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Marek Kwiek and Andrzej Kurkiewicz
Editors

The Modernisation of European Universities

Cross-National Academic Perspectives

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HIGHER EDUCATION RESEARCH AND POLICY (HERP)

VOLUME 1

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The *Higher Education Research and Policy* (HERP) series is intended to present both research-oriented and policy-oriented studies of higher education systems in transition, especially from comparative international perspectives. Higher education systems worldwide are currently under multi-layered pressures to transform their funding and governance structures in rapidly changing environments. The series intends to explore the impact of such wider social and economic processes as globalization, internationalization and Europeanization on higher education institutions, and is focused on such issues as the changing relationships between the university and the state, the changing academic profession, changes in public funding and university governance, the emergent public/private dynamics in higher education, the consequences of educational expansion, education as public/private goods, and the impact of changing demographics on national systems. Its audience includes higher education researchers and higher education policy analysts, university managers and administrators, as well as national policymakers and the staff of international organizations involved in higher education policymaking.

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Notes on Editors

Andrzej Kurkiewicz is a Deputy Director of the Department of Strategy at the Polish Ministry of Science and Higher Education. He is an assistant professor in the Institute of Public Affairs at the Jagiellonian University and holds a PhD from this university. He specializes in public sector management. His major areas of research interest include project management, security management, and social policy with particular emphasis on educational policy. He has been a Polish delegate to a number of expert panels and working groups of the European Commission, such as Directors General for Higher Education (DGHE) meetings and the Working Group on the Modernisation of Higher Education.

Marek Kwiek is a full Professor and Founding Director (2002) of the Centre for Public Policy Studies at Poznan University, Poland. His research interests include university governance, globalization and education, supranational and European educational policies, welfare state and public sector reforms, the academic profession, and academic entrepreneurialism. He has published about 100 papers and 10 books, most recently *The University and the State: A Study into Global Transformation* (2006); *University Transformations. Institutional Change and Educational Policies in Europe* (2010, in Polish); and the forthcoming *Knowledge Production in European Universities: States, Markets, and Academic Entrepreneurship*. Also, he is a higher education policy expert to the European Commission (EC), USAID, OECD, the World Bank, UNESCO, OSCE, the Council of Europe, and UNDP in twelve transition countries. Apart from about 20 international higher education policy projects, he has participated in about 20 international comparative research projects, funded by the European Commission, European Science Foundation (ESF) and other international foundations. Most recently, he has been a partner in *EUEREK: European Universities for Entrepreneurship* (2004-2007, EC); *GOODUEP: Good Practices in University - Enterprises Partnerships* (2007-2009, EC); and *EU-ROAC: The Academic Profession in Europe* (2009-2012, ESF); as well as the coordinator of a Polish MAESTRO Program for International Comparative Research in Higher Education (2012-2017). He serves as an editorial board member for the *Higher Education Quarterly* and *European Educational Research Journal*, and is a general editor of a book series HERP: *Higher Education Research and Policy* (Peter Lang).

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Dominik Antonowicz has a PhD in sociology and works as a researcher and lecturer at the Institute of Sociology, Nicolaus Copernicus University in Toruń (Poland). He is a former Chevening scholar (Birmingham University), and Foundation for Polish Science scholar (Center for Higher Education Policy Studies, Twente University), and is a sociologist, higher education researcher and policy analyst. His research interests include public policy and higher education, internationalization in higher education, university governance and transformations in the academic profession. He served as an adviser to the Ombudsmen (dr Janusz Kochanowski) and a full-time adviser to the Minister of Science and Higher Education in Poland (prof. Barbara Kudrycka). He is currently a member of Committee for Evaluation of Research Units in Poland.

Harry de Boer is a senior researcher and research coordinator at the Center for Higher Education Policy Studies (CHEPS) at the University of Twente, in the Netherlands. His research interests in the field of higher education studies concern governance and steering models, public policy analysis, institutional governance and management, and strategic planning and decision making. He has conducted many research and consultancy projects for national and international bodies such as the Dutch ministry, the German Research Foundation and the European Commission. He frequently publishes articles in the journals *Higher Education*, *European Journal of Education*, *Higher Education Research & Development*, *Public Administration*, *Leadership* and *Tertiary Education and Management*, and over the years he has published many book chapters on the aforementioned topics.

Maria Hulicka holds Ph.D. in Economics and has been Independent Public Accountant since 2005. Currently, she is the Bursar of the Jagiellonian University. She possesses extensive experience in financial management, having previously occupied the post of the Finance Director and the Board Member in several large corporations. She is a Supervisory Board Member in various commercial companies and the Member of the Polish National Chamber of Statutory Auditors. Author of a considerable number of expert opinions of financial management in Higher Education and the book (*Financial Misstatement, 2008* [in Polish]).

Ben Jongbloed has a Master's degree in Econometrics from the University of Groningen and a PhD in Public Administration (Public Finance) from the University of Twente. Since starting to work for the Center for Higher Education Policy Studies at the University of Twente in 1992, his research and scholarly publications have focused in particular on governance and resource allocation issues in higher education. His work addresses topics such as funding methodologies for higher education, performance measurement in higher education, and university-industry collaboration. In 2004, he was one of the authors of the Kluwer publication *Markets in Higher Education: Rhetoric or Reality?* He has worked on several international research projects funded by the European Commission, including a recent (2010) study of governance and funding reforms in European higher education.

Tomáš Konečný is a Ph.D. graduate from the Center for Economic Research and Graduate Education (CERGE-EI), a joint workplace of the Charles University and the Economics Institute of Academy of Sciences of the Czech Republic. Currently a Postdoctoral Research Fellow at the Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague. In the years 2008 and 2009, he participated in the project Public/Private Funding of Higher Education: A Social Balance (coordinated by Hochschul-Informations-System, GmbH). Between 2009 and 2010, he was a member of the team of experts preparing a blueprint of the Higher Education Finance Reform for the Czech Ministry of Education. The unifying theme of his research efforts is the study of mechanisms that improve access of isolated/disadvantaged agents to the existing market opportunities, be it through social networks (immigration), government policies (education), or independent NGO-driven initiatives (Fair Trade).

Andrzej Kraśniewski is a Professor and Director of the PhD Programme at the Faculty of Electronics and Information Technology, Warsaw University of Technology, and Advisor to the Rector on the implementation of the Bologna Process. Since 1999 he has served as Secretary General of the Conference of Rectors for Academic Schools in Poland (KRASP). In 2006-2010 he was a member the working group established by the Minister for the development of the national qualifications framework for higher education, and since 2008 he has been a member of the team of national Bologna experts. He is currently a steering committee member for two projects coordinated by the European University Association. He has published 120 technical papers in the field of computer engineering and 40 papers on various aspects of higher education, in particular on education in engineering.

Peter Maassen is a professor in Higher Education Studies and member of the Departmental Board with responsibility for research at the Institute for Educational Research which is part of the Faculty of Education at the University of Oslo. Previously he was the director of the *Center for Higher Education Policy Studies* at the University of Twente, the Netherlands. He is a member of the Board at Oslo University College, and of the Board at the *Centrum für Hochschulentwicklung*. He is currently a member of the international panel evaluating Danish university reforms, and he has been a member of the recent Norwegian governmental commission on higher education, as well as of OECD review teams for Japan and Finland. He has produced over 100 international publications on higher education policy issues, including the book *University Dynamics and European Integration* (2007).

Petr Matějů, professor of Sociology, currently the Chair of the Department of Sociology at the University of Finance and Administration in Prague and senior researcher on education and educational policy in the Institute for Social and Economic Analyses. Since 2008 he has served as President of the Czech Science Foundation. Between 1998 and 2002 he was a Member of the Czech Parliament (chairing the Committee for Science and Higher Education). During the years 2006-2010 he was the Czech delegate to the OECD Educational Policy Committee, OECD forum on Institutional Management of Higher Education. In 2007 and 2008 he was a grantee of the Fulbright New Century Scholars participating in the project Higher Education in 21st Century: Access and Equity. His main research interests have been focused on social inequality, social and distributive justice, educational and occupational mobility, comparative research in education, social transformation in Central and Eastern Europe, formation of political attitudes and voting behavior. He is the co-author or editor of 4 books and has published more than 30 papers in impacted journals. He is among the most cited Czech sociologists.

Maria Helena Nazaré, a former rector of the University of Aveiro (2002-2010), chair of the Portuguese Rectors Conference Committee for research and knowledge transfer, a Member of the Research Working Group for the European University Association. Member of the EUA Institutional Evaluation Pool (since 2004), she has participated in the evaluation of universities in Spain, Turkey, Palestine, Slovenia, Kazakhstan and Ghana. Elected to the EUA board and appointed as Vice-President in 2009. She has also participated in OECD lead evaluations in Catalonia and Lombardy and ENQA evaluations in Galiza and Finland. Currently, a member of the Portuguese National Education Council and Chair of its Higher Education Commission; Member of the Administration

Board of Portugal Telecom; President of the Advisory Board of Fundação Galp Energia; President of the Portuguese Physics Society; and President of the European Association (since April 2012) for a three year mandate.

