander, Tonia Bieber, Anja P. Jakobi, Philipp Knodel, Dennis Niemann, Janna Teltemann (2010). "Measuring Transformation of Education Policy – A Mixed-Method Approach". In: Kerstin Martens, Alexander-Kenneth Nagel, Michael Windzio, Ansgar Weymann (eds.), *Transformation of Education Policy*. Basingstoke: Palgrave Macmillan. 28-52.

- Neaman Institute (2008). *Proceedings of the International Conference: Privatization in Higher Education*. The Samuel Neaman Institute, Haifa, Israel, January 7-8, 2008.
- Neave, Guy (2000). "Universities' Responsibility to Society: An Historical Exploration of an Enduring Issue". In: Neave, Guy (ed.). *The Universities' Responsibilities to Societies. International Perspectives*. Amsterdam: Pergamon Press, 7-30.
- Neave, Guy (2001). "The European Dimension in Higher Education: An Excursion into the Modern Use of Historical Analogues". In: Jeroen Huisman, Peter Maassen, Guy Neave (eds.), *Higher Education and the State. The International Dimension of Higher Education*. Amsterdam: Pergamon Press, 13-75.
- Neave, Guy (2002). "On Stakeholders, Cheshire Cats and Seers: Changing Visions of the University". In: The CHEPS Inaugural Lectures 2002. Enschede: CHEPS.
- Neave, Guy (2003a) "The Bologna Declaration: Some of the Historic Dilemmas Posed By the Reconstruction of the Community in Europe's Systems of Higher Education". *Educational Policy*. Vol. 17. No. 1. 141-164.
- Neave, Guy (2003b). "On the Return from Babylon: A Long Voyage around History, Ideology and Systems Change". In: J. File, L. Goedegebuure (red.), *Real-Time Systems: Reflections on Higher Education in the Czech Republic, Hungary, Poland and Slovenia*. Brno: Vuilin Publishers.
- Neave, Guy (2008a). "Now You See It, Now You Don't: Privatization as the Will O' the Wisp in the Higher Education Policies of Western Europe". In: *Proceedings of the International Conference: Privatization in Higher Education*. The Samuel Neaman Institute, Haifa, Israel, January 7-8, 2008.
- Neave, Guy (2008b). "The European Dimension in Higher Education: An Excursion into the Modern Use of Historical Analogues". In: Jeroen Huisman, Peter Maassen, Guy Neave (eds.), *Higher Education and the Nation State: The International Dimension of Higher Education*. Bingley: Emerald Group Publishing. 13-73.
- Neave, Guy (2009). "Institutional Autonomy 2010-2020. A Tale of Elan – Two Steps Back to Make One Very Large Leap Forward". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 3-22.
- Neave, Guy (2010). "Burton R. Clark, 1921-2009. The Man, His Saga and His Times". *London Review of Education*. Vol. 8. No. 3. 209-216.
- Neave, Guy (2012). *The Evaluative State, Institutional Autonomy and Re-Engineering Higher Education in Western Europe: The Prince and His Pleasure*. Basingstoke: Palgrave Macmillan.
- Neave, Guy, Alberto Amaral, eds. (2012a). *Higher Education in Portugal 1974-2009: A Nation, a Generation*. Dordrecht: Springer.
- Neave, Guy, Alberto Amaral (2012b). "Introduction. On Exceptionalism: The Nation, a Generation and Higher Education, Portugal 1974-2009". In: Guy Neave, Alberto Amaral (eds.), *Higher Education in Portugal 1974-2009: A Nation, a Generation*. Dordrecht: Springer. 1-46.
- Neave, Guy, Frans A. van Vught, eds. (1994a). *Government and Higher Education Relationships Across Three Continents: The Winds of Change*. Oxford: Pergamon.

- Neave, Guy, Frans A. van Vught (1994b). "Government and Higher Education in Developing Nations: A Conceptual Framework". In: Guy Neave, Frans A. van Vught (eds.), *Government and Higher Education Relationships Across Three Continents: The Winds of Change*. Oxford: Pergamon. 1-21.
- Neave, Guy, Peter Maassen (2007). "The Bologna Process: An Intergovernmental Policy Perspective". In: Peter Maassen, Johan P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer.
- Neave, Guy, Frans A. van Vught, eds. (1991). *Prometheus Bound: The Changing Relationship between Government and Higher Education in Western Europe*. Oxford and New York: Pergamon Press.
- Neave, Guy, Kjell Blücker, Thorsten Nybom, eds. (2006). *The European Research University: A Historical Parenthesis?* New York: Palgrave Macmillan.
- Nedeva, Maria (2007). "New Tricks and Old Dogs? The 'Third Mission' and the Re-Productivity of the University". In: D. Epstein, R. Boden, R. Deem, F. Rizvi, S. Wright (eds.), *Geographies of Knowledge, Geometries of Power: Framing the Future of Higher Education. World Yearbook of Education 2008*. New York: Routledge. 85-103.
- Nelles, Jen, Tim Vorley (2010a). "Constructing an Entrepreneurial Architecture: An Emergent Framework for Studying the Contemporary University Beyond the Entrepreneurial Turn". *Innovative Higher Education*. Vol. 35. No. 3. 161-176.
- Nelles, Jen, Tim Vorley (2010b). "Entrepreneurial Architecture: A Blueprint for Entrepreneurial Universities". *Canadian Journal of Administrative Sciences*. Vol. 28. 341-353.
- Nelson, Joan M., Charles Tilly, and Lee Walker (1997). *Transforming Post-Communist Political Economies*. Washington DC: National Academy Press.
- Nelson, Richard R. (2007). "Understanding Economic Growth As the Central Task of Economic Analysis". In: Franco Malerba, Stefano Brusoni (eds.), *Perspectives on Innovation*. Cambridge: Cambridge University Press. 27-41.
- Newman, Frank, Lara Couturier, Jamie Scurry (2004). *The Future of Higher Education. Rhetoric, Reality, and the Risks of the Market*. San Francisco: Jossey-Bass.
- Newman, Janet, John Clarke (2009). *Publics, Politics & Power: Remaking the Public in Public Services*. Los Angeles: SAGE.
- Newson, Janice, and Jan Currie, eds. (1998). *Globalization and the University*. Los Angeles: SAGE.
- Newson, Janice, and Howard Buchbinder (1998). *The University Means Business*. Toronto: Garamond Press.
- Nixon, Jon (2012). "Universities and the Common Good". In: Ronald Barnett (ed.), *The Future University: Ideas and Possibilities*. New York: Routledge. 141-151.
- Noelke, Clemens (2008). "Social Protection, Inequality and Labour Market Risks in Central and Eastern Europe". In: Irena Kogan, Michael Gebel, Clemens Noelke (eds.), *Europe Enlarged: A Handbook of Education, Labour and Welfare Regimes in Central and Eastern Europe*. Bristol: The Polity Press. 63-95.
- Nolan, Brendan C., ed. (2001). *Public Sector Reform: An International Perspective*. Basingstoke, Hampshire: Palgrave.

- Nordvall, Robert C. (1982). *The Process of Change in Higher Education Institutions*. AAHE-ERIC/ Higher Education Research Report No. 7. Washington, D.C.: American Association for Higher Education.
- North, Douglass C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Nóvoa, António (2010). "Governing Without Governing: The Formation of a European Educational Space". In: Michael W. Apple, Stephen J. Ball, Luis Armando Gandin (eds.), *The Routledge International Handbook of the Sociology of Education*. London: Routledge. 264-273.
- Nóvoa, António, Martin Lawn (2002). *Fabricating Europe. The Formation of an Educational Space*. Dordrecht: Kluwer.
- Nullmeier, Frank, Franz-Xaver Kaufmann (2010). "Post-War Welfare State Development". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 81-101.
- Nussbaum, Martha, (2010). *Not For Profit. Why Democracy Needs the Humanities*. Princeton: Princeton University Press.
- Nybom, Thorsten (2012). "The Disintegration of Higher Education in Europe, 1970-2010: A Post-Humboldtian Essay". In: Sheldon Rothblatt (ed.), *Clark Kerr's World of Higher Education Reaches the 21st Century: Chapters in a Special History*. Dordrecht: Springer. 163-181.
- Obinger, Herbert, Reimut Zohlnhöfer (2007). "The Real Race to the Bottom: What Happened to Economic Affairs Expenditure After 1980?" In: Francis G. Castles (ed.), *The Disappearing State? Retrenchment Realities in an Age of Globalisation*. Cheltenham: Edward Elgar. 184-214.
- Obinger, Herbert, Peter Starke, Julia Moser, Claudia Bogedan, Edith Gindulis, Stephan Leibfried (2010). *Transformations of the Welfare State: Small States, Big Lessons*. New York: Oxford University Press.
- Obinger, Herbert, Uwe Wagschal (2010). "Social Expenditure and Revenues". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 333-352.
- Oblinger, Diana G., Anne-Lee Verville (1998). *What Business Wants From Higher Education*. American Council of Education. Series on Higher Education. Phoenix: Oryx Press.
- Obinger, Herbert, Reimut Zohlnhöfer (2007). "The Real Race to the Bottom: What Happened to Economic Affairs Expenditure After 1980?" In: Francis G. Castles (ed.), *The Disappearing State? Retrenchment Realities in an Age of Globalisation*. Cheltenham: Edward Elgar. 184-214.
- OECD (1970). *The Challenge of Unemployment to Development and the Role of Training and Research Institutes in Development*. Paris: OECD.
- OECD (1981). *The Welfare State in Crisis*. Paris: OECD.
- OECD (1984). *Industry and University: New Forms of Co-operation and Communication*. Paris: OECD.

- OECD (1990). *Financing Higher Education. Current Patterns* [written by Gareth Williams]. Paris: OECD.
- OECD (1996). *The Knowledge-Based Economy*. OECD: Author.
- OECD (1998a). *Fostering Entrepreneurship. The OECD Jobs Strategy*. Paris: OECD.
- OECD (1998b). *University Research in Transition*. Paris: OECD.
- OECD (1999). *The Response of Higher Education Institutions to Regional Needs*. Paris: Author.
- OECD (2000). *Private Pension Systems and Policy Issues*. Paris: OECD
- OECD (2001). *OECD Private Pensions Conference 2000. Insurance and Pensions*. Paris: OECD.
- OECD (2003a). *Reforming Public Pensions. Sharing the Experiences of Transition and OECD Countries*. Paris: OECD.
- OECD (2003b). *Turning Science into Business: Patenting and Licensing at Public Research Organisations*. Paris: Author.
- OECD (2004a). *Reforming Public Pensions: Sharing the Experiences of Transition and OECD Countries*. Paris: OECD.
- OECD (2004b). *On the Edge: Securing a Sustainable Future for Higher Education*. OECD: OECD.
- OECD (2004c). *OECD Handbook for Internationally Comparative Education Statistics. Concepts, Standards, Definitions and Classifications*. Paris: OECD.
- OECD (2005a). *Private Pensions. OECD Classification and Glossary*. Paris: OECD.
- OECD (2005b). *Higher Education Management and Policy: Entrepreneurship*. Vol. 17. No. 3 – Special Issue. Paris: OECD Publishing.
- OECD (2006). *Think Scenarios, Rethink Education*. Paris: OECD.
- OECD (2007a). *Pensions at a Glance. Public Policies Across OECD Countries*. OECD: OECD.
- OECD (2007b). *Health at a Glance 2007*. OECD Indicators. OECD: OECD.
- OECD (2007c). *Protecting Pensions. Policy Analysis and Examples from OECD Countries*. Paris: OECD.
- OECD (2007d). *Higher Education and Regions. Globally Competitive, Regionally Engaged*. Paris: OECD.
- OECD (2007e). *Regions at a Glance 2007*. Paris: OECD.
- OECD (2008a). *Higher Education to 2030. Volume 1. Demography*. Paris: OECD.
- OECD (2008b). *Growing Unequal? Income Distribution and Poverty in OECD Countries*. Paris: OECD.
- OECD (2009a). *Education Today. The OECD Perspective*. Paris: OECD.
- OECD (2009b). *The Political Economy of Reform. Lessons from Pensions, Product Markets and Labour Markets in Ten OECD Countries*. Paris: OECD.
- OECD (2009c). *Education at a Glance 2009. OECD Indicators*. Paris: OECD.
- OECD (2009d). *Higher Education to 2030. Volume 2. Globalization*. Paris: OECD.
- OECD (2010a). *Education at a Glance 2010. OECD Indicators*. Paris: OECD.
- OECD (2010b). *Making Reform Happen: Lessons From OECD Countries*. Paris: OECD.
- OECD (2011a). *Divided We Stand: Why Inequality Keeps Rising*. Paris: OECD.
- OECD (2011b). *Public Research Institutions: Mapping Sector Trends*. Paris: OECD.

- OECD (2011c). *Education at a Glance 2011. OECD Indicators*. Paris: OECD.
- Oestreich, Joel E., ed. (2012). *International Organizations as Self-Directed Actors*. London: Routledge.
- Offe, Claus (1996a). *Varieties of Transition: The East European and East German Experience*. Cambridge: Polity Press.
- Offe, Claus (1996b). "Designing Institutions in East European Transitions". In: Robert E. Goodin (ed.), *The Theory of Institutional Design*. Cambridge: Cambridge University Press. 199-226.
- Offer, Avner (2006). *The Challenge of Affluence: Self-Control and Well-Being in the United States and Britain since 1950*. Oxford: Oxford University Press.
- Olsen, Johan P. (1997). "European Challenges to the Nation State". In: Bernard Steunenberg, Frans van Vught (eds.), *Political Institutions and Public Policy: Perspective on European Decision Making*. Dordrecht: Kluwer Academic Publishers. 157-188.
- Olsen, Johan P. (1998). "Institutional Design in Democratic Contexts". In Nils Brunsson, Johan P. Olsen (eds.), *Organizing Organizations*. Copenhagen: Fagbokforlaget.
- Olsen, Johan P. (2007a). *Europe in Search of Political Order. An Institutional Perspective on Unity/Diversity, Citizens/Their Helpers, Democratic Design/Historical Drift, and the Co-existence of Orders*. Oxford: Oxford University Press.
- Olsen, Johan P. (2007b). "The Institutional Dynamics of the European University". In: Peter Maassen, Johan P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 25-54.
- Olsen, Johan P. (2007c). "Understanding Institutions and Logics of Appropriateness: Introductory Essay". ARENA Working Paper No. 13. August 2007.
- Olsen, Johan P. (2007d). "Organization Theory, Public Administration, Democratic Governance". ARENA Working Paper No. 1, January 2007.
- Olsen, Johan P. (2008). "Change and Continuity. An Institutional Approach to Institutions of Democratic Government". ARENA Working Paper No. 15, June 2008.
- Olsen, Johan P. (2010). *Governing through Institution Building. Institutional Theory and Recent European Experiments in Democratic Organization*. Oxford: Oxford University Press.
- Olsen, Johan P., Peter Maassen (2007). "European Debates on the Knowledge Institution: The Modernization of the University at the European Level". In: P. Maassen and J.P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 3-24.
- Olson, Mancur (1965). *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge: Harvard University Press.
- Olssen, Mark, John Codd, Anne-Marie O'Neill (2004). *Education Policy: Globalization, Citizenship and Democracy*. London, Thousand Oaks, New Dehli, Far East Square: SAGE.
- O'Meara, Kerry Ann (2007). "Striving for What? Exploring the Pursuit of Prestige". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XXII*. Dordrecht: Springer. 121-179.