Paul Temple is Reader in Higher Education Management at the Institute of Education, University of London, and Co-Director of its Centre for Higher Education Studies, where he co-directs its MBA programme in higher education management. He has recently worked on two large research projects examining aspects of university-enterprise relations in different European countries, and contributed to the book describing the work of one of these projects, *Entrepreneurialism in Universities and the Knowledge Economy* (ed. M. Shattock, 2009). In 2012 he edited *Universities in the Knowledge Economy. Higher Education Organisation and Global Change* (Routledge). He is the editor of the *London Review of Education*.

Hans Vossensteyn works as the Director and Senior Research Associate at the Center for Higher Education Policy Studies at the University of Twente and as a Professor at the MBA-Hochschul- und Wissenschaftsmanagement at the University of Applied Sciences Fachhochschule Osnabrück in Germany. Since 1991 he has participated in research, training and consultancy projects covering a wide array of subjects including: funding and student financing, internationalisation, higher education indicators, quantitative and qualitative international comparative analyses. His major research interest is in funding matters, including national allocation models, tuition fee policies, student financial support and the affordability of higher education. He was a member of the Advisory Board of the International Finance and Accessibility Project of the Ford Foundation as well as of the MESA Project (Measuring the Effectiveness of Student Aid) of the Educational Policy Institute (EPI) Canada sponsored by the Canada Millennium Scholarships Programme. He is a member of the editorial boards of the Dutch/Belgian journal on higher education (*Tijdschrift voor Hoger Onderwijs en Management, TH@MA*) and of the *Journal of Higher Education Policy and Management*.

Simona Weidnerová is the executive director of the Institute for Social and Economic Analyses (ISEA) in Prague. In years 2009-2011 she was a member of the team of experts preparing the Higher Education Reform for the Czech Ministry of Education, namely the system of student financial aid. She is a co-author of the *White Paper on Tertiary Education* (2009), prepared by the Czech Ministry of Education, Youth and Sports and the *Draft Consultation Document on*

Student Financial Aid (2011). During this period she served as an advisor to the Minister of Education, Youth and Sports. In her capacity of the director of ISEA she coordinated a number of research projects on accessibility of higher education in a comparative perspective. Her major research and policy interests are student financial aid, taxation in education and research, students' work-study balance, talent management, work-force flexibility, diversity management, and social responsibility of firms. She has published in the area of accessibility of higher education and legal aspects of students' financial assistance.

Georg Winckler studied economics at Princeton University and at the University of Vienna, gaining his PhD in 1968. Since 1978 he has been a Professor of Economics, specialising in Monetary Economics, Macroeconomics and European Monetary Integration. He served as Rector of the University of Vienna from October 1, 1999 to September 30, 2011. He was President of the Austrian Rectors' Conference (2000-2005) and Vice President (2001-2005) and President (2005-2009) of the European University Association/EUA. Since April 2008 he has been a member of the European Research Area Board/ERAB and, since February 2009, a member of the PEOPLE Programme Advisory Group, European Commission, Brussels. Since 2009 he has been a member of the Board of Trustees of ETS, Princeton, USA.

Pavel Zgaga is a Professor in the Philosophy of Education at the University of Ljubljana, Slovenia. He has held several research grants and directed national and international projects on education policy, mainly concerned with the development of higher education in the contemporary European context. During the nineties he was State Secretary for Higher Education and Minister of Education and Sport. After his return to academia, he co-founded the Centre for Educational Policy Studies (CEPS) at the University of Ljubljana and remains its director until today. He was also engaged in the Bologna Process, serving as general rapporteur (2001-2003); as a member of the Board of the BFUG (2004-2005) and as the rapporteur of the Working Group on the External Dimension of the Bologna Process (2006-2007); as well as in other projects related to European Higher Education.

Preface

Barbara Kudrycka

It is my great honour to present to you this publication from the Conference on the Modernization of Higher Education which took place on 24-25 of October 2011 in Sopot. This conference has been the most important event in the framework of the Polish Presidency priority for the modernization of higher education. It clearly corresponded to the new Commission Communication on the modernization of higher education systems in Europe and preceded the adoption of the Council conclusion on the modernization of higher education.

The conference on higher education was organized in the near neighbourhood of the cradle of the Solidarity movement which started the process of democratization in Central and Eastern Europe. Thanks to these changes we can progressively implement the elements of a modern society which obviously encompass the transformation of education policies.

In the last two decades new challenges have appeared, and these concern to differing extents all Member States. The global race for talents, along with demographic changes and other challenges of the global world, force us reflect on a new reform agenda for the higher education systems of Europe. Apart from this, for several years Europe has been facing financial difficulties, as well as a crisis in the labour market which can be characterized as the growing uncertainty of graduates' prospects and the skills mismatch. Universities providing society with the most qualified human capital have a huge responsibility for overcoming this situation. The Ministers responsible for education stated in their conclusions to the modernization of higher education that "in the current economic climate higher education [...] has a crucial role to play in providing highly skilled human capital and promoting the essential research that Europe needs in its drive to secure jobs, economic growth and prosperity."

This publication contains the positions of the most distinguished European researchers dealing with educational policies, as well as those of policy-makers from the Member States and European institutions on the newest findings concerning public policy in the area of higher education, along with recipes on how to meet the above mentioned challenges. They gathered for two days in Sopot to discuss the main policy lines of the new modernization agenda which can be perceived as the core condition for taking full advantage of Europe's intellectual capital.

The above mentioned subjects are at the same time the leitmotifs regarding the reform agenda for higher education systems in Europe. I am very glad that

EU Ministers of education have been able to reach a consensus on the common principles regarding the changes needed at European universities.

However even the noblest intentions will not make a reform agenda successful if it is not based on evidence. Therefore, we truly need closer links between policy-making and research. The conference on the modernization of higher education is indeed the effect of this conviction. Accordingly, I hope that the results of the conference, which have been presented in this book, will prove an inspiration for European and national debates on the diagnosis of the current condition of European universities as well as for meaningful reforms to higher education systems in Europe.

Polish Minister of Science and Higher Education

Foreword and Message

Jan Truszczyński

Foreword and message from Mr Jan Truszczyński regarding the publication of a collection of papers on the Modernisation of Higher Education following the Presidency Conference on the Modernisation of Higher Education in Sopot, 24-25 October 2011.

2011 was another good year for EU co-operation in higher education. The European Union set out a strategic agenda in which the European Commission, Member States, higher education institutions and other stakeholders will work together to maximise the contribution of higher education in helping Europe emerge stronger from the economic and financial crisis, by boosting graduate numbers, improving teaching quality and raising skills, and developing its capacity for innovation.

This strategy is important for everyone involved in delivering university-level education. It highlights the areas where countries and higher education institutions need to do more to respond to the needs of the 21st Century, and it sets out where European action can help, by supporting reforms in Member State through sharing experiences about effective policies and practices and through EU funding programmes.

In 2012 our focus is upon implementation: we will be working to bring to fruition several high profile commitments which we announced in the Agenda for the Modernisation of Higher Education. These include the establishment of a high-level expert group on excellence in teaching; and the piloting of a transparency instrument to help prospective students navigate their way around the maze of higher education offers and to help universities better identify their strengths and weaknesses. And we will continue to engage with stakeholders as we develop our proposals for the new generation EU programme for education and training.

The Polish Presidency of the Council of the European Union was instrumental in securing the commitment of its partners to the European agenda. In addition to leading the work of the Council in developing conclusions on this theme, the Polish Presidency conference on the modernisation of higher education and the meeting of Director Generals of Higher Education highlighted important and pressing issues for modern higher education systems.

The conference on the modernisation of higher education was the forum for a stimulating debate, gathering together the viewpoints of policy makers, academics, and stakeholders to share opinions and to learn from each other's experiences. The world of higher education has changed substantially in recent years, yet its significant potential to contribute to economic and social growth, especially – but not exclusively – in the current economic climate, has not been fully realised. Policy makers and higher education institutions need to be ready to take up this challenge: to adapt to changing demands, to raise higher education attainment levels and to increase the quality and societal and economic relevance of higher education. This includes a need to focus more on labour market integration and the employability of Europe's graduates – both to ensure sustainable economic growth, and to maximise individual potential and provide the best defence against unemployment. Governments must also do more to empower universities and other higher education institutions to deliver on their strengths and to secure the resources to meet the diverse needs of their target groups. The European Commission looks forward to working with Member States and higher education institutions to realise our shared ambitions for modernised European higher education systems.

Jan Truszczyński
Director-general
Directorate general for education and culture
European Commission

Introduction

Academic Responses to the Modernisation Agenda of European Universities

Andrzej Kurkiewicz and Marek Kwiek

The modern university in Europe over the last two centuries has been closely linked to the nation-state. With the advent of globalisation, and its pressures on nation-states, universities are increasingly experiencing a de-linking from the traditional needs of the nation-state (and from its financial resources). In Europe, the overall social and economic answer to globalisation has been a strengthening of European integration. European universities, as well as the governments of EU member states, find it useful to refer to new transnational strategies in redefining the role(s) of educational institutions under both globalisation and Europeanisation. Consequently, the last decade has given rise to substantially new ways of thinking about universities at the level of the European Commission in the European Union. Emergent EU educational policies were becoming increasingly influential as the university reform agenda was being viewed as part of the wider Lisbon strategy reforms, and recently, as part of the Europe 2020 strategy. The EU member states – national governments – were not only adopting the Lisbon strategy but also the social and economic concept of the university implied in it and consistently developed in subsequent official documents of the European Commission. The EU member states, for the first time in the more than fifty year history of the European Union, needed to balance their educational policies between the requirements of new policies strongly promoted by the EU and the requirements of their traditional national systems (in the first four decades, in general, higher education was left in the competence of member states; today it is viewed by the European Commission as being of critical importance to the economic future of the EU and in need of EU-level intervention). Additionally, national educational policies are under strong globalisation-related (mostly financial) pressures, as are all the other social services of the “European social model”. European universities and European academics are functioning in the midst of these large-scale changes at the level of European and national strategies. Their interpretations of, and responses to, what is termed “the modernisation agenda of European universities” is at the core of the present volume.

The reason for renewed EU interest in higher education is clearly stated by the European Commission: while responsibilities for universities lie essentially at the national (or regional) level, the most important challenges are “European, and even international or global”, as *The Role of Universities in the Europe of Knowledge*, a

2003 Communication from the EC, put it. Recent years have seen intensified thinking about the future of public universities in Europe, from a distinctly supranational perspective. Regional processes for the integration of educational and research and development policies in the European Union add a new dimension to the nation-state/national university issue. On top of the discussions about the nation-state (and the welfare state), we are confronted with new supranational ideas on how to revitalise the European project through education and how to use European universities for the purpose of creating in Europe a globally competitive knowledge economy. For the first time in the 2000s new ways of thinking about higher education were formulated at the EU level – and were accompanied by a number of practical measures, coordinated and funded by the European Commission. Higher education, left at the disposal of particular nation-states in recent decades in Europe, returns now to the forefront in discussions about the future of the EU.

The book grew out of the Polish EU Presidency “Conference on the Modernization of Higher Education” organized in Sopot, Poland in 23-25 October, 2011. In his overview chapter, “The Growing Complexity of the Academic Enterprise in Europe”: A Panoramic View”, Marek Kwiek provides a background to the book and focuses on common themes in the current transformations of European universities. The chapter shows an increasingly complicated picture for the academic enterprise in Europe. The factors generating change in national higher education policies and in national higher education systems are viewed as multi-layered, interrelated and often common throughout the continent. Kwiek assumes that there are 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 adapting to changing environmental settings; renegotiations of the general social contract providing the basis for the post-war welfare state and its public services; the tremendous scale of operations and funding for universities; the divergence between global, supranational, European and often national reform discourses as well as 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. The chapter discusses the three following major questions with reference to the coming decade: (1) Should European higher education systems, in general, expect more (quasi-) market mechanisms and more new income-generating paradigms?; (2) What is the role of new university stakeholders and how may teaching/research missions evolve in European universities?; and (3) To what extent is meeting the conflicting demands of different university stakeholders a major challenge to the European academic profession?

Maria Helena Nazaré in her contribution on “People and their Ideas: The Foundation for Inclusive European Growth” shows that during the last decade, the European higher education landscape has undergone tremendous alterations both at system and at institutional levels. She points out that many of these were directly linked with, or driven by, the need for effectively qualifying the workforce, within an appropriate span of time, and equipping it with the skills required by a globally competitive world market. Hence the Bologna higher education reforms which have brought about the restructuring of higher education degrees, new methodologies focused on the learning process instead of teaching-centred ones, increased mobility of students and staff, and the new importance of quality improvement and quality assurance within higher education. Nazaré reviews the impact these reforms had on institutions, namely in terms of the changes introduced to institutional autonomy and governance, and refers to the way institutions are prepared to face the challenges of the 21st century using the EU 2020 strategy and the modernisation agenda. In particular, she focuses on the aspects pertaining to the adverse demographics in Europe and the challenges these represent for higher education institutions in EU countries.

The next chapter, “System Diversity in European Higher Education” by Peter Maassen presents the underlying assumptions that more complex and competitive economic and technological global environments require rapid adaptations of national economies to shifting opportunities and constraints; that higher education is expected to play a central role in this adaptation, since, as the main public knowledge sector, it is assumed to link research and education effectively to the needs of society and industry. Maassen points out that this expectation has been used as a rationale for reforms aimed at stimulating universities and colleges to develop more relevant and effective institutional strategies, and professionalize their leadership and management capacity. He views the Lisbon summit and the subsequent Lisbon 2000 Agenda as important drivers in the promotion of this vision in Europe. Making Europe the most dynamic knowledge economy in the world by 2010 was argued to be dependent on urgent reforms to its higher education systems and institutions. This was clearly expressed in two reform agendas published by the European Commission in 2006 and 2011. He focuses on the 2011 agenda and its aim to contribute to more effective system diversity in higher education and discusses, amongst other things, the consistency of the arguments underlying the Commission’s claim concerning its contributions to this.

Maria Hulicka in her contribution on “External and internal sources of financing for universities. The practice of good governance” stresses that in a time of knowledge-driven transformations to the economy, only universities with high quality teaching potential and strong research resources have the capacity

to play an important role in shaping a development strategy for regions and countries. Therefore, she sees one of the most important challenges facing higher education is the creation of an innovative type of university that is characterized by inter-disciplinary teaching and research; involving the best academics, most creative employees and leading research groups. The other urgent issue she points out is the need to limit the ever widening gap between the best universities and those which do not keep up with the changes. This requires the investment of additional funds, but also a marked improvement in the efficiency of spending such funds invested in higher education by the introduction of modernized styles of university financial management. The purpose of this chapter is to study the key factors influencing the amount of funds that universities have at their disposal and to recognise the basics regarding the financial standing of a university. Hulicka stresses the need for a concentration of spending as well as diversified, pro-innovative funding evaluated according to quality and certain achievements in selected activities. The aim of the chapter is also to present the close relationship between the efficiency of university financial management, and especially the search for internal sources of income, and its influence on financial results. She shows how all aspects of financial management can be greatly supported by integrated information systems.

Dominik Antonowicz in his chapter entitled “Europe 2050 New Europeans and Higher Education” focuses on the growing demographic challenges that must be addressed by both national governments and higher education institutions in Europe in the coming decades. His major claim is that European countries in 2050 will be characterized by smaller, older and more diverse populations, and that without a net migration the population of Europe will fall sharply. With such a demographic drop, gradually decreasing with a rapidly ageing population, the European economy as a whole will not be able to close the distance between it and the American economy and it will probably be overtaken by the Chinese and Indian economies. Therefore, in his view, the EU27 should show more interest in a growing population of immigrants in order to use them differently than simply manpower in the industrial sector. These so-called “New Europeans” will have to take some responsibility for the European economy, not only as a cheap labour force for the manufacturing sector but also as a well-educated workforce who will make a critical contribution to the European knowledge economy. According to Antonowicz, education systems in most EU countries must respond to external conditions and changing social demands. This raises all sorts of huge challenges; including for European governments that are responsible for both the development of a post-industrial economy and for social cohesion. New Europeans are, as human resources, an important asset that can no longer be ignored or wasted.

Ben Jongbloed and Harry de Boer claim in their chapter on “Higher Education Funding Reforms in Europe and the 2006 Modernisation Agenda” that to explore the extent to which the various European higher education systems have implemented funding reforms and to learn how these reforms compare to the suggestions included in the European Commission’s 2006 Modernisation Agenda, it is useful to present an overview of higher education funding arrangements in 33 European countries, as well as the reforms in such funding mechanisms. They discuss governance reforms in higher education, summarize the 2006 Modernisation Agenda, and present a *Funding Reform Scoreboard* that shows the situation for the year 2008, as compared to the year 1995, for 33 European countries with respect to six items: (1) the autonomy that higher education institutions experience in decision-making on financial matters; (2) the share of third party funding; (3) the share of revenues from tuition fees; (4) the degree of performance orientation in the mechanism that allocates public funds to universities; (5) the share of competitive research funds in the university sector; and (6) the portability of student grants. Comparing the situation between 1995 and 2008, they conclude that the scoreboard shows that the extent to which European higher education systems have incorporated the funding-related aspects of the Modernisation Agenda has increased in respect of all six items.