- O'Meara, Kerry Ann, Aimee Lapointe Terosky, Anna Neumann (2008). *Faculty Careers and Work Lives: A Professional Growth Perspective*. ASHE Higher Education Report: Vol. 34. No. 3. San Francisco, California: Wiley Periodicals.
- Opello, Walter C. Jr., Stephen J. Rostow (1999). *The Nation-State and Global Order. A Historical Introduction to Contemporary Politics*. Boulder, Colorado: Lynne Rienner Publishers.
- Orenstein, Mitchell A. (2005). "The New Pension Reform as Global Policy". *Global Social Policy*. Vol. 5. No. 2.
- Orenstein, Mitchell A. (2006). *Out of the Red: Building Capitalism and Democracy in Postcommunist Europe*. Ann Arbor: University of Michigan Press.
- Orenstein, Mitchell A. (2008a). *Privatizing Pensions: The Transnational Campaign for Social Security Reform*. Princeton: Princeton University Press.
- Orenstein, Mitchell A. (2008b). "Postcommunist Welfare States". *Journal of Democracy*. Vol. 19. No. 4. October 2008. 80-94.
- Orenstein, Mitchell A., ed. (2009). *Pensions, Social Security, and the Privatization of Risk*. New York: Columbia University Press.
- Orenstein, Mitchell A., Martine R. Haas (2005). "Globalization and the Future of Welfare States in Post-Communist East-Central European Countries". In: Miguel Glatzer, Dietrich Rueschemeyer (eds.), *Globalization and the Future of the Welfare State*. Pittsburgh: University of Pittsburgh Press. 130-152.
- Orenstein, Mitchell A., Stephen Bloom, Nicole Lindstrom, eds. (2008). *Transnational Actors in Central and East European Transitions*. Pittsburgh: University of Pittsburgh Press.
- Orr, Dominic (2012). "Widening Access to Higher Education - What Can EUROSTUDENT Say About the New Challenges Emerging for Teaching and Learning?" In: Adrian Curaj, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part I*. Dordrecht: Springer. 173-189.
- Orr, Dominic, Christoph Gwosć, Nicolai Netz (2011). *Social and Economic Conditions of Student Life in Europe*. Synopsis of indicators. Final report. Eurostudent IV 2008-2011. Bielefeld: W. Bertelsmann Verlag.
- Ortiz, Luis, Aleksander Kucel (2008). "Do Fields of Study Matter for Over-Education?" *International Journal of Comparative Sociology*. Vol. 49. No. 4-5.
- O'Shea, Rory P., Thomas J. Allen, Kenneth P. Morse, Colm O'Gorman and Frank Roche (2007). "Delineating the anatomy of an entrepreneurial university: the Massachusetts Institute of Technology experience". *R&D Management*. Vol. 37. No. 1. 1-16.
- Osborne, David, Ted Gaebler (1993). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. New York: Penguin Books.
- Osborne, Stephen P., ed. (2010). *The New Public Governance? Emerging Perspectives on the Theory and Practice of Public Governance*. London: Routledge.
- Ostrom, Elinor (1990). *Governing the Commons. The Evolution of Institutions for Collective Actions*. Cambridge: CUP.

- O'Sullivan, Noël (2012). "The Rationale for the Retreat from the Welfare State". In: James Connelly, Jack Hayward (eds.), *The Withering of the Welfare State: Regression*. Basingstoke: Palgrave Macmillan. 21-36.
- Otto, Hans-Uwe, Holger Ziegler, eds. (2010). *Education, Welfare and the Capabilities Approach. A European Perspective*. Opladen and Farmington Hills: Barbara Budrich Publishers.
- Ougaard, Morten (2010). "The OECD's Global Role: Agenda-setting and Policy Diffusion". In: Kerstin Martens, Anja P. Jakobi (eds.), *Mechanisms of OECD Governance: International Incentives for National Policy-Making?* Oxford: Oxford University Press. 26-49.
- Ozga, Jenny (2000). *Policy Research in Educational Settings: Contested Terrain*. Buckingham: Open University Press.
- Ozga, Jenny, Terri Seddon, Thomas S. Popkewitz (2006). "Education Research and Policy - Steering the Knowledge-based Economy". In: Jenny Ozga, Terri Seddon, Thomas S. Popkewitz (eds.), *World Yearbook of Education 2006. Education Research and Policy: Steering the Knowledge-based Economy*. London: Routledge. 1-14.
- Palfreyman, David (2004). *The Economics of Higher Education: Affordability and Access; Costing, Pricing and Accountability*. Oxford: OxCHEPS.
- Palfreyman, David, T. Tapper (1999). *Oxford and the Decline of the Collegiate Tradition*. New York: Routledge.
- Palfreyman, David, T. Tapper, eds. (2009a). *Structuring Mass Higher Education. The Role of Elite Institutions*. London: Routledge.
- Palfreyman, David, Ted Tapper (2009b). "Structuring Mass Higher Education: Interpreting the Process of Change". In: David Palfreyman, Ted Tapper (eds.), *Structuring Mass Higher Education. The Role of Elite Institutions*. London: Routledge. 1-9.
- Palfreyman, David, Ted Tapper (2009c). "What is an 'Elite' or 'Leading Global' University?" In: David Palfreyman, Ted Tapper (eds.), *Structuring Mass Higher Education. The Role of Elite Institutions*. London: Routledge. 203-218.
- Palier, Bruno, ed. (2010a). *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press.
- Palier, Bruno (2010b). "Ordering Change: Understanding the 'Bismarckian' Welfare Reform Trajectory". In: Bruno Palier (ed.), *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press. 19-44.
- Pålsson, Carl Magnus, Bo Göransson and Claes Brundenius (2009). "Vitalizing the Swedish University System: Implementation of the 'Third Mission'". *Science and Public Policy*. Vol. 36. No. 2. 145-150.
- Papagiannidis, Savvas, Feng Li, Henry Etzkowitz (2009). "Entrepreneurial Networks: A Triple Helix Approach for Brokering Human and Social Capital". *The Journal of International Entrepreneurship*. Vol. 7. 215-235.
- Paradeise, Catherine (2012). "Tools and Implementation for a New Governance of Universities: Understanding Variability Between and Within Countries". In: Adrian Curaj, Peter Scott, Lazăr Vlăsceanu, Lesley Wilson (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Part 2*. Dordrecht: Springer. 573-598.

- Paradeise, Catherine, Emanuela Reale, Ivar Bleiklie, Ewan Ferlie, eds. (2009). *University Governance. Western European Comparative Perspectives*. Dordrecht: Springer.
- Park, Susan, Catherine Weaver (2012). "The Anatomy of Autonomy: The Case of the World Bank". In: Joel E. Oestreich (ed.), *International Organizations as Self-Directed Actors*. London: Routledge. 91-117.
- Paulsen, Michael B., John C. Smart (2001). *The Finance of Higher Education: Theory, Research, Policy and Practice*. New York: Agathon Press.
- Pearson, Richard (2006). "The Demise of the Graduate Labour Market". In: Ian McNay (ed.), *Beyond Mass Higher Education: Building On Experience*. Maidenhead: SRHE and Open University Press.
- Pedersen, Ove K. (2010). "Institutional Competitiveness: How Nations Came to Compete". In: Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen, Richard Whitley (eds.), *The Oxford Handbook of Comparative Institutional Analysis*. New York: Oxford University Press. 625-657.
- Perkin, Harold (1969). *Key Profession. The History of the Association of University Teachers*. London: Routledge & Kegan Paul.
- Perkin, Harold (2006). "History of Universities". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education*. Dordrecht: Springer.
- Perry, Beth, Michael Harloe (2007). "External Engagements and Internal Transformations: Universities, Localities and Regional Development". In: Alan Harding, Alan Scott, Stephan Laske, Christian Burtscher (eds.), *Bright Satanic Mills: Universities, Regional Development and the Knowledge Economy*. Aldershot: Ashgate. 25-37.
- Pestieau, Pierre (2006). *The Welfare State in the European Union: Economic and Social Perspectives*. Oxford, England: Oxford University Press.
- Peters, B. Guy (2005). *Institutional Theory in Political Science. The "New Institutionalism"*. London and New York: Continuum.
- Peters, B. Guy (2008). "Institutional Theory: Problems and Prospects". In: Jon Pierre, B. Guy Peters, Gerry Stoker (eds.), *Debating institutionalism*. Manchester and New York: Manchester University Press. 1-21.
- Peters, Guy, Jon Pierre, Gerry Stoker (2010). "The Relevance of Political Science". In: David Marsh, Gerry Stoker (eds.), *Theory and Methods in Political Science*. Third Edition. Basingstoke: Palgrave Macmillan. 325-342.
- Peterson, Marvin W. (1997). "Using Contextual Planning to Transform Institutions". In: Marvin W. Peterson, David D. Dill, Lisa A. Mets, and Associates (eds.), *Planning and Management for a Changing Environment*. San Francisco: Jossey-Bass. 127-157.
- Peterson, Marvin W. (2005). "A Serendipitous Search for a Career in Higher Education". In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XX*. Dordrecht: Springer. 1-53.
- Peterson, Marvin W. (2007). "The Study of Colleges and Universities as Organizations". In: Patricia J. Gumpert (ed.), *Sociology of Higher Education. Contributions and Their Contexts*. Baltimore: Johns Hopkins University Press. 147-184.

- Peterson, Marvin W., David D. Dill (1997). "Understanding the Competitive Environment of the Postsecondary Knowledge Industry". In: In: Marvin W. Peterson, David D. Dill, Lisa A. Mets, and Associates (eds.), *Planning and Management for a Changing Environment*. San Francisco: Jossey-Bass. 3-29.
- Peterson, Marvin W., David D. Dill, Lisa A. Mets, and Associates, eds. (1997). *Planning and Management for a Changing Environment*. San Francisco: Jossey-Bass.
- Pfeffer, Jeffrey (1982). *Organizations and Organization Theory*. Boston: Pitman Publishing.
- Pfeffer, Jeffrey, Gerald R. Salancik (2003). *The External Control of Organizations. A Resource Dependence Perspective*. Stanford: Stanford University Press.
- Phillips, David, Michele Schweisfurth (2007). *Comparative and International Education: An Introduction to Theory, Method, and Practice*. London and New York: Continuum.
- Phillipson, Chris (2009). "Social Welfare, Aging, and Globalization in a Post-Industrial Society". In: Jason Powell and Jon Hendricks (eds.), *The Welfare State in Post-Industrial Society. A Global Perspective*. Dordrecht: Springer. 57-70.
- Philpott, Kevin, Lawrence Dooley, Caroline O'Reilly, Gary Lupton (2011). "The entrepreneurial university: Examining the underlying academic tensions". *Technovation*. Vol. 31. 161-170.
- Pickles, John, Adrian Smith, eds. (1998). *Theorising Transition: The Political Economy of Post-Communist Transformations*. London: Routledge.
- Pierre, Jon, B. Guy Peters, Gerry Stoker, eds. (2008). *Debating institutionalism*. Manchester and New York: Manchester University Press.
- Pierson, Christopher (2006). *Beyond the Welfare State? The New Political Economy of Welfare*. Third Edition. Cambridge and Malden: Polity Press.
- Pierson, Paul (1994). *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment*. Cambridge: CUP.
- Pierson, Paul (2000). "Increasing Returns, Path Dependence, and the Study of Politics". *American Political Science Review*. Vol. 94.
- Pierson, Paul, ed. (2001a). *The New Politics of the Welfare State*. Oxford: Oxford University Press.
- Pierson, Paul (2001b). "Coping with Permanent Austerity: Welfare State Restructuring in Affluent Democracies". In: P. Pierson (ed.), *The New Politics of the Welfare State*. Oxford: Oxford UP.
- Pierson, Paul (2004). *Politics in Time. History, Institutions, and Social Analysis*. Princeton: Princeton University Press.
- Pierson, Paul (2006). "Public Policies as Institutions". In: I. Shapiro, S. Skowronek, D. Galvin (eds.), *Rethinking Political Institutions. The Art of the State*. New York: New York University Press.
- Pilegaard, Morten, Peter W. Moroz, and Helle Neergaard (2010). "An Auto-Ethnographic Perspective on Academic Entrepreneurship: Implications for Research in the Social Sciences and Humanities". *The Academy of Management Perspectives*. Vol. 24. No. 1. 46-61.
- Pinheiro, Rómulo, Paul Benneworth, Glen A. Jones, eds. (2012a). *Universities and Regional Development: A Critical Assessment of Tensions and Contradictions*. London: Routledge.

- Pinheiro, Rómulo, Paul Benneworth, Glen A. Jones (2012b). "Understanding Regions and the Institutionalization of Universities". In: Rómulo Pinheiro, Paul Benneworth, Glen A. Jones (eds.), *Universities and Regional Development: A Critical Assessment of Tensions and Contradictions*. London: Routledge. 11-32.
- Pinheiro, Rómulo, Glen A. Jones, Paul Benneworth (2012). "What Next? Steps towards a Recategorization of Universities' Regional Missions". In: Rómulo Pinheiro, Paul Benneworth, Glen A. Jones (eds.), *Universities and Regional Development: A Critical Assessment of Tensions and Contradictions*. London: Routledge. 241-255.
- Plano, Clark, Vicki L., Manijeh Badiiee (2010). "Research Questions in Mixed Methods Research". In: Abbas Tashakkori, Charles Teddlie (eds.), *SAGE Handbook of Mixed Methods in Social & Behavioral Research*. Los Angeles: SAGE. 275-304.
- Podolny, Joel M. (2005). *Status Signals: A Sociological Study of Market Competition*. Princeton: Princeton University Press.
- Polanyi, Karl (1957). *The Great Transformation. The Political and Economic Origins of Our Time*. Boston: Beacon Press.
- Polanyi, Michael (2002). "The Republic of Science: Its Political and Economic Theory". In: Philip Mirowski, Esther-Mirjam Sent (eds.), *Science: Bought and Sold. Essays in the Economics of Science*. Chicago and London: The University of Chicago Press. 465-485.
- Pontusson, Jonas (2005). *Inequality and Prosperity: Social Europe vs. Liberal America*. Ithaca: Cornell University Press.
- Porter, Katherine (2012). "Driven by Debt: Bankruptcy and Financial Failure in American Families". In: Katherine Porter (ed.), *How Debt Bankrupts the Middle Class*. Stanford: Stanford University Press. 1-21.
- Porter, Michael E. (1990). *The Competitive Advantage of Nations*. New York: the Free Press.
- Porter, Michael E. (2004). *On Competition* (Updated and Expanded Edition). Boston: Harvard Business School.
- Porter, Michael E., Xavier Sala-i-Martin, Klaus Schwab (2008). *The Global Competitiveness Report 2007-2008*. New York: Palgrave.
- Potter, Jonathan (2008). "Entrepreneurship and Higher Education: Future Policy Directions". In: J. Potter (ed.), *Entrepreneurship and Higher Education*. Paris: OECD Publishing. 313-335.
- Potůček, Martin (2008). "Metamorphoses of Welfare States in Central and Eastern Europe". In: Martin Seeleib-Kaiser (ed.), *Welfare State Transformations: Comparative Perspectives*. Basingstoke: Palgrave Macmillan. 79-95.
- Powell, Jason, Jon Hendricks, eds. (2009). *The Welfare State in Post-Industrial Society. A Global Perspective*. Dordrecht: Springer.
- Powell, Walter W., Paul J. Dimaggio, eds. (1991). *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press.
- Pressman, Jeffrey L., Aaron Wildavsky (1973). *Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing That Federal Programs Work At All This Being a Saga of the Economic Development Administration As Told By Two Sympathetic Observers Who Seek to Build Moral on a Foundation of Ruined Hopes*. Berkeley/Los Angeles/London: University of California Press.

- Preston, Samuel H., Patrick Heuveline, Michel Guillot (2001). *Demography: Measuring and Modeling Population Processes*. Oxford: Blackwell Publishers.
- Priest, Douglas M., Edward P. St. John, eds. (2006). *Privatization and Public Universities*. Bloomington: Indiana University Press.
- Przeworski, Adam (1991). *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. Cambridge: CUP.
- Psacharopoulos, George (1973). *Returns to Education: An International Comparison*. San Francisco: Jossey-Bass.
- Psacharopoulos, George, Maureen Woodhall (1985). *Education for Development: An Analysis of Investment Choices*. Oxford University Press.
- Psacharopoulos, George, ed. (1987). *Economics of Education Research and Studies*. Oxford: Pergamon Press.
- Pusser, Brian (2006). "Reconsidering Higher Education and the Public Good: The Role of Public Spheres". In: William G. Tierney (ed.), *Governance and the Public Good*. Albany: State University of New York Press. 11-27.
- Pusser, Brian (2012). "Power and Authority in the Creation of a Public Sphere Through Higher Education". In: Brian Pusser, Ken Kempner, Simon Marginson, Imanol Ordorika (eds.), *Universities and the Public Sphere: Knowledge Creation and State Building in the Era of Globalization*. New York: Routledge. 27-46.
- Pusser, Brian, Simon Marginson (2012). "The Elephant in the Room: Power, Politics, and Global Rankings in Higher Education". In: Michael N. Bastedo (ed.), *The Organization of Higher Education: Managing Colleges for a New Era*. Baltimore: The John Hopkins University Press. 86-117.
- Pusser, Brian, Ken Kempner, Simon Marginson, Imanol Ordorika, eds. (2012). *Universities and the Public Sphere: Knowledge Creation and State Building in the Era of Globalization*. New York: Routledge.
- Rama, Martin (2000). "Public Sector Downsizing: An Introduction". *The World Bank Economic Review*. Vol. 13. No. 1.
- Ramaley, Judith A. (2005). "Scholarship for the Public Good: Living in Pasteur's Quadrant". In: Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt (eds.), *Higher Education for the Public Good: Emerging Voices from a National Movement*. San Francisco: Jossey-Bass. 166-181.
- Ramirez, Francisco O. (2002). "Eyes Wide Shut: University, State and Society". *European Educational Research Journal*. Vol. 1. No. 2.
- Ramirez, Francisco O. (2006). "The Rationalization of Universities". In: Marie-Laure Djelic, Kerstin Sahlin-Andersson (eds.), *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge: Cambridge University Press. 225-244.
- Ramos-Vielba, Irene, Manuel Fernández-Esquinas, Elena Espinosa-de-los-Monteros (2010). "Measuring University-industry Collaboration in a Regional Innovation System". *Scientometrics*. Vol. 84. 649-667.
- Ramos-Vielba, Irene, Manuel Fernández-Esquinas (2011). "Beneath the Tip of the Iceberg: Exploring the Multiple Forms of University-industry Linkages". *Higher Education*. Published on 2 December 2011. 1-29.

- Ranga, Liana Marina, Koenraad Debackere, Nick von Tunzelmann (2003). "Entrepreneurial Universities and the Dynamics of Academic Knowledge Production: A Case Study of Basic vs. Applied Research in Belgium". *Scientometrics*. Vol. 58. 301-320.
- Readings, Bill (1996). *The University in Ruins*. Boston: Harvard University Press.
- Regini, Marino (2011). *European Universities and the Challenge of the Market: A Comparative Analysis*. Cheltenham: Edward Elgar.
- Reich, Robert B. (1992). *The Work of Nations. Preparing Ourselves for the 21<sup>st</sup> Century Capitalism*. New York: Vintage Books.
- Reichenfeld, Linda (2010). "The Barriers to Academic Engagement with Enterprise: A Social Scientist's Perspective". In: R.J. Howlett (ed.), *Innovation through Knowledge Transfer 2010*. SIST 9. 163-176.
- Reimer, David, Clemens Noelke (2008). "Labor Market Effects of Field of Study in Comparative Perspective. An Analysis of 22 European Countries". *International Journal of Comparative Sociology*. Vol. 49. No. 4-5. 305-327.
- Rhoades, Gary (1990). "Political Competition and Differentiation in Higher Education". In: Jeffrey C. Alexander, Paul Colomy (eds.), *Differentiation Theory and Social Change: Comparative and Historical Perspectives*. New York: Columbia University Press. 187-221.
- Rhoades, Gary (2007). "Distinctive Choices in Intersecting Markets: Seeking Strategic Niches". Roger L. Geiger, Carol L. Colbeck, Roger L. Williams, Christian K. Anderson (eds.), *Future of the American Public Research University*. Rotterdam/Taipei: Sense Publishers. 121-143.
- Rhoades, Gary (2010). "Envisioning Invisible Workforces: Enhancing Intellectual Capital". In: George Gordon, Celia Whitchurch (eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*. New York: Routledge. 35-53.
- Rhoades, Gary, Sheila Slaughter (2004). "Academic Capitalism in the New Economy: Challenges and Choices". *American Academic*. Vol. 1. No. 1. 37-60.
- Rhode, Deborah L. (2006). *In Pursuit of Knowledge: Scholars, Status, and Academic Culture*. Stanford: Stanford Law and Politics.
- Rhoten, Diana, Craig Calhoun, eds. (2011). *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press.
- Richards, Graham (2009). *Spin-Outs: Creating Businesses from University Intellectual Property*. Hampshire: Harriman House.
- Rieger, Elmar, Stephan Leibfried (2003). *Limits to Globalization*. Cambridge: Polity Press.
- Rigney, Daniel (2010). *The Matthew Effect: How Advantage Begets Further Advantage*. New York: Columbia University Press.
- RIHE (2006). *Reports on Changing Academic Profession Project Workshop on Quality, Relevance, and Governance in the Changing Academia: International Perspectives*. Hiroshima: RIHE.
- RIHE (2008). *The Changing Academic Profession in International Comparative and Quantitative Perspectives*. Hiroshima: Hiroshima University/RIHE.
- RIHE (2009). *The Changing Academic Profession over 1992-2007: International, Comparative and Quantitative Perspectives*. Hiroshima: Hiroshima University/RIHE.

- RIHE (2010). *The Changing Academic Profession in International and Quantitative Perspectives: A Focus on Teaching and Research Activities*. RIHE: Hiroshima.
- Ringer, Fritz K. (1990). *The Decline of the German mandarins: The German Academic Community, 1890-1933*. Hanover and London: University Press of New England.
- Rizvi, Fazal (2006). "The Ideology of Privatization in Higher Education: A Global Perspective". In: Douglas M. Priest, Edward P. St. John (eds.), *Privatization and Public Universities*. Bloomington: Indiana University Press. 65-84.
- Rizvi, Fazal, Bob Lingard (2010). *Globalizing Educational Policy*. London: Routledge.
- Robertson, Susan L. (2009a). "Europe, Competitiveness and Higher Education: An Evolving Project". In: Roger Dale, Susan Robertson (eds.), *Globalisation & Europeanisation in Education*. Oxford: Symposium Books. 65-83.
- Robertson, Susan L. (2009b). "Market Multilateralism, the World Bank Group, and the Asymmetries of Globalizing Higher Education: Toward a Critical Political Economy Analysis". In: Roberta Malee Bassett, Alma Maldonado-Maldonado (eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge. 113-131.
- Rodrik, Dani (1998). "Promises, Promises: Credible Policy Reform via Signalling". In: Federico Sturzenegger, Mariano Tommasi (eds.), *The Political Economy of Reform*. Cambridge & London: The MIT Press. 307-327.
- Rodrik, Dani, ed. (2003). *In Search of Prosperity: Analytic Narratives on Economic Growth*. Princeton: Princeton University Press.
- Rodrik, Dani (2007). *One Economics - Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton: Princeton University Press.
- Röhrs, Hermann (1995). *The Classical German Concept of the University and Its Influence on Higher Education in the United States*. Frankfurt a/Main: Peter Lang.
- Rooney, David, Greg, Hearn, Abraham Ninan, eds. (2005). *Handbook on the Knowledge Economy*. Cheltenham: Edward Elgar Publishing.
- Rosenzweig, Robert M., Barbara Turlington (1982). *The Research Universities and Their Patrons*. Berkeley, Los Angeles, London: University of California Press.
- Rothaermel, Frank T., Shanti D. Agung, Lin Jiang (2007). "University Entrepreneurship: A Taxonomy of the Literature". *Industrial and Corporate Change*. Vol. 16. No. 4. 691-791.
- Rothblatt, Sheldon, Björn Wittrock, eds. (1993). *The European and American university since 1800: Historical and sociological essays*. Cambridge: Cambridge University Press.
- Rothblatt, Sheldon, ed. (2012a). *Clark Kerr's World of Higher Education Reaches the 21st Century: Chapters in a Special History*. Dordrecht: Springer.
- Rothblatt, Sheldon (2012b). Clark Kerr: Two Voices. In: Sheldon Rothblatt (ed.), *Clark Kerr's World of Higher Education Reaches the 21st Century: Chapters in a Special History*. Dordrecht: Springer. 1-42.
- Rothgang, Heinz, Mirella Cacace, Simone Grimmeisen, Claus Wendt (2005). "The Changing Role of the State in Healthcare Systems". In: Stephan Leibfried, Michael Zürn (eds.), *Transformations of the State?* Cambridge: CUP. 187-212.

- Rothgang, Heinz, Mirella Cacace, Lorraine Frisina, Simone Grimmeisen, Achim Schmid, Claus Wendt (2010). *The State and Healthcare: Comparing OECD Countries*. Basingstoke: Palgrave Macmillan.
- Rüegg, Walter, ed. (2004). *A History of the University in Europe. Vol. III. Universities in the Nineteenth and Early Twentieth Centuries (1800-1945)*. Cambridge: CUP.
- Rueschemeyer, Dietrich (2009). *Usable Theory. Analytic Tools for Social and Political Research*. Princeton: Princeton UP.
- Ruggie, John Gerard (1982). "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order". *International Organization*. Vol. 36. No. 2. Spring 1982.
- Ruggie, John Gerard (1997). "Globalization and the Embedded Liberalism Compromise: The End of an Era?" Max Planck Institute for the Studies of Societies. Working Paper 97/1.
- Ruggie, John Gerard (1998). *Constructing the World Polity: Essays on International Institutionalization*. London: Routledge.
- Rumbley, Laura E., Ivan F. Pacheco, Philip G. Altbach (2008). *International Comparison of Academic Salaries*. Boston: CIHE.
- Sabatier, Paul A. (2007a). "Fostering the Development of Policy Theory". In: Paul A. Sabatier (ed.), *Theories of the Policy Process*. Boulder: Westview Press. 321-336.
- Sabatier, Paul A. (2007b). "The Need for Better Theories". In: Paul A. Sabatier (ed.), *Theories of the Policy Process*. Boulder: Westview Press. 3-17.
- Sabatier, Paul A., eds. (2007). *Theories of the Policy Process*. Boulder: Westview Press.
- Sachs, Jeffrey (1994). "Life in the Economic Emergency Room". In: John Williamson (ed.), *The Political Economy of Policy Reforms*. Washington DC: Institute for International Economics. 501-524.
- Sadlak, J. (1991). "Poland". In: P. G. Altbach (ed.), *International Higher Education. An Encyclopedia: Volume 2*. New York and London: Garland Publishing. 751-766.
- Sadlak, Jan, Philip G. Altbach, eds. (1997). *Higher Education Research at the Turn of the New Century: Structures, Issues, and Trends*. Paris: UNESCO Publishing.
- Salerno, Carlo (2004). "Public Money and Private Providers: Funding Channels and National Patterns in Four Countries". *Higher Education*. Vol. 48.
- Salerno, Carlo (2005). "Financing Higher Education: The Economics of Options, Trade-offs and Dilemmas". In: In: Luc Weber, Sjur Bergan (eds.), *The Public Responsibility for Higher Education and Research*. Strasbourg: Council of Europe Publishing. 181-192.
- Salerno, Carlo (2007). "A Service Enterprise: The Market Vision". In: Peter Maassen, Johan P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer. 119-132.
- Salerno, Carlo (2009). "Privatizing the Public European University". In: Christopher C. Morphet, Peter D. Eckel (eds.), *Privatizing the Public University. Perspectives from Across the Academy*. Baltimore: The Johns Hopkins University Press. 160-180.
- Salerno, Carlo, Ben Jongbloed, Stig Slipersaeter, Benedetto Lepori (2005). *CHINC. Changes in European Higher Education Institutions' Research Income, Structures and Strategies*. Enschede: CHEPS.
- Salmi, Jamil (2009). *The Challenge of Establishing World-Class Universities*. Washington DC: World Bank.