In his contribution on “Ensuring the quality of teaching and learning in the higher education modernisation agenda”, Andrzej Krasniewski assumes that quality is central to the competitiveness of European higher education and is at the heart of the Bologna Process reforms. He focuses on the quality assurance issues addressed in several EU-level policy documents, in particular in the recent Communication of the European Commission on the modernisation of Europe's higher education systems. This chapter presents an analysis of the recommendations made by the Commission, pointing out that some key issues related to quality enhancement are not addressed satisfactorily in the Communication. These issues include the reorientation of the education process towards learning outcomes and moving from teacher-centred learning to student-centred learning; first of all in the European Standards and Guidelines for Quality Assurance – a fundamental document underlying the recent developments in quality assurance within the European Higher Education Area. Krasniewski discusses how policies and regulations at the system (national) level can support the development of a quality culture in higher education institutions. He stresses the importance of providing higher education institutions with a high level of autonomy and introducing a national qualifications framework. His discussion is illustrated with an example showing how system-level regulations introduced in the process of modernising the higher education system in Poland support the de-

velopment of an institutional quality culture and the reorientation of higher education to make it more relevant to the needs of the labour market.

The next chapter on “Social Dimensions of Modernizing Higher Education. Czech-Dutch Comparative Study on Student Funding and Equality” by Petr Matějů, Simona Weidnerová, Tomáš Konečný, and Hans Vossensteyn explores the possible effects of student funding on the development of inequalities regarding access to higher education. Though it is recognized that financial issues like tuition fees and student financial aid are only some among the many factors that influence student choice and access, the authors stress that financial policies are an important instrument that can affect student choice. The aim of the chapter is to contribute to a better understanding of the impact of financial restraints on the participation in higher education of students from different socio-economic backgrounds by comparing the Czech Republic and the Netherlands, two countries with important similarities as well as differences in their education systems, student funding and participation patterns in higher education. The chapter shows that the context of steadily increasing tuition fees, accompanied by an efficient student support system (as is case in the Netherlands), does not generate an increase in inequalities of access (the results indicate rather a decrease), whereas a system of free tuition accompanied by mainly indirect (parent-based) student support did not lead to a reduction in the high inequalities of participation after the fall of the communist regime in the Czech Republic (the analysis reveals rather a steady increase in inequality).

The next chapter, “Effective Universities: some considerations regarding funding, governance and management” by Paul Temple, examines various aspects of university funding, governance and management in Europe in the context of the European Commission’s September 2011 Communication on university modernization. It considers how these issues are inter-related, and suggests that there is evidence that European higher education is changing quite rapidly in the direction of creating what the literature calls “entrepreneurial universities”. Temple claims, though, that these changes will give rise to tensions, both between universities and their national governments, but also between universities and students, who are likely to enter into new financial relationships with their universities. The chapter argues that managing these tensions effectively means understanding both the nature of higher education markets and the distinctive organizational character of universities. These characteristics need to be taken into account in the governance and management of universities.

Pavel Zgaga in “The ‘Global Strategy’ 2007 – 2011: The external attractiveness of the EHEA and its internal uneasiness” investigates the implementation of the strategy “The European Higher Education Area (EHEA) in a Global Setting (2007)” during its first four years. He stresses that this is only a short period

and there has certainly not been enough time for strong developments in this area. Further, there is not much sound data yet; however, the Bologna reports in combination with other surveys give some insight into the main trends. Using the national reports to BFUG, Zgaga designs a comprehensive table to present the implementation activities in five policy areas defined by the strategy. By far the most frequent type of activity in implementing the Strategy during its first two years seems to be, rather surprisingly, bilateral and multilateral contacts and agreements between the EHEA countries. In general, non-EU countries, both to the West and East, appear less frequently in the table than EU member states. He corroborates the assessment of the 2009 *Bologna Stocktaking* report that “most countries seem to promote their own higher education systems internationally and very few promote the EHEA” by using other surveys and reports. Zgaga reconfirms and, in the concluding part of the chapter, comments on its relationship to the concept of the “attractiveness of the EHEA”.

Georg Winckler in his chapter on “The European debate on the modernisation agenda for universities. What has happened since 2000?” points out that the Bologna Process and the Lisbon Agenda triggered a European debate on modernising universities. As part of the “Hampton Court follow up” (2005/2006), the EU Commission produced a document which asked for the greater effectiveness of mass higher education and for the greater mobility of students and staff. In addition, more “real” autonomy and accountability for universities across Europe, better governance structures, more excellence at the top, and a funding target for universities of 2% of GDP were demanded. Yet, he stresses that member states did not appreciate these comprehensive demands by the Commission. In its recent communication on this issue in September 2011, the Commission is viewed as retreating from these extra demands; although, in the meantime, a Europeanization of national systems has already set in due to Bologna, ERC and other factors. Winckler concludes that despite member states’ responsibility for universities, European programmes on research and cross-border mobility may create a European space for universities; and so enable them to better contribute to a research-based European knowledge society if universities can act autonomously, are strategically oriented and overall funding at the European level is sufficient.

The book presents also two recent documents by the European Commission, published during the Polish EU Presidency, which were major points of reference. There are two chapters: “Communication from the Commission: Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems” and “European Commission staff working document: Supporting growth and jobs: an agenda for the modernisation of Europe's higher education systems”. Finally, the concluding chapter, “European Strategies and Higher Ed-

ucation” by Marek Kwiek, discusses EU-level developments in policy thinking in the area of higher education, training, and labour markets based on the analysis of a major large-scale strategy promoted by the European Commission in the 2000s, “Education and Training 2010”.¹

1 The editors would like to express their gratitude to Mr. Keith Stewart for his valuable assistance in proofreading the papers.

Chapter 1

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

Marek Kwiek

1. Introduction

The increasingly complicated picture of the academic enterprise in Europe is due to several general factors: globalization and Europeanization, educational expansion and the massification of higher education, the economic crisis and public sector reforms, and the knowledge-driven economic competitiveness of nations and regions. Some factors, like expansion and massification, have exerted their influence over a few decades; others, like the economic crisis, for a few years. They can be put under four more general categories of external pressure 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.¹ Reforms increasingly today, and throughout the European continent, lead to further reforms rather than to reformed higher education systems, which supports the 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-attempts at changing organizational forms” (Brunsson 2009: 1).² 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

1 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” (Kogan and Hanney 2000: 11); see also Ladislav Cerych and Paul A. Sabatier (in their 1986 study of the implementation of higher education reforms in Europe) who said the late 1970s and the early 1980s were “a most critical period” (Cerych and Sabatier 1986: 3).

2 Not surprisingly, as observed in organizational research by Johan P. Olsen fifteen years ago: “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).

agenda for “universities” and for “higher education systems” tend to show (see EC 2006, EC 2011a, EC 2011b and numerous related documents). Universities, throughout their history, have changed as their environments changed, and the early 21st century is no exception (see Rüegg 2011 for the post-war period; for theoretical perspectives in organizational theory, there are two streams: 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 1978).³ Different directions regarding current and projected academic restructuring in different national systems add to the complexity of the picture at a European level.

There are 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 adapting to changing environmental settings; renegotiations of the general social contract providing the basis for the post-war welfare state and its public services; the tremendous scale of operations of and funding for universities; the divergence between global, 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 as follows:

- *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) levels have accelerated to an unprecedented degree. 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

3 Various forms of the population ecology perspectives stress the critical role of environments in the 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 distinction between universities as “instruments for shifting national political agendas” and as “institutions” made throughout the book they edited (Maassen and Olsen 2007).

2002, Foray 2006, Kahin and Foray 2006, Bok 2003, Slaughter and Rhoades 2004, Shattock 2008). 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, with the potential of European higher education institutions being viewed as “underexploited”, EC 2011a: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 relationship 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 1994, 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 centre of the key economic challenges facing modern societies (Geiger 2004, Leydesdorff 2006, Bonaccorsi and Doraio 2007). In most European systems, the relationship between the state authorities 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 “foundation universities” (in Sweden or Germany) which are at the same time non-public and non-private, which further complicates the picture.
- *Universities functioning under permanent conditions of adapting to changing environmental settings.* The changing social, economic, cultural and legal settings of European higher education institutions increasingly compels them to function in a state of permanent adaptation; adaptations are required as responses to changes both in their financing and governance modes (see Clark 1998, Shattock 1998, 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 tend to view universities, like other public institutions, as “incomplete”; reforms are intended to make them “complete” institutions

(Brunsson 2009). Reforms are thus leading to further waves of reforms (Maassen and Olsen 2007, Clancy and Dill 2009).⁴

- *Renegotiations of the general social contract providing the basis for the post-war welfare state and its public services.* Europe faces a double renegotiation of the post-war social contract related to the welfare state (which traditionally includes education, as in Stiglitz 2000, Barr 2004, Kwiek 2010b) and the renegotiation of the social contract links, over the last two hundred years, between public universities and European nation states (see Jakobi *et al.* 2010, Rothblatt and Wittrock 1993, Kwiek 2005, 2006). The future of the traditional idea of the university in new settings whereby public institutions and public services are increasingly based, or compelled to be based, on the economic logic and (quasi-)market formulas of functionality is still unclear (see Dill and Van Vught 2010, Geiger 2004, Bok 2003, Weber and Duderstadt 2004, Clancy and Dill 2009). Current pension reforms throughout Europe are a widely, publicly debated aspect of the same social contract.
- *The tremendous scale of operations and funding.* The scale of operations (and financing) of universities, both regarding university teaching and university-based research, in European economies remains historically unprecedented. Never before had the functioning of universities brought so many diverse benefits, both explicitly public and explicitly private. But also, never in post-war history had all aspects of their functioning been analysed 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, OECD 2008, Dill and Van Vught 2010, 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 2011b 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 allocations to universities has been shifting towards a “competitive approach” to university beha-

4 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 1998: 30). Or, in other words, reformers’ “great expectations” often lead to what Cerych and Sabatier called “mixed performance” (Cerych and Sabatier 1986).

viour and funding (Geuna 1999), with possible unintended negative consequences (Geuna 2001).