- Salmi, Jamil (2011a). "The Challenge of Establishing World-Class Research Universities in Developing Countries". In: Philip G. Altbach (ed.), *Leadership for World-Class Universities: Challenges for Developing Countries*. New York: Routledge. 224-240.
- Salmi, Jamil (2011b). "The Road to Academic Excellence: Lessons of Experience". In: Philip G. Altbach, Jamil Salmi (eds.), *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington, D.C.: The World Bank. 323-347.
- Salter, Ammon J., Ben R. Martin (2001). "The Economic Benefits of Publicly Funded Basic Research: A Critical Review". *Research Policy*. Vol. 30. 509-532.
- Sanderson, Michael (1999). *Education and economic decline in Britain, 1870 to the 1990s*. Cambridge: Cambridge University Press.
- Santiago, Paulo, Karine Tremblay, Ester Basri and Elena Arnal (2008a). *Tertiary Education for the Knowledge Society. Volume 1. Special Features: Governance, Funding, Quality*. Paris: OECD.
- Santiago, Paulo, Karine Tremblay, Ester Basri and Elena Arnal (2008b). *Tertiary Education for the Knowledge Society. Volume 2. Special Features: Equity, Innovation, Labour Market, Internationalisation*. Paris: OECD.
- Sapolsky, Harvey M. (1994). "Financing Science after the Cold War". In: David H. Guston, Kenneth Keniston (eds.), *The Fragile Contract: University Science and the Federal Government*. Cambridge and London: The MIT Press. 159-176.
- Sapolsky, Harvey M., Mark Zachary Taylor (2011). "Politics and the Science of Science Policy". In: Kaye Husbands Fealing, Julia I. Lane, John H. Marburger III, Stephanie S. Shipp (eds.), *The Science of Science Policy: A Handbook*. Stanford: Stanford University Press. 31-55.
- Sassen, Saskia (2007). *A Sociology of Globalization*. New York: W.W. Norton & Company.
- Saunders, Lesley, ed. (2007). *Educational Research and Policy-Making: Exploring the border country between research and policy*. London: Routledge.
- Saunders, Peter (2010). *Social Mobility Myths*. London: Civitas.
- Scharpf, Fritz W. (1996). "Economic Integration, Democracy and the Welfare-State". Max Plank Institute for the Study of Societies Working Paper 96/2, Cologne.
- Scharpf, Fritz (1999). "The Viability of Advanced Welfare States in the International Economy: Vulnerabilities and Options". Max Plank Institute for the Study of Societies Working Paper 99/9, Cologne.
- Scharpf, Fritz (2000a). "Negative Integration: States and the Loss of Boundary Control". In: Christopher Pierson, Francis G. Castles (ed.), *The Welfare State Reader*. Cambridge: Polity Press.
- Scharpf, Fritz W. (2000b). "Economic Changes, Vulnerabilities, and Institutional Capabilities". In: Fritz W. Scharpf, Vivien A. Schmidt (eds.), *Welfare and Work in the Open Economy. Volume 1. From Vulnerability to Competitiveness*. Oxford: Oxford University Press. 21-124.
- Scharpf, Fritz W. (2002). "The European Social Model: Coping with the Challenges of Diversity". Max Plank Institute for the Study of Societies Working Paper 02/8, Cologne.
- Scharpf, Fritz W. (2010). *Community and Autonomy: Institutions, Policies and Legitimacy in Multilevel Europe*. Frankfurt, New York: Campus Verlag.

- Scharpf, Fritz W., Vivien A. Schmidt, eds. (2000). *Welfare and Work in the Open Economy. Volume 1. From Vulnerability to Competitiveness*. Oxford: Oxford University Press.
- Schimank, Uwe, Markus Winnes (2000). "Beyond Humboldt? The Relationship Between Teaching and Research in European University Systems". *Science and Public Policy*. Vol. 27.
- Schmidt, Vivien A. (2002). *The Futures of European Capitalism*. New York: Oxford University Press.
- Schneider, Steffen, Achim Hurrelmann, Zuzana Krell-Laluhova, Frank Nullmeier, Achim Wiesner (2010). *Democracy's Deep Roots: Why the Nation State Remains Legitimate*. Basingstoke: Palgrave Macmillan.
- Schomburg, Harald (2011). "Employability and Mobility of Bachelor Graduates: The Findings of Graduate Surveys in Ten European Countries on the Assessment of the Impact of the Bologna Reform". In: Harald Schomburg, Ulrich Teichler (eds.), *Employability and Mobility of Bachelor Graduates in Europe. Key Results of the Bologna Process*. Rotterdam: Sense Publishers. 253-274.
- Schomburg, Harald, Ulrich Teichler (2006). *Higher Education and Graduate Employment in Europe. Results from Graduate Surveys from Twelve Countries*. Dordrecht: Springer.
- Schomburg, Harald, Ulrich Teichler, eds. (2011). *Employability and Mobility of Bachelor Graduates in Europe: Key Results of the Bologna Process*. Rotterdam: Sense Publishers.
- Schreyögg, Georg, Jörg Sydow (2010). "Understanding Institutional and Organizational Path Dependencies". In: Georg Schreyögg, Jörg Sydow (eds.), *The Hidden Dynamics of Path Dependence: Institutions and Organizations*. Basingstoke: Palgrave Macmillan.
- Schreyögg, Georg, Jörg Sydow, eds. (2010). *The Hidden Dynamics of Path Dependence: Institutions and Organizations*. Basingstoke: Palgrave Macmillan.
- Schubert, Klaus, Simon Hegelich, Ursula Bazant, eds. (2009a). *The Handbook of European Welfare Systems*. London: Routledge.
- Schubert, Klaus, Simon Hegelich, Ursula Bazant (2009b). "European Welfare Systems: Current State of Research and Some Theoretical Considerations". In: Klaus Schubert, Simon Hegelich, Ursula Bazant (eds.), *The Handbook of European Welfare Systems*. London: Routledge. 3-28.
- Schuller, Tom, Stéphan Vincent-Lancrin (2009). "OECD Work on the Internationalization of Higher Education: An Insider Perspective". In: Roberta Malee Bassett, Alma Maldonado-Maldonado (eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge. 64-81.
- Schulte, Peter (2004). "The Entrepreneurial University: A Strategy For Institutional Development". *Higher education in Europe*. Vol. 29. No. 2. 187-191.
- Schultz, Theodore W. (1963). *The Economic Value of Education*. New York and London: Columbia University Press.
- Schultz, Theodore W., ed. (1973). *Economics of the Family: Marriage, Children, and Human Capital*. Chicago: The University of Chicago Press.
- Schumpeter, Joseph A. (2009). *Can Capitalism Survive? Creative Destruction and the Future of the Global Economy*. New York: Harper Perennial Modern Thought.

- Schuster, Jack H. (2010). "The New University: What It Portends for the Academic Profession and Their 'Managers'". In: V. Lynn Meek, Leo Goedegebuure, Rui Santiago, Teresa Carvalho (eds.), *The Changing Dynamics of Higher Education Middle Management*. Dordrecht: Springer. 213-228.
- Schuster, Jack H. (2011). "The Professoriate's Perilous Path". In: J. C. Hermanowicz (ed.), *The American Academic Profession. Transformations in Contemporary Higher Education*. Baltimore: the Johns Hopkins University Press. 21-43.
- Schuster, Jack H., Martin J. Finkelstein (2006). *The American Faculty. The Restructuring of Academic Work and Careers*. Baltimore: Johns Hopkins University Press.
- Schwab, Klaus (2010). *The Global Competitiveness Report 2010-2011*. New York: Palgrave.
- Schwartz, Herman (2011). "Round up the Usual Suspects! Globalization, Domestic Politics, and Welfare State Change". In: Pete Alcock, Martin Powell (eds.), *Welfare Theory and Development. Volume IV*. London: SAGE. 25-53.
- Schwarz, Stefanie, Ulrich Teichler, eds. (2000a). *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer Academic Publishers.
- Schwarz, Stefanie, Ulrich Teichler (2000b). "Introduction: Comparing the Institutional Basis of Higher Education Research". In: Stefanie Schwarz, Ulrich Teichler (eds.), *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer Academic Publishers. 1-9.
- Schwarzenberger, Astrid, ed. (2008). *Public / Private Funding of Higher Education: A Social Balance*. Hannover: HIS.
- Scott, Peter (2000). "Higher Education Research in the Light of the Dialogue between Policy-makers and Practitioners". In: Ulrich Teichler, Jan Sadlak (eds.), *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press. 123-147.
- Scott, Peter (2003). "Challenges to Academic Values and the Organization of Academic Work in a Time of Globalization". *Higher Education in Europe*. Vol. XXVIII. No.3.
- Scott, Peter (2005a). "Divergence or Convergence? The Links between Teaching and Research in Mass Higher Education". In: R. Barnett (ed.), *Reshaping the University. New Relationships between Research, Scholarship and Teaching*. Maidenhead: Open University Press. 53-66.
- Scott, Peter (2005b). "The Opportunities and Threats of Globalization". In: G.A. Jones, P.L. McCarney, M.L. Skolnik (eds.), *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*. Toronto: University of Toronto Press. 42-55.
- Scott, Peter (2006). Higher Education in Central and Eastern Europe. In: James J. Forest and Philip G. Altbach (eds.), *International Handbook of Higher Education*. Dordrecht: Springer.
- Scott, Peter (2007). "Reflections on Private Higher Education Tendencies in Central and Eastern Europe". In: S. Slantcheva, D. C. Levy (eds.), *Private Higher Education in Post-Communist Europe. In Search of Legitimacy*. New York: Palgrave.

- Scott, Peter (2009). "Markets and New Modes of Knowledge Production". In: Jürgen Enders, Egbert de Weert (eds.), *The Changing Face of Academic Life: Analytical and Comparative Perspectives*. New York: Palgrave Macmillan. 58-77.
- Scott, Peter (2010). "Burton Clark's Half Century: Selected Writings 1956-2006". *London Review of Education*. Vol. 8. No. 3. 273-280.
- Scott, Peter (2011). "The University As a Global institution". In: Roger King, Simon Marginson, Rajani Naidoo (eds.), *Handbook on Globalization and Higher Education*. Cheltenham: Edward Elgar. 59-75.
- Scott, W. Richard, Raymond Levitt, Ryan J. Orr, eds. (2011). *Global Projects: Institutional and Political Challenges*. Cambridge: Cambridge University Press.
- Sebkova, Helena (2012). "The Czech Republic: High Estimation for the Academic Profession". In:
- Seeleib-Kaiser, Martin, ed. (2008a). *Welfare State Transformations: Comparative Perspectives*. Basingstoke: Palgrave Macmillan.
- Seeleib-Kaiser, Martin (2008b). "Welfare State Transformations in Comparative Perspective: Shifting Boundaries of 'Public' and 'Private' Social Policy?" In: Martin Seeleib-Kaiser (ed.), *Welfare State Transformations: Comparative Perspectives*. Basingstoke: Palgrave Macmillan. 1-13.
- Selznick, Philip (1957). *Leadership in Administration: A Sociological Interpretation*. Berkeley/Los Angeles/London: University of California Press.
- Shane, Scott (2004). *Academic Entrepreneurship. University Spinoffs and Wealth Creation*. Cheltenham: Edward Elgar.
- Shane, Scott (2005a). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. New Horizons in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- Shane, Scott, ed. (2005b). *Economic Development through Entrepreneurship: Government, University and Business Linkages. New Horizons in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- Shapiro, Harold T. (2005). *A Larger Sense of Purpose. Higher Education and Society*. Princeton: Princeton University Press.
- Shapiro, Ian, Stephen Skowronek and Daniel Galvin, eds. (2006). *Rethinking Political Institutions. The Art of the State*. New York: New York University Press.
- Sharma, Raj (2004). "Performance-Based Funding in the Entrepreneurial North American and Australian Universities". *Journal of Higher Education Policy and Management*. Vol. 26. No. 1. 109-118.
- Shattock, Michael (1988). "Financial Management in Universities: the Lessons from University College, Cardiff", *Financial Accountability and Management*. Vol. 4. No. 2. 99-112
- Shattock, Michael (1999). "Governance and management in universities: the way we live now". *Journal of Education Policy*. Vol. 14. No. 3. 271-282.
- Shattock, Michael (2000). "Strategic Management in European Universities in an Age of Increasing Institutional Self-Reliance". *Tertiary Education and Management*. Vol. 6. No. 2. 93-104
- Shattock, Michael (2002). "Re-Balancing Modern Concepts of University Governance", *Higher Education Quarterly*. Vol. 56. No. 3. 235-244.

- Shattock, Michael (2003a). *Managing Successful Universities*. Buckingham: SRHE and Open University Press.
- Shattock, Michael (2003b). "Research, Administration and University Management: What Can Research Contribute to Policy?" In: Roddy Begg (ed.), *The Dialogue between Higher Education Research and Practice: 25 Years of EAIR*. Dordrecht: Kluwer Academic Publishers. 55-66.
- Shattock, Michael, ed. (1983c). *The Structure and Governance of Higher Education*. Guildford: The Society for Research into Higher Education.
- Shattock, Michael, ed. (2004a). *Entrepreneurialism and the Transformation of Russian Universities*. Paris: UNESCO IIEP.
- Shattock, Michael (2004b). "Generating Non-State Income in European Universities". In: M. Shattock (ed.) *Entrepreneurialism and the Transformation of Russian Universities*. Paris: UNESCO IIEP.
- Shattock, Michael (2005). "European Universities for Entrepreneurship: Their Role in the Europe of Knowledge: The Theoretical Context". In: OECD, *Higher Education Management and Policy: Entrepreneurship*. Vol. 17. No. 3 – Special Issue. Paris: OECD. 13-25.
- Shattock, Michael (2006a). *Managing Good Governance in Higher Education*. Maidenhead: Open University Press.
- Shattock, Michael (2006b). "University Governance and the Role of the State". In: Ian McNay (ed.), *Beyond Mass Higher Education: Building On Experience*. Maidenhead: SRHE and Open University Press. 209-216.
- Shattock, Michael (2009a). *Entrepreneurialism in Universities and the Knowledge Economy. Diversification and Organizational Change in European Higher Education*. Maidenhead: Open University Press and SRHE.
- Shattock, Michael (2009b). "Entrepreneurialism and Organizational Change in Higher Education". In: M. Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Berkshire: SRHE & Open University Press. 1-8
- Shattock, Michael (2009c). "Research, Technology, and Knowledge Transfer". In: M. Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Berkshire: SRHE & Open University Press. 33-48
- Shattock, Michael (2010). "The Entrepreneurial University: An Idea for Its Time". *London Review of Education*. Vol. 8. No. 8. 263-271.
- Shattock, Michael, Paul Temple (2006). "Entrepreneurialism and the Knowledge Society: Some Conclusions from Cross-national Studies". A paper presented at the EAIR Forum, Rome.
- Shavit, Yossi, Richard Arum, Adam Gamoran, eds. (2007). *Stratification in Higher Education: A Comparative Study*. Stanford: Stanford University Press.
- Shin, Jung Cheol, Robert K. Toutkoushian (2011). "The Past, Present, and Future of University Rankings". In: Jung Cheol Shin, Robert K. Toutkoushian, Ulrich Teichler (eds.), *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*. Dordrecht: Springer. 1-16.

- Shin, Jung Cheol, Robert K. Toutkoushian, Ulrich Teichler, eds. (2011). *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*. Dordrecht: Springer.
- Socrates Institute (2011). "Demographic Tsunami". Warsaw: Socrates Institute.
- Siegel, Donald S., Mike Wright, Andy Lockett (2007). "The Rise of Entrepreneurial Activity at Universities: Organizational and Societal Implications". *Industrial and Corporate Change*. Vol. 16. No. 4. 489-504.
- Simmons, Beth A., Frank Dobbin, and Geoffrey Garret, eds. (2008). *The Global Diffusion of Markets and Democracy*. Cambridge: Cambridge University Press.
- Simmons, Richard, Martin Powell, Ian Greener, eds. (2009). *The Consumer in Public Services: Choice, Values and Difference*. Bristol: Policy Press.
- Sipilä, Jorma, Anelli Anttonen, and Teppo Kröger (2009). "A Nordic Welfare State in a Post-industrial Society". In: Jason Powell and Jon Hendricks (eds.), *The Welfare State in Post-Industrial Society. A Global Perspective*. Dordrecht: Springer. 181-200.
- Sissenich, Beate (2007). *Building States Without Society: European Union Enlargement and the Transfer of EU Social Policy to Poland and Hungary*. Lanham: Lexington Books.
- Skolnik, Michael L. (2005). "Reflections on the Difficulty of Balancing the University's Economic and Non-economic Objectives in Periods When Its Economic Role Is Highly Valued". In: G. A. Jones, P. L. McCarney, M. L. Skolnik (eds.), *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*. Toronto: University of Toronto Press. 106-126.
- Slantcheva, Snejana, Daniel C. Levy, eds. (2007). *Private Higher Education in Post-Communist Europe. In Search of Legitimacy*. New York: Palgrave/Macmillan.
- Slantcheva-Durst, Snejana (2010). "Ups and Downs across Central and Eastern Europe". *International Higher Education*. 61/Fall 2010. 13-14.
- Slaughter, Anne-Marie (2004). *A New World Order*. Princeton: Princeton University Press.
- Slaughter, Sheila, Larry L. Leslie (1997). *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore: Johns Hopkins University Press.
- Slaughter, Sheila, Gary Rhoades (2002). "The Emergence of a Competitiveness Research and Development Policy Coalition and the Commercialization of Academic Science Technology". In: Philip Mirowski, Esther-Mirjam Sent (eds.), *Science: Bought and Sold. Essays in the Economics of Science*. Chicago and London: The University of Chicago Press. 69-108.
- Slaughter, Sheila, Gary Rhoades (2004). *Academic Capitalism and the New Economy. Markets, State, and Higher Education*. Baltimore: Johns Hopkins University Press.
- Smith, Adrian, John Pickles (1998). "Introduction: Theorising Transition and The Political Economy of Transformation". In: John Pickles, Adrian Smith (eds.), *Theorising Transition: The Political Economy of Post-Communist Transformations*. London: Routledge. 1-22.
- Smith, Daryl G. (2009). *Diversity's Promise for Higher Education*. Baltimore: The Johns Hopkins University Press.
- Smith, Dean O. (2011). *Managing the Research University*. New York: Oxford University Press.

- Meira Soares, Virgilio A., Alberto M.S.C. Amaral (1999). "The Entrepreneurial University: How to Survive and Prosper in an Era of Global Competition". *Higher Education in Europe*. Vol. 24. No. 1. 11-21.
- Sørensen, Georg (2006). "The Transformation of the State". In: Colin Hay, Michael Lister, David Marsh (eds.), *The State: Theories and Issues*. Basingstoke: Palgrave Macmillan. 190-208.
- Sörlin, Sverker, Hebe Vessuri (2007). "Introduction: The Democratic Deficit of Knowledge Economies". In: Sverker Sörlin, Hebe Vessuri (eds.), *Knowledge Society vs. Knowledge Economy: Knowledge, Power, and Politics*. New York: Palgrave Macmillan. 1-33.
- Spence, A. Michael (1974). *Market Signaling: Informational Transfer in Hiring and Related Screening Processes*. Cambridge: Harvard University Press.
- Sporn, Barbara (1999a). "Towards More Adaptive Universities: Trends of Institutional Reform in Europe". *Higher Education in Europe*. Vol. XXIV. No. 1. 23-33
- Sporn, Barbara (1999b). *Adaptive University Structures. An Analysis of Adaptations to Socioeconomic Environments of US and European Universities*, London: Jessica Kingsley.
- Sporn, Barbara (2001). "Building Adaptive Universities: Emerging Organisational Forms Based on Experiences of European and US Universities". *Tertiary Education and Management*. Vol. 7. No. 2. 121-134.
- Sporn, Barbara (2006). "Governance and Administration: Organizational and Structural Trends". In: James J. F. Forest, Philip G. Altbach (eds.), *International Handbook of Higher Education*. Dordrecht: Springer.
- Spring, Joel (2009). *Globalization of Education: An Introduction*. New York: Routledge.
- Spulber, Nicolas (1997). *Redefining the State: Privatization and Welfare Reform in Industrial and Transitional Economies*. Cambridge, England: Cambridge University Press.
- Spybey, Tony (1996). *Globalization and World-Society*. Cambridge: Polity Press.
- St. John, Edward P. (2003). *College Dream: Access, Equal Opportunity, and Justice for Taxpayers*. Baltimore: The John Hopkins University Press.
- St. John, Edward P. (2006). *Education and the Public Interest. School Reform, Public Finance and Access to Higher Education*. Dordrecht: Springer.
- St. John, Edward P. (2006). "Privatization and the Public Interest". In: Douglas M. Priest, Edward P. St. John (eds.), *Privatization and Public Universities*. Bloomington: Indiana University Press. 247-270.
- St. John, Edward P., Douglas M. Priest (2006). "Privatization in Public Universities". In: Douglas M. Priest, Edward P. St. John (eds.), *Privatization and Public Universities*. Bloomington: Indiana University Press. 271-284.
- St. John, Edward P., Shouping Hu, Amy S. Fisher (2011). *Breaking Through the Access Barrier. How Academic Capital Formation Can Improve Policy in Higher Education*. New York: Routledge.
- Staber, Udo (2005). "Entrepreneurship as a Source of Path Dependency". In: Gerhard Fuchs, Philip Shapira (eds.), *Rethinking Regional Innovation and Change: Path Dependency or Regional Breakthrough?* New York: Springer. 107-126.

- Standing, Guy (1996). "Social Protection in Central and Eastern Europe: a Tale of Slipping Anchors and Torn Safety Nets". In: Gøsta Esping-Andersen (ed.), *Welfare States in Transition: National Adaptations in Global Economies*. London: SAGE. 225-255.
- Stankiewicz, Rikard (1986). *Academics and Entrepreneurs: Developing University-Industry Relations*. London: Frances Pinter Publishers.
- Stehr, Nico (1994). *Knowledge Societies*. SAGE Publications.
- Stehr, Nico (2002). *Knowledge and Economic Conduct. The Social Foundations of the Modern Economy*. Toronto: University of Toronto Press.
- Steiner-Khamsi, Gita (2012). "Understanding Policy Borrowing and Lending. Building Comparative Policy Studies". In: G. Steiner-Khamsi and F. Waldow (eds.), *Policy Borrowing and Lending in Education*. London and New York: Routledge. 3-17.
- Steinmo, Sven, Kathleen Thelen, Frank Longstreth, eds. (1992). *Structuring Politics. Historical Institutionalism in Comparative Analysis*. New York: Cambridge University Press.
- Steinmueller, W. Edward (2009). "Technology policy: the roles of industrial analysis and innovation studies". In: Dominique Foray (ed.), *The New Economics of Technology Policy*. Cheltenham: Edward Elgar. 17-32.
- Stensaker, Bjørn, Lee Harvey, eds. (2011). *Accountability in Higher Education: Global Perspectives on Trust and Power*. New York: Routledge.
- Stephan, Paula, Sharon Levin (1992). *Striking the Mother Lode in Science: The Importance of Age, Place, and Time*. Oxford: Oxford University Press.
- Stephen, Frank H., David Urbano, Stefan van Hemmen (2005). "The Impact of Institutions on Entrepreneurial Activity". *Managerial and Decision Economics*. Vol. 26. 413-419.
- Steunenberg, Bernard, Frans van Vught, eds. (1997). *Political Institutions and Public Policy: Perspective on European Decision Making*. Dordrecht: Kluwer Academic Publishers.
- Stiglitz, Joseph E. (2000). *Economics of the Public Sector*. Third Edition. New York: W.W. Norton & Company.
- Stiglitz, Joseph E. (2001). "The Theory of 'Screening', Education, and the Distribution of Income". In: Nicholas Barr (ed.), *Economic Theory and the Welfare State. Volume III: Benefits in Kind*. Cheltenham: Edward Elgar. 354-371.
- Stråth, Bo (2009). "Path Dependence Versus Path-breaking Crises: An Alternative View". In: Lars Magnusson, Jan Ottosson (eds.), *The Evolution of Path Dependence*. Cheltenham: Edward Elgar. 19-42.
- Streeck, Wolfgang (2009). *Re-Forming Capitalism: Institutional Change in the German Political Economy*. New York: Oxford University Press.
- Streeck, Wolfgang (2010). "Institutions in History: Bringing Capitalism Back In". in: Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen, Richard Whitley (eds.), *The Oxford Handbook of Comparative Institutional Analysis*. New York: Oxford University Press. 659-686.
- Streeck, Wolfgang, Kathleen Thelen, eds. (2005). *Beyond Continuity. Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.
- Streeck, Wolfgang, Kathleen Thelen (2009). "Institutional Change in Advanced Political Economies". In: Bob Hancké, (ed.), *Debating Varieties of Capitalism: A Reader*. New York: Oxford University Press. 95-131.

- Sturzenegger, Federico, Mariano Tommasi, eds. (1998). *The Political Economy of Reform*. Cambridge & London: The MIT Press.
- Suleiman, Ezra (2003). *Dismantling Democratic States*. Princeton: Princeton University Press.
- Sullivan, William M., Matthew S. Rosin (2008). *A New Agenda for Higher Education. Shaping a Life of the Mind for Practice*. San Francisco: Jossey-Bass.
- Svallfors, Stefan, ed. (2005). *Analyzing Inequality: Life Chances and Social Mobility in Comparative Perspective*. Stanford: Stanford University Press.
- Svallfors, Stefan, ed. (2012a). *Contested Welfare States: Welfare Attitudes in Europe and Beyond*. Stanford: Stanford University Press.
- Svallfors, Stefan (2012b). "Welfare States and Welfare Attitudes". In: Stefan Svallfors (ed.), *Contested Welfare States: Welfare Attitudes in Europe and Beyond*. Stanford: Stanford University Press. 1-24.
- Svallfors, Stefan, Peter Taylor-Gooby, eds. (1999). *The End of the Welfare State? Responses to State Retrenchment*. London: Routledge.
- Svensson, Peter, Magnus Klofsten, Henry Etzkowitz (2012). "An Entrepreneurial University Strategy for Renewing a Declining Industrial City: The Norrköping Way". *European Planning Studies*. Vol. 20. No. 4. 505-525.
- Swank, Duane (2001). "Political Institutions and Welfare State Restructuring. The Impact of Institutions on Social Policy Change in Developed Democracies". In: Paul Pierson (ed.), *The New Politics of the Welfare State*. Oxford: Oxford UP.
- Swank, Duane (2002). *Global Capital, Political Institutions, and Policy Change in Developed Welfare States*. Cambridge: Cambridge University Press.
- Swank, Duane (2010). "Globalization". In: Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, Christopher Pierson (eds.), *The Oxford Handbook of the Welfare State*. New York: Oxford University Press. 318-330.
- Szczepański, Jan (1974). *Higher Education in Eastern Europe*. New York: International Council for Educational Development.
- Szczepański, Jan (1978). *Systems of Higher Education: Poland*. New York: International Council for Educational Development.
- Szczepański, Jan (1997). "Higher Education as an Object of Research: A Reflection". In: Jan Sadlak, Philip G. Altbach (eds.), *Higher Education Research at the Turn of the New Century: Structures, Issues, and Trends*. Paris: UNESCO Publishing. 349-357.
- Szelenyi, Ivan, Katarzyna Wilk (2010). "Institutional Transformation in European Post-Communist Regimes". In: Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen, Richard Whitley (eds.), *The Oxford Handbook of Comparative Institutional Analysis*. New York: Oxford University Press. 565-585.
- Tachibanaki, Toshiaki (1995). "Education, Occupation, and Earnings". In: Martin Carnoy (ed.), *International Encyclopedia of Economics of Education*. New York: Elsevier. 145-149.
- Tandberg, David A. (2010). "Politics, Interest Groups and State Funding of Public Higher Education". *Research in Higher Education*. Vol. 51. No. 5. 416-450.
- Tanzi, Vito, ed. (1993). *Transition to Market: Studies in Fiscal Reform*. Washington: International Monetary Fund.

- Tanzi, Vito (2001). "Taxation and the Future of Social Protection". In: Anthony Giddens (ed.), *The Global Third Way Debate*. Cambridge: Polity Press.
- Tanzi, Vito (2011). *Government versus Market: The Changing Economic Role of the State*. Cambridge: Cambridge University Press.
- Tapper, Ted (2007). *The Governance of British Higher Education. The Struggle for Policy Control*. Dordrecht: Springer.
- Tapper, Ted, Brian Salter (1992). *Oxford, Cambridge and the Changing Idea of the University: The Challenge to Donnish Domination*. Buckingham: SRHE & Open University Press.
- Tapper, Ted, David Palfreyman (2000). *Oxford and the Decline of the Collegiate Tradition*. London: Routledge.
- Tapper, Ted, David Palfreyman (2009). "Conclusion: Converging Systems of Higher Education?" In: David Palfreyman, Ted Tapper (eds.), *Structuring Mass Higher Education. The Role of Elite Institutions*. London: Routledge. 321-333.
- Taylor-Gooby, Peter, ed. (2004a). *New Risks, New Welfare. The Transformation of the European Welfare State*. Oxford: Oxford University Press.
- Taylor-Gooby, Peter (2004b). "New Risks and Social Change". In: Peter Taylor-Gooby (ed.), *New Risks, New Welfare. The Transformation of the European Welfare State*. Oxford: Oxford UP. 3-28.
- Taylor-Gooby, Peter (2004c). "New Social Risks and Welfare States: New Paradigm and New Politics?" In: Peter Taylor-Gooby (ed.), *New Risks, New Welfare. The Transformation of the European Welfare State*. Oxford: Oxford UP. 209-238.
- Taylor-Gooby, Peter, ed. (1998). *Choice and Public Policy: The Limits to Welfare Markets*. Houndmills: Macmillan.
- Teepie, Gary (1995). *Globalization and the Decline of Social Reform*. Toronto: Garamond Press.
- Teichler, Ulrich (1988). *Changing Patterns of the Higher Education System: The Experience of Three Decades*. London: Jessica Kingsley Publishers.
- Teichler, Ulrich (1993). "Structures of Higher Education Systems in Europe". In: Claudius Gellert (ed.), *Higher Education in Europe*. London: Jessica Kingsley Publishers. 23-36.
- Teichler, Ulrich (2000a). "Higher Education Research and its Institutional Basis". In: Stefanie Schwarz, Ulrich Teichler (eds.), *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer Academic Publishers. 13-24.
- Teichler, Ulrich (2000b). "The Relationships Between Higher Education Research and Higher Education Policy and Practice: The Researchers' Perspective". In: Ulrich Teichler, Jan Sadlak (eds.), *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press. 3-34.
- Teichler, Ulrich (2003). "Higher Education Research Europe". In: Roddy Begg (ed.), *The Dialogue between Higher Education Research and Practice: 25 Years of EAIR*. Dordrecht: Kluwer Academic Publishers. 47-54.
- Teichler, Ulrich (2005). "Research on Higher Education in Europe". *European Journal of Education*. Vol. 40. No. 4. 447-469.