- *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 to higher education, and reflected also in the 2011 Communication from the European Commission, referred to throughout the present volume). And the second is a set of nationally differentiated traditional discourses by the academic community, deeply rooted in traditional, both national and global, academic values, norms, and behaviours (see Novoa and Lawn 2002, Ramirez 2006). These two sets of discourses seem polarised today as never before. The struggles between them (the former set supported by the ascendancy of the changing modes regarding the redistribution of resources and the legal changes relevant to universities' operations; and the latter set supported by the strength of academic traditions, and, in general, of the academic community) 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 the academic community about the substance of higher education reforms. The political economy of reforms suggests, though, that no reforms can be successful without the support of at least some groups of academics.
- *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 the public discussions that accompany them. Together with the increased emphasis in public policy on private goods (and private benefits), the threat to the public subsidization of traditional public institutions may be growing (Marginson 2011, 2007b, McMahon 2009). Viewing higher education more consistently from the perspective of private investment (and private returns) is more probable than it has ever been since the 1960s when the human capital approach was formed. This may have an impact on long-term public perceptions of the social roles of universities and their services, and on long-term views about the public funding of universities in the future.

The panoramic view presented here draws on both current research and policy debates to show possible directions of change for the academic enterprise in Europe. There are many options possible and forecasting in the arena of higher education does not have a good track record. There are many variables, and most

of them are explicitly related to the changing social and economic environments in which universities function.⁵

There are several contentious areas, and all of them contribute to the possible growing systemic complexity of the academic enterprise in the next decade. Six of them will be briefly discussed 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 are at least expected to become, crucial. They include the following (descriptions of each area will be followed by related questions):

- *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?
- *The role of third-stream funding.* What is the role in university budgets for 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?
- *Changing university governance modes.* What are the many faces of the new managerialism in universities, and what will its impact be on the norms, behaviours, and routines of the academic community?
- *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 becoming internally differentiated by various levels of research intensity and competitive access to research funding? How does the research-intensity of institutions determine their funding levels and national prestige hierarchies?
- *The changing academic profession(s).* How far can the differentiation processes within the academic profession go in following the differentiation processes in higher education systems themselves? What are the many futures for differentiated academic profession(s) in national systems?
- *Further expansion of higher education systems.* What might universal higher education mean for millions of graduates, for their job prospects and future income differentials in today's post-industrial economies? Are middle-class lifestyles attainable for all, based on universal access to higher education?

5 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 the future of higher education and the future roles of private higher education (see Levine *et al.* 1989, Breneman and Finn 1978, and the Carnegie Report 1977).

The present chapter will refer to the above contentious areas in higher educational research and policies and will discuss the three following major questions with reference to the coming decade:

- Should European higher education systems expect, in general, more (quasi-) market mechanisms and more new income-generating patterns?
- What is the role of the new university stakeholders and how might teaching/research missions evolve in European universities?
- To what extent is meeting the conflicting demands from different university stakeholders a major challenge to the European academic profession?

2. Marketization and the growing competition for public funding in European universities

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.

Firstly, there may be a growing relevance for a market perspective, as well as increasing financial austerity, in respect of all public services (accompanied by a growing competition for 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.⁶), strengthened by several factors. These factors include the 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 have to respond to increasingly unfriendly financial settings by either cost-side solutions or revenue-side solutions (see Johnstone 2006). 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, already termed “external income generation” and “earned income” by Gareth Williams in *Changing Patterns of Finance in Higher Education* with reference to British universities two decades ago (see Williams 1992: 39-50; ex-

6 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 2006, Kwiek 2007a and Kwiek 2010.

amples of academic entrepreneurialism so understood can already be found in most European systems, to different degrees, as empirical research demonstrates, e.g. EUERЕК project, *European Universities for Entrepreneurship*; see Shattock 2008, Kwiek 2008b, 2008d).⁷

New sources of income may thus include various forms of academic entrepreneurialism in research (consultancies, contracts with 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 the academic traditions in which the systems are embedded, as well as the incentives for institutions and for entrepreneurial-minded academics and their research groups within institutions. In general, the non-core income of academic institutions includes six items: gifts, investments, research grants, research contracts, consultancies 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.⁸ “Academic entrepreneurialism” and various forms of “third mission activities” seem to have attracted 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 coopera-

7 The EC communication explicitly mentions the need for 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).

8 As Williams defined academic entrepreneurialism based on research performed in the EU FP6 EUERЕК project (in which the present author was a partner): “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... Financial stringency and financial opportunities have been the main drivers of entrepreneurial activity in the case study institutions” (Williams 2008: 9).

tion with business should be viewed as a “core activity” of higher education institutions, EC 2011a: 7,8; see the wide panorama in my recent monograph, Kwiek 2012c).

Secondly, in such times of possible reformulations to the most generous types of welfare state regimes in Europe (see Powell and Hendricks 2009, Pestieau 2006, Iversen 2005), 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 with the levels of public funding for higher education. And overall trends in welfare state restructuring seem to have been relatively similar worldwide (as Paul Pierson had already stressed a decade ago, long before the recent financial crisis arose, “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 ... the control of public expenditure is a central, if not dominant consideration”, Pierson 2001: 456). 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).⁹ The competition for tax funding between various social needs and different public services is bound to grow, regardless of the time when the current financial crisis will be overcome. The reason is simple, as both students of welfare and students of demography have shown: 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).

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 to 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 post-war (Continental) European tradition was

9 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 and Marcucci 2007: 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 and Marcucci 2007: 46-63).

tax-based higher education, and (high-level) fees still look non-traditional in most systems.¹⁰

Trends in European demographics (especially the aging of European societies, see the decade-long OECD *Public Pensions Series*) will directly affect the functioning of the welfare state (and public sector institutions) in general, with strong country-specific variations. In most European countries, demographics will only affect universities indirectly, through the growing pressures on public expenditures in general, and the growing competition for all public funding. In some countries, such as Central Europe (especially in Bulgaria, Romania, Poland, Hungary and Slovakia; Poland, with powerfully declining demographics, faces projections for the number of students as dwindling between 2008 and 2025 by one million, Kwiek 2012), the indirect impact on all public services will be combined with the direct impact on educational institutions. Strong higher education institutions will be able to steer the future changes in funding patterns for higher education in their countries – rather than to merely drift with them.

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; for a powerful defence of higher education as a public good see especially Calhoun 2006, Marginson 2006, Rhoten and Calhoun 2011: 1-33, and Marginson 2011). 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: Philip Altbach stressing that in a global context, “the private-good argument largely dominates the current debate”, which results from a combination of economics, ideology, and philosophy (Altbach 2007: xx).¹¹

10 For a powerful rationale for the universal introduction of fees, see Johnstone’s work 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, forthcoming. 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 (so far tax-based) public sector, see Kwiek 2012a, Kwiek and Maassen 2012.

11 William F. Massy concluded almost a decade ago about American colleges 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

Fourthly, in the last half century, despite immense growth in enrolments, public higher education in Europe remained relatively stable from a qualitative point of view. Its fundamental structure remained unchanged. Currently, the forces of change worldwide are similar (see Johnstone 2006) and they are pushing higher education systems into more market-oriented and more competitive arenas (as well as towards more state regulation, possibly combined with less state funding, available on a more competitive basis, Teixeira *et al.* 2004). As Fazal Rizvi 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 were subsidized by the state. Over the last 200 years, most students in Europe attended state-funded public institutions and most faculty members worked in state-funded public institutions (within all major models of the university in Europe which served as “templates” for other parts of the world). Today market forces in higher education are on the rise worldwide and the non-core non-state income of universities is on the rise too (see a recent report by CHEPS 2010, Shattock 2008). While the form and pace of these transformations are different across the world, they are of a global nature and are expected to have a powerful impact on higher education systems in Europe.