- Teichler, Ulrich (2006a). "Has the Research University in Europe a Future?". In: Guy Neave, Kjell Blücker, Thorsten Nybom (eds.), *The European Research University. An Historical Parenthesis?* New York: Palgrave Macmillan. 165-176.
- Teichler, Ulrich (2006b). "Principles of Comparative Higher Education Research". In: *Reports on Changing Academic Profession Project Workshop on Quality, Relevance, and Governance in the Changing Academia: International Perspectives*. Hiroshima: RIHE. 267-277.
- Teichler, Ulrich, ed. (2007a). *Careers of University Graduates. Views and Experiences in Comparative Perspectives*. Dordrecht: Springer.
- Teichler, Ulrich (2007b). *Higher Education Systems: Conceptual Frameworks, Comparative Perspectives, Empirical Findings*. Rotterdam: Sense Publishers.
- Teichler, Ulrich (2007c). "Does Higher Education Matter? Lessons from a Comparative Graduate Survey". *European Journal of Education*. Vol. 42. No. 1. 11-34.
- Teichler, Ulrich (2008). "Diversification? Trends and Explanations of the Shape and Size of Higher Education". *Higher Education*. Vol. 56. 349-379.
- Teichler, Ulrich (2009). *Higher Education and the World of Work. Conceptual Frameworks, Comparative Perspectives, Empirical Findings*. Rotterdam/Taipei: Sense Publishers.
- Teichler, Ulrich (2011a). "Bologna – Motor or Stumbling Block for the Mobility and Employability of Graduates?" In: Harald Schomburg, Ulrich Teichler (eds.), *Employability and Mobility of Bachelor Graduates in Europe. Key Results of the Bologna Process*. Rotterdam: Sense Publishers. 3-42.
- Teichler, Ulrich (2011b). "Social Context and Systemic Consequence of University Rankings: A Meta-Analysis of the Ranking Literature". In: Jung Cheol Shin, Robert K. Toutkoushian, Ulrich Teichler (eds.), *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*. Dordrecht: Springer. 55-69.
- Teichler, Ulrich (2011c). "The Future of University Rankings". In: Jung Cheol Shin, Robert K. Toutkoushian, Ulrich Teichler (eds.), *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*. Dordrecht: Springer. 259-265.
- Teichler, Ulrich, Yasemin Yağcı (2009). "Changing Challenges of Academic Work: Concepts and Observations". In: V. Lynn Meek, Ulrich Teichler, Mary-Louise Kearney (eds.), *Higher Education, Research and Innovation: Changing Dynamics*. Kassel: INCHER. 85-145.
- Ulrich Teichler and Ester Ava Höhle, eds. (2012). *The Work Situation, the Views and the Activities of the Academic Profession: Findings of a Questionnaire Survey in Twelve European Countries*. Dordrecht: Springer.
- Teichler, Ulrich, Jan Sadlak, eds. (2000). *Higher Education Research: Its Relationship to Policy and Practice*. Oxford, New York: Pergamon Press.
- Teixeira, Pedro N. (2009). "Economic Imperialism and the Ivory Tower: Some Reflections Upon the Funding of Higher Education in the EHEA (2010-2020)". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 43-60.

- Teixeira, Pedro N. (2012). "The Changing Public-Private Mix in Higher Education: Analysing Portugal's Apparent Exceptionalism". In: Guy Neave, Alberto Amaral (eds.), *Higher Education in Portugal 1974-2009: A Nation, a Generation*. Dordrecht: Springer. 307-328.
- Teixeira, Pedro, Maria João Rosa, Alberto Amaral (2002). "Is There a Higher Education Market in Portugal?" In: Pedro Teixeira, Ben Jongbloed, David Dill, Alberto Amaral (eds.), *Markets in Higher Education: Rhetoric or Reality?* Dordrecht: Kluwer Academic Publishers. 291-310.
- Teixeira, Pedro, Alberto Amaral (2001). "Private Higher Education and Diversity: An Exploratory Survey". *Higher Education Quarterly*. Vol. 55. No. 4. 359-395.
- Teixeira, Pedro, Alberto Amaral (2007). "Waiting for the Tide to Change? Strategies for Survival of Portuguese HEIs". *Higher Education Quarterly*. Vol. 61. No. 2. 208-222.
- Teixeira, Pedro, Maria João Rosa, Alberto Amaral (2008). "A Broader Church? Expansion, Access and Cost-sharing in Portuguese Higher Education". In: Pedro Teixeira, D. Bruce Johnstone, Maria J. Rosa, Hans Vossensteyn (eds.), *Cost-sharing and Accessibility in Higher Education: A fairer Deal?* Dordrecht: Springer. 241-264.
- Teixeira, Pedro N., David D. Dill (2011). "Introduction – The Many Faces of Marketization in Higher Education". In: Pedro N. Teixeira, David D. Dill (eds.), *Public Vices, Private Virtues? Assessing the Effects of Marketization in Higher Education*. Rotterdam/Boston/Taipei: Sense Publishers. vii-xxiii.
- Teixeira, Pedro, Ben Jongbloed, David Dill, Alberto Amaral, eds. (2004). *Markets in Higher Education. Rhetoric or Reality?* Dordrecht: Kluwer.
- Teixeira, Pedro, D. Bruce Johnstone, Maria J. Rosa, Hans Vossensteyn, eds. (2006). *Cost-Sharing and Accessibility in Higher Education: A Fairer Deal?* Dordrecht: Springer.
- Teixeira, Pedro N., David D. Dill, eds. (2011). *Public Vices, Private Virtues? Assessing the Effects of Marketization in Higher Education*. Rotterdam/Boston/Taipei: Sense Publishers.
- Temple, Paul (2006). "Intervention in a Higher Education Market: A Case Study". *Higher Education Quarterly*. Vol. 60. No. 3. 257-269
- Temple, Paul (2009). "Teaching and Learning: An Entrepreneurial Perspective". In: M. Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Berkshire: Society for Research into Higher Education & Open University Press. 49-73.
- Temple, Paul (2011). "Accountability in Eastern Europe". In: Bjørn Stensaker, Lee Harvey (eds.), *Accountability in Higher Education: Global Perspectives on Trust and Power*. New York: Routledge. 93-109.
- Temple, Paul, ed. (2012a). *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge.
- Temple, Paul (2012b). "Introduction: The Development of the University's Role in the Knowledge Economy". In P. Temple (ed.), *Universities in the Knowledge Economy. Higher Education Organisation and Global Change*. London and New York: Routledge.

- Temple, Paul (2012c). "University Organisation and Knowledge Production". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 11-18.
- Ternouth, Philip (2012). "Universities as Knowledge Producers". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 38-62.
- Ternouth, Philip, Keith Herrmann, David Docherty (2010). "Absorbing Research: The role of university research in business and market innovation". London: CIHE.
- Thelen, Kathleen (2002). "The Political Economy of Business and Labor in the Developed Democracies". In: Ira Katznelson, Helen V. Milner (eds.), *Political Science: State of the Discipline*. New York: W.W. Norton & Company. 371-397.
- Thelen, Kathleen (2003). "How Institutions Evolve. Insights from Comparative Historical Analysis". In: James Mahoney, Dietrich Rueschemeyer (eds.), *Comparative Historical Analysis in the Social Sciences*. Cambridge: Cambridge University Press.
- Thelen, Kathleen (2010). "Beyond Comparative Statics: Historical Institutional Approaches to Stability and Change in the Political Economy of Labor". In: Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen, Richard Whitley (eds.), *The Oxford Handbook of Comparative Institutional Analysis*. New York: Oxford University Press. 41-61.
- Thelen, Kathleen, Sven Steinmo (1992). "Historical Institutionalism in Comparative Politics". In: Sven Steinmo, Kathleen Thelen, Frank Longstreth (eds.), *Structuring Politics: Historical institutionalism in comparative analysis*. New York: Cambridge University Press. 1-32.
- Tierney, William G. (2006a). *Trust and the Public Good*. New York: Lang.
- Tierney, William G. (2006b). "The Examined University: Process and Change in Higher Education". In: William G. Tierney (ed.), *Governance and the Public Good*. Albany: State University of New York Press. 1-10.
- Tierney, William G. (2008). *The Impact of Culture on Organizational Decision Making: Theory and Practice in Higher Education*. Sterling: Stylus Pub.
- Tierney, William G., Randall F. Clemens (2002). "Qualitative Research and Public Policy: The Challenges of Relevance and Trustworthiness". In: John C. Smart, Michael B. Paulsen (eds.), *Higher Education: Handbook of Theory and Research. Volume 26*. Dordrecht: Springer. 57-83.
- Tierney, William G, Guilbert C. Hentschke (2007). *New Players, Different Game. Understanding the Rise of For-Profit Colleges and Universities*. Baltimore: Johns Hopkins University Press.
- Tierney, William G., ed. (1998). *The Responsive University. Restructuring for High Performance*. Baltimore: Johns Hopkins University Press.
- Tight, Malcolm (2003). *Researching Higher Education*. Buckingham: SRHE and Open University Press.
- Tight, Malcolm, ed. (2004). *The RoutledgeFalmer Reader in Higher Education*. New York: RoutledgeFalmer.
- Tight, Malcolm (2006). "Changing Understandings of 'Public' and 'Private' in Higher Education: The United Kingdom Case". *Higher Education Quarterly*. Vol. 60. No. 3.

- Tilly, Charles (1984). *Big Structures. Large Processes. Huge Comparisons*. New York: Russell Sage Foundation.
- Tilly, Charles (2006). "Why and How History Matters". In: Robert E. Goodin, Charles Tilly (eds.), *The Oxford Handbook of Contextual Political Analysis*. Oxford: Oxford University Press. 417-437.
- Titmuss, Richard M. (1968). *Commitment to Welfare*. London: George Allen and Unwin.
- Todorovic, Zelimir William, Rod B. McNaughton, Paul Guild (2011). "ENTRE-U: An entrepreneurial orientation scale for universities". *Technovation*. Vol. 31. 128-137.
- Tomka, B. (2005). "The Politics of Institutionalized Volatility: Lessons from East Central European Welfare Reforms". In: M. Cain, N. Gelazis, T. Inglot (eds.), *Fighting Poverty and Reforming Social Security: What Can Post-Soviet States Learn From the New Democracies of Central Europe?* Washington DC: Woodrow Wilson Center. 67-85.
- Tomusk, Voldemar (2004). *The Open World and Closed Societies. Essays on Higher Education Policies 'In Transition'*. New York: Palgrave.
- Tomusk, Voldemar, ed. (2006). *Creating the European Area of Higher Education. Voices from the Periphery*. Dordrecht: Springer.
- Torres, Gerver, Sarita Mathur (1996). *The Third Wave of Privatization. Privatization of Social Sectors in Developing Countries*. World Bank: Author.
- Toutkoushian, Robert K. (2003a). "Weathering the Storm: Generating Revenues for Higher Education During a Recession". In: F. K. Alexander, R. G. Ehrenberg (eds.), *Maximizing Revenue in Higher Education. New Directions for Institutional Research*. San Francisco, California: A Wiley Periodicals. 27-40.
- Toutkoushian, Robert K. (2003b). "What Can Labor Economics Tell Us About the Earnings and Employment Prospects for Faculty?" In: John C. Smart (ed.), *Higher Education: Handbook of Theory and Research. Volume XVIII*. Dordrecht: Kluwer Academic Publishers. 263-322.
- Trani, Eugene P., Robert D. Holsworth (2010). *The Indispensable University: Higher Education, Economic Development, and the Knowledge Economy*. Lanham: Rowman & Littlefield Publishers.
- Trani, Eugene P., Robert D. Holsorth (2012). "Universities, Communities and Knowledge in the United States". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 139-156.
- Trends V* (2007). *Trends V: Universities Shaping the European Higher Education Area. An EUA Report*. By David Crosier, Lewis Purser and Hanne Smidt. Brussels: EUA.
- Tresch, Richard W. (2008). *Public Sector Economics*. Basingstoke, New York: Palgrave Macmillan.
- Trow, Martin A. (1984). "The Analysis of Status". In: Burton R. Clark (ed.), *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press. 132-164.
- Trow, Martin A. (2007). "Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education In Modern Societies Since WWII". In: J. J. F Forest, P. G. Altbach (eds.), *International Handbook of Higher Education*. Dordrecht: Springer.

- Trowler, Paul R. (2003). *Education Policy*. London: Routledge.
- Trowler, Paul R. (2008). *Cultures and Change in Higher Education: Theories and Practice*. Basingstoke, New York: Palgrave Macmillan.
- Trowler, Paul R. (2012). "Disciplines and Academic Practices". In: Paul Trowler, Murray Saunders, Veronica Bamber (eds.), *Tribes and Territories in the 21st Century: Rethinking the Significance of Disciplines in Higher Education*. London: Routledge. 30-38.
- Trowler, Paul R., Peter T. Knight (2002). "Exploring the Implementation Gap: Theory and Practices in Change Interventions". In: Paul R. Trowler (ed.), *Higher Education Policy and Institutional Change: Intentions and Outcomes in Turbulent Environments*. Buckingham: SRHE & Open University Press. 142-163.
- Trowler, Paul R., ed. (2002). *Higher Education Policy and Institutional Change: Intentions and Outcomes in Turbulent Environments*. Buckingham: SRHE & Open University Press.
- Trowler, Paul, Murray Saunders, Veronica Bamber, eds. (2012). *Tribes and Territories in the 21st Century: Rethinking the significance of disciplines in higher education*. London: Routledge.
- UNDP (2007). *Edukacja dla pracy. Raport o Rozwoju Społecznym Polska 2007 (Education for Work. A Report on Social Development – Poland 2007)*. Ed. by Sztanderska, Urszula. Warszawa: UNDP.
- UNESCO-CEPES (2000). *Ten Years After and Looking Ahead: A Review of the Transformations of Higher Education in Central and Eastern Europe*. Bucharest: UNESCO.
- United Nations (2001). *Globalization and the State. World Public Sector Report 2001*. New York: Author.
- Unterhalter, Elaine (2007). *Gender, Schooling and Global Social Justice*. London: Routledge.
- Unterhalter, Elaine, Vincent Carpentier (2010a). "Introduction. Whose Interests are We Serving? Global Inequalities and Higher Education". In: Elaine Unterhalter, Vincent Carpentier (eds.), *Global Inequalities and Higher Education: Whose interests are we serving?* Basingstoke: Palgrave Macmillan. 1-39.
- Unterhalter, Elaine, Vincent Carpentier, eds. (2010b). *Global Inequalities and Higher Education: Whose interests are we serving?* Basingstoke: Palgrave Macmillan.
- Usher, Alex, Amy Cervenak (2005). *Global Higher Education Rankings. Affordability and Accessibility in Comparative Perspective 2005*. Washington DC.
- Usher, Alex, Massimo Savino (2009). "A Global Survey of University Ranking and League Tables". In: Malcolm Tight, Ka Ho Mok, Jeroen Huisman, Christopher C. Morphew (eds.), *The Routledge International Handbook of Higher Education*. New York: Routledge. 255-264.
- Välilä, Jussi (1999). "Managing a Diverse System of Higher Education". In: Mary Henkel, Brenda Little (eds.), *Changing Relationships Between Higher Education and the State*. London: Jessica Kingsley Publishers. 23-41.

- Välilä, Jussi (2008a). "Cultural Studies in Higher Education Research". In: Jussi Välilä, Oili-Helena Ylijoki (eds.), *Cultural Perspectives on Higher Education*. Dordrecht: Springer. 9-25.
- Välilä, Jussi (2008b). "On Comparative Research in Higher Education". In: Alberto Amaral, Ivar Bleiklie, Christine Musselin (eds.), *From Governance to Identity: A Festschrift for Mary Henkel*. Dordrecht: Springer. 141-155.
- Välilä, Jussi (2009). "The Relevance of Higher Education to Knowledge Society and Knowledge-Driven Economy: Education, research and Innovation". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 23-41.
- Välilä, Jussi (2012). "The Corporatization of National Universities in Finland". In: Brian Pusser, Ken Kempner, Simon Marginson, Imanol Ordorika (eds.), *Universities and the Public Sphere: Knowledge Creation and State Building in the Era of Globalization*. New York: Routledge. 101-119.
- Välilä, Jussi, David Hoffman (2008). "Knowledge Society Discourse and Higher Education". *Higher Education*. Vol. 56. 265-285.
- Välilä, Jussi, Oili-Helena Ylijoki, eds. (2008). *Cultural Perspectives on Higher Education*. Dordrecht: Springer.
- van der Velden, Rolf, Jim Allen (2011). "Conclusions and Policy Implications". In: Jim Allen, Rolf van der Velden (eds.), *The Flexible Professional in the Knowledge Society: New Challenges for Higher Education*. Dordrecht: Springer. 241-253.
- van Dooren, Wouter, Geert Bouckaert, John Halligan (2010). *Performance Management in the Public Sector*. London: Routledge.
- van Oorschot, Wim, Bart Meuleman (2012). "Welfare Performance and Welfare Support". In: Stefan Svallfors (ed.), *Contested Welfare States: Welfare Attitudes in Europe and Beyond*. Stanford: Stanford University Press. 25-57.
- van Vught, Frans A. (1997). "Using Policy Analysis for Strategic Choices". In: Marvin W. Peterson, David D. Dill, Lisa A. Mets, and Associates (eds.), *Planning and Management for a Changing Environment*. San Francisco: Jossey-Bass. 382-402.
- van Vught, Frans A. (2008). "Isomorphism in Higher Education? Towards a Theory of Differentiation and Diversity in Higher Education Systems". In: V. Lynn Meek, Leo Goedegebuure, Osmo Kivinen, Risto Rinne (eds.), *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Bingley: Emerald Group Publishing. 42-58.
- van Vught, Frans A. (2009a). "Diversity and Differentiation in Higher Education". In: Frans A. van Vught (ed.), *Mapping the Higher Education Landscape: Towards a European Classification of Higher Education*. Dordrecht: Springer. 1-16.
- van Vught, Frans A., ed. (2009b). *Mapping the Higher Education Landscape: Towards a European Classification of Higher Education*. Dordrecht: Springer.
- van Vught, Frans A., Don F. Westerheijden, Frank Ziegele (2012). "Introduction: Towards a New Ranking Approach in Higher Education and Research". In: Frans A. van Vught, Frank Ziegele (eds.), *Multidimensional Ranking: The Design and Development of U-Multirank*. Dordrecht: Springer. 1-7.

- van Vught, Frans A., Frank Ziegele, eds. (2012). *Multidimensional Ranking: The Design and Development of U-Multirank*. Dordrecht: Springer.
- Veiga, Amélia, Alberto Amaral (2008). "How Does the Bologna Process Challenge the National Traditions of Higher Education Institutions?" In: Jussi Välimaa, Oili-Helena Ylijoki (eds.), *Cultural Perspectives on Higher Education*. Dordrecht: Springer. 245-263.
- Verkuil, Paul R. (2007). *Outsourcing Sovereignty: Why Privatization of Government Functions Threatens Democracy and What We Can Do About It*. New York: Cambridge University Press.
- Véron, Jacques, Sophie Pennec, Jacques Légaré, eds. (2007). *Ages, Generations and the Social Contract. The Demographic Challenges Facing the Welfare State*. Dordrecht: Springer.
- Vessuri, Hebe, Ulrich Teichler, eds. (2008). *Universities as Centres of Research and Knowledge Creation: An Endangered Species?* Rotterdam/Taipei: Sense Publishers.
- Vest, Charles M. (2005). *Pursuing the Endless Frontier. Essays on MIT and the Role of Research Universities*. Cambridge: the MIT Press.
- Vest, Charles M. (2008). "The Emerging Meta University". In: Luc E. Weber, James J. Duderstadt (eds.), *The Globalization of Higher Education*. Paris: Economica. 217-225.
- Vest, Charles M. (2012). "Strategy in the Face of Uncertainty and Unpredictability: The Research University Role". In: Luc E. Weber, James J. Duderstadt (eds.), *Global Sustainability and the Responsibilities of Universities*. Paris: Economica. 59-71.
- Viale, Riccardo, Henry Etzkowitz (2010). "Introduction: Anti-cyclic Triple Helix". In: R. Viale, H. Etzkowitz (eds.), *The Capitalization of Knowledge. A Triple Helix of University-Industry-Government*. Cheltenham: Edward Elgar Publishing. 1-27
- Viale, Riccardo, Henry Etzkowitz, eds. (2010). *The Capitalization of Knowledge. A Triple Helix of University-Industry-Government*. Cheltenham: Edward Elgar Publishing.
- Vincent-Lancrin, Stéphan (2006). "What Is Changing in Academic Research? Trends and Future Scenarios". *European Journal of Education*. Vol. 41. No. 2. June 2006.
- Vincent-Lancrin, Stéphan (2007). "Building future scenarios for universities and higher education". In: Simon Marginson (ed.), *Prospects of Higher Educations: Globalization, market Competition, Public Goods and the Future of the University*. Rotterdam: Sense Publishers. 3-27.
- Vincent-Lancrin, Stéphan (2008). "What is the Impact of Demography on Higher Education Systems? A Forward-looking Approach for OECD Countries". In: *OECD, Higher Education to 2030. Volume I. Demography*. Paris: OECD. 41-103.
- Vinck, Dominique (2010). *The Sociology of Scientific Work: The Fundamental Relationship between Science and Society*. Cheltenham: Edward Elgar.
- Vink, Maarten P., Paolo Graziano (2007). "Challenges of a New Research Agenda". In: Paolo Graziano, Maarten P. Vink (eds.), *Europeanization: New Research Agendas*. Basingstoke, New York: Palgrave Macmillan. 3-20.
- Vis, Barbara, Kees van Kersbergen, and Thomas H. Hylands (2012). "To What Extent Did the Financial Crisis Intensify the Pressure to Reform the Welfare State?". In: Bent Greve (ed.) *The Times They Are Changing? Crisis and the Welfare State*. Chichester: Wiley-Blackwell. 7-22.

- Wagener, Hans-Jürgen (2002). "The Welfare State in Transition Economies and Accession to the EU". *West European Politics*. Vol. 25. No. 2. 152-174.
- Wagner, Peter, Carol Hirschon Weiss, Björn Wittrock, Hellmut Wollmann, eds. (1991). *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*. Cambridge: CUP.
- Walker, Melanie (2006). *Higher Education Pedagogies: A Capabilities Approach*. Maidenhead: Open University Press.
- Warren, Elizabeth, Deborah Thorne (2012). "A Vulnerable Middle Class: Bankruptcy and Class Status". In: Katherine Porter (ed.), *How Debt Bankrupts the Middle Class*. Stanford: Stanford University Press. 25-39.
- Watson, David (2007). *Managing Civic and Community Engagement*. Berkshire and New York: McGraw-Hill and Open University Press.
- Watson, David, Paul Temple (2009). "The University Community in a European Community: Investigating the Notion of an Engaged University". In: Barbara M. Kehm, Jeroen Huisman, Bjørn Stensaker (eds.), *The European Higher Education Area: Perspectives on a Moving Target*. Rotterdam/Boston/Taipei: Sense Publishers. 163-180.
- Watson, David, Robert M. Hollister, Susan E. Stroud, Elizabeth Babcock (2011). *The Engaged University: International Perspectives on Civic Engagement*. New York: Routledge.
- Weber, Luc E. (2005). "Nature and scope of the public responsibility for higher education and research?" In: In: Luc Weber, Sjur Bergan (eds.), *The Public Responsibility for Higher Education and Research*. Strasbourg: Council of Europe Publishing. 29-43.
- Weber, Luc E. (2012). "Universities, Hard and Soft Sciences: All Key Pillars of Global Sustainability". In: Luc E. Weber, James J. Duderstadt (eds.), *Global Sustainability and the Responsibilities of Universities*. Paris: Economica. 3-14.
- Weber, Luc, James J. Duderstadt, eds. (2004). *Reinventing the Research University*. London: Economica.
- Weber, Luc E., Sjur Bergan, eds. (2005). *The Public Responsibility for Higher Education and Research*. Strasbourg: Council of Europe Publishing.
- Weber, Luc, James J. Duderstadt, eds. (2006). *Universities and Business: Partnering for the Knowledge Society*. London: Economica.
- Weber, Max (1919/1973). *On Universities. The Power of the State and the Dignity of the Academic Calling in Imperial Germany*. (E. Shils, trans.). Chicago: The University of Chicago Press.
- Webster, Andrew, Henry Etzkowitz (1998). "Toward a Theoretical Analysis of Academic – Industry Collaboration". In: H. Etzkowitz, A. Webster, P. Healey (eds.), *Capitalizing Knowledge: New Intersections of Industry and Academia*. Albany: State University of New York Press. 47-71.
- Wedgwood, Marilyn (2006). "Mainstreaming the Third Stream". In: Ian McNay (ed.), *Beyond Mass Higher Education: Building On Experience*. Maidenhead: SRHE and Open University Press. 134-157.
- Wei, Shang-Jin (1998). "Gradualism versus Big Bang: Speed and Sustainability of Reforms". In: Federico Sturzenegger, Mariano Tommasi (eds.), *The Political Economy of Reform*. Cambridge & London: The MIT Press. 269-284.

- Weick, Karl E. (2001). *Making Sense of the Organization*. Malden and Oxford and Carlton: Blackwell Publishing.
- Weick, Karl E. (2009). *Making Sense of the Organization: The Impermanent Organization. Volume 2*. Chichester: John Wiley & Sons.
- Weisbrod, Burton A., Jeffrey P. Ballou, Evelyn D. Asch (2008). *Mission and Money. Understanding the University*. Cambridge: Cambridge University Press.
- Weisz, George (1983). *The Emergence of Modern Universities in France, 1863-1914*. Princeton: Princeton University Press.
- Welch, Anthony (2012). "Academic Salaries, Massification, and the Rise of an Underclass in Australia". In: Philip G. Altbach, Liz Reisberg, Maria Yudkevich, Gregory Androushchak, Iván F. Pacheco (eds.), *Paying the Professoriate: A Global Comparison of Compensation and Contracts*. New York: Routledge. 61-71.
- Welch, Anthony, ed. (2007). *The Professoriate. Profile of a Profession*. Dordrecht: Springer.
- Wells Peter James, Jan Sadlak, Lazar Vlasceanu, eds. (2007). *The Rising Role and Relevance of Private Higher Education in Europe*. Bucharest. Romania: UNESCO-CEPES (European Centre for Higher Education)
- Weymann, Ansgar, Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (2007). "International Organizations, Markets and the Nation State in Education Governance". In: Kerstin Martens, Alessandra Rusconi, Kathrin Leuze (eds.), *New Arenas of Education Governance: The Impact of International Organizations and Markets on Educational Policy Making*. Basingstoke: Palgrave Macmillan. 229-241.
- Whiston, Thomas G., Roger L. Geiger, eds. (1992). *Research and Higher Education*. Buckingham: Open University Press.
- Whitchurch, Celia (2010). "The Challenges of a Diversifying Workforce". In: George Gordon, Celia Whitchurch (eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*. New York: Routledge. 245-255.
- Whitehouse, Edward (2007). *Pensions Panorama. Retirement-Income Systems in 53 Countries*. Washington, DC: World Bank.
- Whitley, Richard (1995). "Transformation and Change in Europe: Critical Themes". In: Eckhard J. Dittrich, Gert Schmidt, Richard Whitley (eds.), *Industrial Transformation in Europe*. London: SAGE. 11-29.
- Whitley, Richard (2000). *The Intellectual and Social Organization of the Sciences*. Second Edition. Oxford: Oxford University Press.
- Whitley, Richard (2010). "Reconfiguring the Public Sciences. The Impact of Governance Changes on Authority and Innovation in Public Science Systems". In: Richard Whitley, Jochen Gläser, Lars Engwall (eds.), *Reconfiguring Knowledge Production. Changing Authority Relationships in the Sciences and Their Consequences for Intellectual Innovation*. Oxford: Oxford University Press.
- Whitley, Richard (2012). "Internationalization and the Institutional Structuring of Economic Organization: Changing Authority Relations in the Twenty-First Century". In: Glenn Morgan, Richard Whitley (eds.), *Capitalisms & Capitalism in the Twenty-First Century*. Oxford: Oxford University Press. 211-236.