3. Conflicting demands and the teaching/research divide in European universities

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.

Universities under conditions of massification are increasingly expected to be meeting not only the changing needs of the state but also the changing needs of students, employers, the labour market and industry, as well as the regions in

rather than a public good: very important for those who get it, but something most government officials can safely take for granted” (Massy 2003: 4). The diagnosis is “the erosion of trust” (Massy 2003: 3-28) and “the diminishing of public purpose” (Zemsky, Wegner and Massy 2006: 1-14).

which they are located (Jones, McCarney, and Skolnik 2005). The demands put on academics are increasingly conflicting. Globally, for the vast majority of academics, the traditional combination of teaching, research, and service is beyond reach: 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 and in the US (Schuster 2011). The expected developments in the next decade may fundamentally alter the relationship between various stakeholders, with a decreasing role for the state (for example, and perhaps especially, in terms of funding), the increasing role of students and the labour market (for the more teaching-oriented sector of higher education), and the increasing role of industry and the regions (for the more research-oriented sector of higher education). These processes are already advanced to varying degrees in different European countries.

On a more general level, the massification of higher education is tied up with the growing significance of these new (or only re-emergent as powerful, as is the case of students under the Bologna Process transformations) stakeholders (Palfreyman and Tapper 2009). At the same time, let it be stressed here, in the midst of reforms, in order to flourish, universities, and especially research universities, also need to continue to be meeting the needs (either traditional or re-defined) of academics, the core of the university (Clark 1987, Clark 1983). 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 – have already led to largely differentiated institutional systems (and, in a parallel manner, a largely 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 2005: 53).

Such questions as: how to combine teaching and research in university missions, in which types of institutions should they be combined, and based on which funding streams (e.g. 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. 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-centred. Students as university stakeholders are becoming increasingly powerful, also through being reconceptualised as “clients” by institutions and as a future well-trained graduate labour force by governments.

University missions are already being strongly redefined, and their redefinition may require a fundamental reconstruction of the roles of educational institutions (as well as a reconstruction of the 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, the implications of the Bologna process at both European, national, institutional and individual (i.e. academics) levels seem still not to be fully realized. 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 advanced countries ... or may fall mainly to business and private investment” (Johnstone and Marcucci 2007: 3). The concentration of research funding in an ever smaller number of top institutions is observed throughout European higher education and research systems: there are gainers and losers in these processes for 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).

The social, political, and economic contexts in which universities function are changing, and so are student populations changing as well as educational

institutions (increasingly 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.¹²

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). Institutions are thus expected to transform themselves to maintain public trust (and to have a good rationale for using public subsidies). 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). The role of the market in higher education (or of government-regulated “quasi-markets”, see Teixeira *et al.* 2004) seems so far to be growing, because the market seems to be increasingly affecting our lives as humans, citizens, workers, and finally as students/faculty.

Never before has the institution of the university for so long been under the changing (and increasingly conflicting) pressures of different stakeholders. Never before has it been perceived by so many, all over the world, as an institutional failure in meeting the needs of students and the labour market (the literature on the supply/demand mismatch is substantial, and growing). Therefore the question as to 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 the educational credentials received by graduates are increasingly linked to their professional and economic futures – seems to be open.

Following the 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 the permanent need to cope with the financial austerity facing all public sector services (see Pierson, 2001). Universities may soon be under pressures to compete more fiercely for financial resources with other public

12 Research universities are especially expensive: in 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 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 then 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*, Carnegie 1977, and Breneman and Finn, 1978).

services, also heavily reliant on the public purse. Public priorities are changing throughout the world, and new funding patterns and funding mechanisms are being experimented with (Central Europe, Poland included, has long been experimenting with various forms of privatization in public services).¹³ The rationale for European university research funding has been changing throughout the last two decades, often with “negative unintended consequences” (Geuna 2001).

The consequences for the teaching/research agenda at universities regarding the growing competition for public resources are far-reaching. The trend towards the concentration of research in selected institutions is powerful in several countries (Poland included: in 2009, 80 per-cent of research funds were concentrated in 20 institutions, in a system of about 100 public and 330 private institutions). The trend for disconnecting teaching and research in higher education has already started: as Stephan Vincent-Lancrin from OECD (2006: 12) summarizes in 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 2006: 81-138). The perspective of further future delinking of teaching and research, especially in first-tier institutions, runs counter to 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. Reputation is “the main currency for the academic” (Becher and Kogan 1980: 103) and it derives from research rather than from teaching (Clark 1983, 1987, Altbach 2007). In the developing countries, research and teaching have always been separated except for national flagship institutions. Further differentiated academic professions can be expected to emerge, of which only small segments will be involved in (usually in the higher education sector and state-funded) research.¹⁴

13 In higher education, see the different implications of internal and external privatization in Kwiek 2008c, 2010a, and, especially, Kwiek 2012c.

14 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.

4. Academics and their transforming institutions

The third question regarding the present panorama is to what extent meeting the conflicting demands of new and evolving stakeholders is a major challenge to the academic profession.

Massified educational systems (and an increasingly massified academic profession) unavoidably lead towards various new forms of system differentiation and stratification. Universities in most European countries seem still quite faculty-centred and their responsiveness to student and labour 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). The broadening of the debate about the 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. And 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.

European research universities will be attractive if they are able to meet current (sometimes conflicting) differentiated needs. These needs sometimes seem to run counter the traditional twentieth-century social expectations of the academic profession in continental Europe, though.

Consequently, attractive European higher education systems will have to find a fair balance in their expected transformations so that the academic profession is not deprived of its traditional voice in university management and governance; the 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, Perkin 1969, Maassen and Olsen 2007). Close relationships with industry, responsiveness to labour market needs and meeting students’ vocational needs – have not traditionally been associated with the core values of the academic profession in continental Europe (despite perhaps the verbal declarations of the academic community and despite universities’ mission statements). It is unclear to what extent these core values are al-

ready under renegotiation in massified systems. The academic profession may find future transformations of higher education systems – and of their own institutions – surprising at best; appalling at worst. But it must be taken for granted, no matter what transformations are in place, that academics are in the very centre 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).

Increasingly differentiated student populations in Europe also require increasingly differentiated institutions, and (possibly) increasingly differentiated types of academics. The academic profession is clearly becoming a myriad of academic professions, even within the same national system, not to mention cross-country differences. This might 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 a profound impact on the social stratification of academics, especially in those countries where the expansion in enrolments is especially high.

The point is that the academic profession is at the core of the academic enterprise, as relentlessly proclaimed 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”).¹⁵ 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 industrial sector under the conditions of globalization, with industry or service jobs often going to cheaper la-

15 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 social science-based studies of the profession. For similar views see: *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.

bour force destinations.¹⁶ 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 2009), as well as research and innovation (Dill and Van Vught 2010). But universities may become much less significant in the knowledge-driven economy if the academic profession is not fully committed to academic missions (and wholly optimistic about its own career opportunities in the future). This is what the logic in the political economy of higher educational 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 below.

The changes in the academic profession in Europe occur in a specific context defined by the common realities faced by European higher education systems: they include processes related to financial constraints, differentiation, accountability, societal relevance, as well as 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).

In all on-going reform initiatives throughout Europe, there is the hidden dynamics of changes in the relationships between the state, or the major sponsor of teaching and research, and academics, or the major beneficiaries of state sponsorship in the academic enterprise. The academic profession has a fiduciary role to play: the institution of the university is, following James March and Johan P. Olsen’s normative institutionalism, a relatively enduring “collection of rules and organized practices embedded in structures of meaning and resources that are relatively invariant in the face of the turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances. Constitutive rules and practices prescribe appropriate behaviour of specific actors in specific situations” (Olsen 2008: 27). Constitu-

16 The delinking of universities and public good may lead to the 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 defence of the public mission of the research university in Rhoten and Calhoun 2011, especially Calhoun 2011: 1-33). Also Ulrich Teichler, noting that the European research university is more endangered than ever before, states that “research can emigrate just as well as advanced academic training. Even the credentialing power of the university could vanish” (Teichler 2006: 169).

tive rules and practices are not easily changeable, they take time to root and take time to change. The modernization of the institution of the European university (including a recent EU “agenda for the modernization of Europe’s higher education systems”, see EC 2011a and EC 2011b) means changes in the rules constituting its identity. 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). The “Great expectations” shared by higher education reformers has traditionally led to “mixed results” in terms of their implementation, and reforming higher education is closely linked to reforming the states in which it operates (Cerych and Sabatier 1980). 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).