- Whitley, Richard, Glenn Morgan (2012). "Capitalisms and Capitalism in the Twenty-First Century: Introduction". In: Glenn Morgan, Richard Whitley (eds.), *Capitalisms & Capitalism in the Twenty-First Century*. Oxford: Oxford University Press. 1-10.
- Whitley, Richard, Jochen Gläser, eds. (2007). *The Changing Governance of the Sciences. The Advent of Research Evaluation Systems*. Dordrecht: Springer.
- Whitley, Richard, Jochen Gläser, Lars Engwall, eds. (2010). *Reconfiguring Knowledge Production. Changing Authority Relationships in the Sciences and Their Consequences for Intellectual Innovation*. Oxford: Oxford University Press.
- Whitty, Geoff (2002). *Making Sense of Education Policy: Studies in the Sociology and Politics of Education*. London: SAGE.
- Whitty, Geoff (2007). "Education(al) research and education policy-making: Is conflict inevitable?" In: Lesley Saunders (ed.), *Educational Research and Policy-Making: Exploring the border country between research and policy*. London: Routledge. 1-18.
- Wildavsky, Aaron (1979). *Speaking Truth to Power: The Art and Craft of Policy Analysis*. New Brunswick: Transaction Publishers.
- Wilensky, Harold L. (1975). *The Welfare State and Equality: Structural and Ideological Roots of Public Expenditures*. Berkeley and Los Angeles: University of California Press.
- Wilensky, Harold L. (2002). *Rich Democracies. Political Economy, Public Policy, and Performance*. Berkeley: University of California Press.
- Williams, Gareth (1984). "The Economic Approach". In: Burton R. Clark (ed.), *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*. Berkeley: University of California Press. 79-105.
- Williams, Gareth (1992). *Changing Patterns of Finance in Higher Education*. Buckingham: Open University Press.
- Williams, Gareth (1995). "The 'Marketization' of Higher Education: Reforms and Potential Reforms in Higher Education Finance". In: David D. Dill, Barbara Sporn (eds.), *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly*. New York: Pergamon. 170-193.
- Williams, Gareth (1998). "Advantages and Disadvantages of Diversified Funding in Universities". *Tertiary Education and Management*. Vol. 4. No. 2. 85-93.
- Williams, Gareth (1999). "State Finance of Higher Education: An Overview of Theoretical and Empirical Issues". In: Mary Henkel, Brenda Little (eds.), *Changing Relationships Between Higher Education and the State*. London: Jessica Kingsley Publishers. 142-161.
- Williams, Gareth (2003). "An Honest Living or Dumping Down?". In: Gareth Williams (ed.), *The Enterprising University: Reform, Excellence and Equity*. Buckingham: SRHE & Open University Press. 3-19.
- Williams, Gareth (2004a). "The Changing Political Economy of Higher Education". In: M. Shattock, ed. *Entrepreneurialism and the Transformation of Russian Universities*. Paris: UNESCO IIEP.
- Williams, Gareth, ed. (2004b). *The Enterprising University. Reform, Excellence and Equity*, London: Open University Press and SRHE.

- Williams, Gareth (2009). "Finance and Entrepreneurial Activity in Higher Education in a Knowledge Society". In: M. Shattock (ed.), *Entrepreneurialism in Universities and the Knowledge Economy: Diversification and Organizational Change in European Higher Education*. Berkshire: SRHE & Open University Press. 8-32
- Williams, Gareth (2010). "Perspectives on higher education after a quarter of a century". *London Review of Education*. Vol. 8. No. 3. 239-249.
- Williams, Gareth (2012). "Some Wicked Questions from the Dismal Science". In: P. Temple (ed.), *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*. London, New York: Routledge. 19-37.
- Williams, Gareth, Tessa Blackstone, David Metcalf (1974). *The Academic Labour Market: Economic and Social Aspects of a Profession*. New York: Elsevier.
- Williams, Gareth, Tessa Blackstone (1983). *Response to Adversity*. Guildford: The Society for Research into Higher Education.
- Williams, Gareth, Igor Kitaev (2005). "Overview of National Policy Context for Entrepreneurialism in Higher Education Institutions". In: OECD, *Higher Education Management and Policy: Entrepreneurship*. Vol. 17. No. 3 – Special Issue. Paris: OECD Publishing. 125-141.
- Williamson, John, ed. (1994). *The Political Economy of Policy Reform*. Washington DC: Institute for International Economics.
- Willinsky, John (2011). "Rethinking What Is Made *Public* in the University's Public Mission". In: Diana Rhoten, Craig (eds.), *Knowledge Matters: The Public Mission of the Research University*. New York: Columbia University Press. 290-314.
- Wilson, Logan (1942/1995). *The Academic Man. A Study in the Sociology of a Profession*. New Brunswick: Transaction Publishers.
- Wilson, Logan (1979). *American Academics. Then and Now*. New York: Oxford University Press.
- Wink, Rüdiger, ed. (2004). *Academia-Business Links: European Policy Strategies and Lessons Learnt*. New York: Palgrave Macmillan.
- Witt, Ulrich, Christian Zellner (2007). "Knowledge-based entrepreneurship: the organizational side of technology commercialization.". In: Franco Malerba, Stefano Brusoni (eds.), *Perspectives on Innovation*. Cambridge: Cambridge University Press. 352-371.
- Wittrock, (1991). "Social Knowledge and Public Policy: Eight Models of Interaction". In: Peter Wagner, Carol Hirschon Weiss, Björn Wittrock, Hellmut Wollmann (eds.), *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*. Cambridge: CUP. 333-353.
- Wittrock, Björn (1993). "The Modern University: the Three Transformations". In: Sheldon Rothblatt and Björn Wittrock (eds.), *The European and American university since 1800: Historical and sociological essays*. Cambridge: Cambridge University Press. 303-362.
- Wittrock, Björn (2003). "History of Social Science: Understanding Modernity and Rethinking Social Studies of Science". In: Bernward Joerges, Helga Nowotny (eds.), *Social Studies of Science and Technology: Looking Back, Ahead*. Dordrecht: Kluwer Academic Publishers. 79-101.

- Wittrock, Björn, Peter Wagner, Hellmut Wollmann (1991). "Social Science and the Modern State: Policy Knowledge and Political Institutions in Western Europe and the United States". In: Peter Wagner, Carol Hirschon Weiss, Björn Wittrock, Hellmut Wollmann (eds.), *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*. Cambridge: CUP. 28-85.
- Wolfe, David A. (2005). "The Role of Universities in Regional Development and Cluster Formation". In: G. A. Jones, P. L. McCarney, M. L. Skolnik (eds.), *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*. Toronto: University of Toronto Press. 167-194.
- Wolff, Robert Paul (1999). *The Ideal of the University*. New Brunswick and London: Transaction
- Woodward, Richard (2009). *The Organisation for Economic Co-operation and Development (OECD)*. London: Routledge.
- World Bank (1994). *Higher Education: The Lessons of Experience*. Washington, DC: Author.
- World Bank (1996). *From Plan to Market. World Development Report 1996*. Washington, DC: Author.
- World Bank (1997). *The State in a Changing World. World Development Report 1997*. Washington, DC: Author.
- World Bank (2000). *Higher Education in Developing Countries. Peril and Promise*. Washington, DC: Author.
- World Bank (2002). *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington, DC: Author.
- World Bank (2007). *Building knowledge economies. Advanced strategies for development*. Washington, DC: Author.
- World Bank (2010a). *Better Financing: Stronger Outcomes. A Public Expenditure Review for the Education Sector in Poland*. Washington, DC: World Bank.
- World Bank (2010b). *Doing Business 2011. Making a Difference for Entrepreneurs*. Washington, DC: Author.
- World Bank/EIB (2004). *Tertiary education in Poland*. Warsaw: World Bank/European Investment Bank.
- Woźnicki, Jerzy (2009). *The University as an Institution of Public Domain: The Polish Perspective*. Warsaw-Bukarest: UNESCO-CEPES.
- Wright, Mike (2007). "University-Industry Links: Regional Policies and Initiatives in the United Kingdom". In: Shahid Yusuf, Kaoru Nabeshima (eds.), *How Universities Promote Economic Growth*. Washington, DC: The World Bank. 151-162.
- Wright, Mike, Bart Clarysse, Philippe Mustar, Andy Lockett (2007). *Academic Entrepreneurship in Europe*. Cheltenham: Edward Elgar Publishing.
- Young, Michael (2008). *The Rise of the Meritocracy*. New Brunswick: Transaction Publishers.
- Yusuf, Shahid (2007). "University-Industry Links". In: Shahid Yusuf, Kaoru Nabeshima (eds.), *How Universities Promote Economic Growth*. Washington, DC: The World Bank. 1-25.

- Yusuf, Shahid, Kaoru Nabeshima, eds. (2007). *How Universities Promote Economic Growth*. Washington, DC: The World Bank.
- Zaltman, Gerald, Robert Duncan (1977). *Strategies for Planned Change*. New York: John Wiley & Sons.
- Zanten, van, Agnès (2010). "The Sociology of Elite Education". In: Michael W. Apple, Stephen J.
- Zemsky, Robert (2008). "Has our Reach Exceeded our Grasp? Taking a Second Look at Higher Education as a Global Enterprise". In: Luc E. Weber, James J. Duderstadt (eds.), *The Globalization of Higher Education*. London: Economica. 251-258.
- Zemsky, Robert, Gregory R. Wegner, William F. Massy (2005). *Remaking the American University: Market- Smart and Mission-Centered*. New Brunswick: Rutgers University Press.
- Zgaga, Pavel (2005). "Higher education for a democratic culture - The public responsibility". In: In: Luc Weber, Sjur Bergan (eds.), *The Public Responsibility for Higher Education and Research*. Strasbourg: Council of Europe Publishing. 107-115.
- Zgaga, Pavel (2007). *Looking Out: The Bologna Process in a Global Setting*. Oslo: Norwegian Ministry of Education and Research.
- Zgaga, Pavel (2012). "The 'Global Strategy' 2007-2011. The External Attractiveness of the EHEA and Its Internal Uneasiness". In: Marek Kwiek, Andrzej Kurkiewicz (eds.), *The Modernisation of European Universities. Cross-National Academic Perspectives*. Frankfurt and New York: Peter Lang. 215-223.
- Ziman, John (1978). *Reliable knowledge: An exploration of the grounds for belief in science*. Cambridge: Cambridge University Press.
- Ziman, John (1994). *Prometheus Bound. Science in a dynamic steady-state*. Cambridge: Cambridge
- Zomer, Arend, Paul Benneworth (2011). "The Rise of the University's Third Mission". In: J. Enders, H.F. de Boer, D.F. Westerheijden (eds.), *Reform of Higher Education in Europe*. Rotterdam: Sense Publishers. 81-101.
- Zuckerman, Harriet (1996). *Scientific Elite: Nobel Laureates in the United States*. New Brunswick: Transaction Publishers.
- Zuckerman, Harriet, Jonathan R. Cole, John T. Bruer, eds. (1991). *The Outer Circle: Women in the Scientific Community*. New York and London: W. W. Norton & Company.
- Zumeta, William (2004). "State Higher Education Financing. Demand Imperatives Meet Structural, Cyclical and Political Constraints". In: Edward P. St. John and Michael D. Parsons (eds.), *Public Funding of Higher Education. Changing Contexts and New Rationales*. Baltimore: Johns Hopkins University Press.
- Zumeta, William, David W. Breneman, Patrick M. Callan, Joni E. Finney (2012). *Financing American Higher Education in the Era of Globalization*. Cambridge: Harvard Education Press.
- Zürn, Michael, Stephan Leibfried (2005). "Reconfiguring the National Constellation". In: Stephan Leibfried, Michael Zürn (eds.), *Transformations of the State?* Cambridge: CUP. 1-36.

## Note on the Author

Professor Marek Kwiek is the founder (2002) and director of the Center for Public Policy Studies, and a Chairholder, UNESCO Chair in Institutional Research and Higher Education Policy at the University of Poznań, Poland. A higher education researcher and higher education policy analyst, with strong background in political philosophy and political sciences. His research interests include university governance, globalization and higher education, supranational and European educational policies, welfare state and public sector reforms, transformations of the academic profession, and academic entrepreneurialism.

He has published about 110 articles and book chapters and authored or edited 11 books; recently, he authored two monographs: *University Transformations. Institutional Change and Educational Policies in Europe* (2010, 450 pp., in Polish), and *The University and the State: A Study into Global Transformations* (2006, 424 pp.) and co-edited two books: *The Modernisation of European Universities. Cross-National Academic Perspectives* (with A. Kurkiewicz, 2012) and *National Higher Education Reforms in a European Context: Comparative Reflections on Poland and Norway* (with P. Maassen, 2012). He published articles in such journals as *Science and Public Policy*, *European Educational Research Journal*, *Comparative Education Review*, *European Journal of Higher Education*, *Compare*, *Higher Education*, *Higher Education in Europe*, *Higher Education Management and Policy*, and others.

He has been a higher education policy expert to the European Commission, USAID, OECD, World Bank, UNESCO, OSCE, Council of Europe, UNDP, as well as national governments and individual academic institutions in a dozen of transition countries.

He has participated in about 20 international (global and European) research projects, funded by the European Commission (6<sup>th</sup> and 7<sup>th</sup> Framework Programmes), European Science Foundation, Ford, Rockefeller and Soros foundations, and German and Norwegian research foundations in the last ten years. He has also participated in about 20 international policy projects in higher education.

Most recently, he has been a partner in several large-scale international research projects: EDUWEL: *Education and Welfare* (2009-2013), WORKABLE: *Making Capabilities Work* (2009-2012), EUROAC: *The Academic Profession in Europe: Responses to Societal Challenges* (2009-

2012), EUERЕК: *European Universities for Entrepreneurship: Their Role in the Europe of Knowledge* (2004-2007), GOODUEP: *Good Practices in University-Enterprise Partnerships* (2007-2009), as well as Norwegian-Polish *NORPOL* (2009-2011) and German-Polish *BORDERUNI* (2010-2012). Currently, he is a principal investigator in a Polish “frontier research” project MAESTRO: *The Program for International Comparative Research in Higher Education* (2012-2017).

He spent three years at North American universities as a Fulbright Foundation scholar, a Kosciuszko Foundation scholar, and a Reagan-Fascell Democracy Fellow (University of Virginia, University of California at Berkeley, and the National Endowment for Democracy/Washington, DC). He was also an OSI International Policy Fellow at Central European University and a global Fulbright “New Century Scholar 2007-2008”. He serves as a board member in *Higher Education Quarterly*, *European Educational Research Journal*, and *European Journal of Higher Education*.