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

Thus, finally, 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 the 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)¹⁷. We 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

¹⁷ The research team also included Dr. Dominik Antonowicz. Research conducted in Poland in 2009-2011 was coordinated by Ulrich Teichler of Kassel University and funded by the European Science Foundation.

will be one of the most important dimensions of successful on-going and future reforms in higher education.¹⁸

Overall, academic professionals in Europe in the countries studied seem to derive relatively high satisfaction from their work in universities. On a 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 it is 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 differ from senior staff most visibly in the 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 (a 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).¹⁹

18 The environment for the academic profession worldwide is reported to be generally “discouraging”. As a recent 2009 report for the UNESCO World Conference on Higher Education 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, are three factors: a concentration of talent, abundant resources, and favourable 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).

19 The following three tables and their brief analysis is extracted from a forthcoming paper written by Marek Kwiek and Dominik Antonowicz, “Changing academic work and

The respondents were also 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 by both senior and junior academics in universities in Austria and Italy (1.8-2.0). The most optimistic views regarding 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 at 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 as 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 question: “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 was also addressed by 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% of the senior academics and 17% of the junior academics stated that they would not do again. As Table 3 below shows, the most negative views are expressed in this respect by academics at universities in the United Kingdom (22% among seniors and 30% among juniors). It is worth noting the responses by academics in Finland: while senior academics respond very positively to this statement with only 9% of negative responses, juniors were among those reacting quite negatively (20%).

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).

Table 3: *Junior and senior academics views on whether they would become academics again (per-cent, 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 question: “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 renegotiation, European welfare state model).

There are two crucial dimensions in the context of the attractiveness of academic careers in European systems. Firstly, it is linked to 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; 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 the 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 the public and private sectors. The prestige of the

academic profession in Europe is still relatively high but, globally, it is diminishing (Altbach *et al.* 2009). Young academics are being compared to young professionals, and university professors are being compared to advanced professionals (a unique study comparing incomes of researchers and professionals in European Union countries was published in 2007: *Remuneration of Researchers in the Public and Private Sectors*, EC 2007). High job security and a relatively friendly, non-competitive work place is increasingly less common globally, but this is also true throughout Europe, as reported by such EUROAC/CAP indicators as personal stress, individual affiliations, academic freedom along with 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 (Altbach and Salmi 2011; see Schuster and Finkelstein 2006: 234-286). University professors in Europe and in North America have traditionally been members of the middle classes and their financial status in the post-war period was relatively stable. In most European countries, though, over the last two decades, academic incomes seem not to have caught up with the incomes of other professionals. References to the “proletarianisation” of the academic profession have been heard ever more strongly within higher education research in the last decade (see, for instance, Amaral 2007, Fulton and Holland 2001, Fulton 2000, Enders and de Weert 2009), and the financial instability of the professoriate may grow higher under the conditions of a 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 have been 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 the European countries studied, the above condition still seems to be met for senior academics. But in ever more complicated settings, overburdened, overworked, and frustrated academics would not be able to make European universities attractive. With a new, more pessimistic academic mind-set, the complexity of the academic enterprise would be even more complex than assumed here.

Attractive higher education systems should be able to offer academics competitive career opportunities. The widening of the gap between the economic

status of academics and other professionals in Europe (visible to varying degrees in different countries, in some academic disciplines more than in others, EC 2007) needs to be stopped, at least in top national research institutions, to avoid further “graying” of the academic profession and to make universities a possible career option for the best young talents. Stopping the process of this widening gap would consequently stop what Alberto Amaral recently called “the gradual proletarianisation of the academic professions – an erosion of their relative class and status advantages” (Amaral 2007: 8).

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). 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).²⁰ These perceptions seem to be valid in the European

20 Time is critical: there appears to be an issue here of the 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, as Dill argues, among other things, “in competitive research and labour 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 ac-

university sector, and especially in European research-intensive universities. Therefore more differentiation and a stronger segmentation of the academic profession is needed, as is more intra-institutional and inter-institutional differentiation as well as stronger segmentation in national higher education systems (e.g. flagship universities or flagship faculties, with additional public funding).²¹ These perceptions seem to be still cherished by those academics who view their primary interest as research: time spent on teaching competes directly with time spent on research, considering that the time spent on administration cannot be easily reduced, and there are powerful tensions between both university missions, with the resulting personal stress revealed through the EUROAC survey (on the trade-offs between teaching and research time being central to European universities, see Enders and Teichler 1997, and Bonaccorsi *et al.* 2007: 166).

The complexity of the academic enterprise is also increasing because academic activities are becoming 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, this is “blurring boundaries between traditional roles and quasi-entrepreneurial roles” (Enders and Musselin 2008: 145).

The concentration of research funding in selected research areas and in selected institutions or their constituent parts, supported strongly by the ideas of world-class universities and various national research schemes directed to existing or emergent flagship universities – leading to the 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 the most competitive academic places is unavoidable, it also means the deprivation of other, less competitive places, of

academics in most countries in the university sector declared that they prefer “both teaching and research” but with a strong emphasis on research.

- 21 The concerns of the 2000s have not been different from those of the past: as Gareth Williams showed referring to the 1980s where the concerns were (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). The Polish reforms of 2008-2011 can be summarized along these four financial lines.

academic talents and resources (see Geuna 2001 on the unintended consequences of a competitive rationale in research funding).²²

To sum up this final section: almost all the emergent complexities of the academic enterprise expected in 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. 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 2006: 169). 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 for the on-going higher education reforms. The “modernization agenda of European universities” promoted in the last few years by the European Commission, to be successful, needs to take into account the specificity of the academic sector and the specificity of the academic profession.

5. Conclusions

There are several conclusions to be drawn. First, the scope of changes envisioned regarding all major aspects of higher educational operations (management, governance, funding, missions, human resources) is much bigger than commonly believed. The changes contemplated 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.

22 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).

Second, 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 economic growth and job creation in knowledge-driven economies. It is also related to the increasing expectations from society and policymakers.

And third, there are no one-size fits all types of answer, across all European systems, to the dilemmas indicated at 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 an increasingly interconnected world. Europe, and its emergent common higher education and research areas, provides a perfect example of seeking common answers to the questions posed by the increasing complexity of the academic enterprise.²³

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Chapter 2

People and Their Ideas: The Foundation for Inclusive European Growth

Maria Helena Nazaré

1. From the Lisbon Strategy to the Modernisation Agenda

The welfare of a nation depends, in the long run, on the quality of human resources; that is on people and their ideas (hence the title of this chapter), and thus it is linked to the capacity of the higher education sector and the quality of its institutions. During the last decade, the European higher education landscape has undergone tremendous alterations both at system and at institutional levels. Many of those were directly linked with, or driven by, the needs for efficiently qualifying the workforce, within an appropriate span of time, and equipping it with the skills required by a competitive global world market. Hence the Bologna higher education reforms, which brought about the restructuring of HE degrees, new methodologies focusing on the learning process instead of teaching-centred ones, increased mobility of students and staff, and the new importance of quality improvement and quality assurance within HE. The building of a knowledge society requires a strengthening of the links between the research and the teaching missions of universities and changes to doctoral education, the third-cycle degree within the new Bologna structure. At the same time novel means of interrelation between the university and business were developed and have proved fruitful.

Half way through the first decade, it became clear that meeting the goals of the Bologna reform and of a knowledge society required more than restructuring HE degrees. The Modernisation of Europe's universities (UE Policy) was (2006) acknowledged as a core condition for the success of the Lisbon Strategy. Many national reform agendas (Portugal and Finland are examples) went beyond the structure of the higher education system and included new governance structures with increased stakeholder influence, different methods of choosing the leadership and greater proportions of performance-based funding. (Altbach 2008, Tauch 2006, Crosier, 2007, Teixeira 2009, Sursock 2010, Borrell-Damian 2007, Borrell-Damian 2010, Reichert 2009).

However, by the end of the first decade of the XXI century, Europe was, and still is, confronted with one of the worst economic and financial crisis since the great depression, together with very adverse demography. To respond adequately to such a challenging environment the *Europe 2020 Strategy* is relying on

tools created by the implementation of the Bologna reforms in order to build an inclusive knowledge society.

But there are severe limitations to the success of the 2020 Strategy, namely, those related to the disparity of demographic trends within Europe as well as the way governments are dealing with the economic crisis which is impacting very negatively on European universities. These issues constitute a severe threat to the achievement of a harmonious ERA and EHEA and also undermine the overall objective of the realisation of a cohesive, inclusive and economically strong Europe. A Strong Inclusive Europe requires Strong Inclusive Universities.

Demographics in Europe

Europe's population – 732 millions in 2010 – is expected to register a 6% decrease, and reach 691 million by 2050, assuming a medium variant of fertility and life expectancy; however, in the same period, the 15 – 59 age group will decrease by 30%, from 459 million to 351 million, while the age group above 60 will increase from 192 to 302 million. That is to say, by 2050 the working population will be about the same size as the senior (above 60) population group.

This constitutes a major threat to the sustainability of the European economy and welfare model. It would undermine social cohesion and cause generational tensions. Social security costs (pensions and health care) will skyrocket - as is already happening! - placing an incredible tax burden on the working age group. At the same time, welcoming and integrating the *necessary* immigrants will require complex and expensive public policies, which will be difficult to explain to the public at large in times of financial scarcity.

Europe is a very diverse region, also in demographic terms, and big differences can be observed which are likely to add to the problem. Eastern Europe faces ageing as well as huge decreases in the overall population. Countries like Bulgaria, Estonia, Latvia, Lithuania, Poland and Romania confront population decline due the cumulative effects of a decrease in fertility and emigration that is not compensated for by immigration; whereas in Southern Europe (Greece, Italy, Portugal, and Spain), the decline in fertility has, so far, been somewhat compensated for by immigration. However, the group of school leavers from which HE traditionally recruits is shrinking across Europe, hence the danger of increased mobility flows from East and South to West and North. This will aggravate the social and economic problems of the émigré regions with increased internalisation of costs and the externalisation of benefits (Teichler 2011, Whiteford 2010, Population 2008).

The materialisation of *smart, sustainable and inclusive growth* in Europe depends on a better and higher articulation among governments, policy makers

and HE institutions, promoted and supported by visionary leadership at all levels. Although *the main responsibility for delivering HE reforms rests with Member States and educational institutions themselves*, the seriousness of the situation transcends geographical borders and needs more than a framework. As long as universities remain underfunded and overregulated it will be impossible for them to deliver the knowledge and graduates that Europe needs for *smart, sustainable and inclusive growth*. As long as Europe does not address the demographic and economic disparities it will continue to lose brains to emerging economies in other parts of the world. Universities have a duty to inform public policies and governments should use the information provided to model the necessary development instruments (Ritzen 2010, Münz, 2007).

2. Increasing Attainment Levels and Improving the Quality and Relevance of Higher Education

Europe needs to increase the qualifications of its workforce and the 2020 objective in this area is to have 40% of young people (aged 30-34) qualified at HE level. Attaining this objective entails, in institutional terms, abandoning for good the paradigm of educating 18 year old secondary schools leavers. It means not only recruiting mature students but having in place different learning paths, ways of recognising competences acquired via formal (including vocational) and non-formal prior education and training, and using learning methodologies (the Bologna tools) in a manner that is appropriate to these new publics so that the probability of success is high. It is more harmful to welcome mature students without having in place adequate tools to deal with these newcomers than not admitting them at all. Universities need to be able to reward success in equipping graduates for the labour market.

All this requires institutions to have autonomy in terms of curriculum, staff recruitment, salaries and incentives. Here is a case where institutions cannot do more with less; at best, they could do more with more autonomy and the same funding level. Partnerships with business and industry are crucial to ensure the relevance of the qualifications and opportunities for the active workforce. However, the danger that this contingent of students may be looked at as the cash provider to balance the shortcomings of public funding is very real (Smidt 2011).

Obviously leadership matters.

Untapped talent is found in the immigrant population. In many European countries immigration and international migrants are not seen as a source of dynamism to the economy or to the innovative capacity of the country; on the con-

trary, they are perceived as competitors for jobs in a low performing market, leading to social tensions. Social exclusion mechanisms affect the school performance of second-generation migrants who, therefore, seldom reach university, resulting in a waste of talent. Proper policies of full and responsible integration are generally needed (Münz 2007).

3. Attract and Retain the Best: Europe Needs More Researchers

Indeed Europe needs more researchers along with a wiser view of the importance of inter-disciplinarity and the role that the social sciences can play in a world where food per capita is diminishing, the number of dislocated people is increasing, the natural supplies of water are under threat, climate change is going to produce mass migration with the associated famines and general hardship, and where fears of nuclear energy are bound to deepen the energy crisis. In terms of food production and dislocated people, the decade 1999-2009 was extremely discouraging. We went from producing 312 kg of grain per person to 303 kg, the estimated total of hungry people went from 842 million to 963 million, and the number of refugees and displaced persons from 14 million to 16 million.

Universities in Europe cannot stay aloof from these, so called Grand Challenges

Europe has an enormous advantage in its universities, at the heart of which is research and research-based education. In fact, the link between higher education and research is a central feature of European universities and this interaction is seen as essential for strengthening the research capacity, and improving the quality and attractiveness of European institutions. The universities recognise that graduates at all levels must have been exposed to a research environment and to research-based training in order to meet the requirements of Europe as a knowledge inclusive society, and that there is a need to increase the number of doctoral level holders to enhance knowledge transfer and foster innovation and creativity.

Hence the absolute need for assuming that the contribution to deal with the Grand Challenges cannot come exclusively (or mainly) from research around these themes. On the contrary the contribution of education -- “research based education” -- is essential (at least with an importance equal to research) in dealing with the problems, challenges, dangers and opportunities which will constitute the framework for society and living conditions in the next 20/30 years. More than ever we need educated and competent citizens trained at the highest level by universities, so they able to understand the new global environment we

live in when a decision taken in China or New Zealand may have immediate consequences and impact in Europe.

The European Universities have a vast wealth of knowledge and competences immensely relevant to dealing with the Grand Societal Challenges: Energy, Climate Change, Ageing, etc. Along with this research Universities can offer training and networking in a multidisciplinary way that no other organisation can. Universities can reach and teach the decision makers of the present and of the future. Only Universities may train sustainability aware citizens on whose behaviour and performance our common future relies.

Doctoral education is being restructured across Europe. European universities have recognised that doctoral training must increasingly meet the needs of the employment market which is wider than academia. Consequently, doctoral programmes have changed a great deal in recent years, becoming more geared to employment outside academia, including interdisciplinary training, focusing on the development of transferable skills and operating within an appropriate time duration; three to four years full-time as a rule. Most of them offer, nowadays, geographical as well as inter-sectoral mobility, along with international collaboration within an integrated framework of cooperation between universities and other partners, in particular enterprises and business.

All over Europe doctoral schools are being created as a result of joint ventures involving international partnerships among universities, other research organisations, industry and business. What is at stake here is the concentration and use of European knowledge to educate, at the highest level, future generations of candidates and it is essential that these doctoral schools are funded accordingly. The use of new technologies enable concentration of knowledge and brains working together to build a vibrant research community without the need for a great deal of travelling around.

The European Universities Association (EUA) has played a key role in helping its members to carry through this process of change, via the Council for Doctoral Education.

The need for restructuring doctoral education within universities is perhaps one of the more challenging issues that the university leadership faces nowadays. The apprenticeship model of doctoral education lies at the very heart and foundation of European universities and so is one of the issues that faculty members resist and are reluctant to change.

In order to strengthen research and research-based education, universities have to develop research strategies that define institutional priorities and identify areas of specialisation leading to excellence and sustainability in research. Of course this calls for enlightened leadership backed by appropriate governance and managing structures and the availability of funds in strategic areas.

Internationalisation of European Higher Education

Doctoral programmes are a key component of the discussion about European higher education in a global context. At institutional level, they are central to the development of universities' internationalisation strategy, attracting the best doctoral candidates from all over the world, encouraging mobility within doctoral programmes and supporting European and international joint doctoral programmes and co-tutelle arrangements. However, so far universities have mostly addressed the question of internationalisation in an individualistic way, each with its own strategy of attracting/exchanging the best staff and students and usually only at postgraduate/doctoral level.

European HE not only needs to welcome (and retain?!) the best but also get involved in capacity building and learning outside the continent. Research priorities have to take into account the global challenges and the needs of both partners in any cooperation. In 2011, if the European HE system and institutions are to become truly international, and contribute to the development of a global cohesive and sustainable economy, coordinated actions are needed. Affiliations of universities in different continents can provide such coordination, maximising synergies and improving quality in a win-win cooperation. **It is thus necessary that such affiliations get enough support**, and not only financial, from the European Union. Here again the EUA has developed a number of coordinated actions involving several European partners (universities, development agencies, etc.) in order to enlarge and improve cooperation with other regions. The Transatlantic Dialogue (USA, Canada), accords between Australia and New Zealand, the Quality Connect project between African universities and the African Association of Universities, several projects between Latin American HE institutions and their associations are but a few examples of recent actions to foster internationalisation and mutual learning across the world.

Transparency Tools

Rankings and league tables are here to stay and their numbers are likely to increase. It is my belief that they can be useful instruments to help drive policies, and so have some merit; however, their role in increasing or promoting transparency is still to be proven, while their use in a blind way may lead to harmful distortions. For instance, they relegate to the background the importance of the social sciences, at a time when the need for a concurrence of several disciplines to properly address the global societal challenges is overwhelming.

It is expected that the Multidimensional University Ranking System will cover the various pillars of the mission and include community outreach and

employability. Worst still is the effect these “transparency tools” may have on the efforts by European universities to improve their position in the rankings, which may lead them to overlook the need to contribute to the social cohesion and economic development of their regions. Hence “paying too much attention to improving ranking scores can be detrimental to the fulfilment of other important tasks of higher education institutions” (Rauhvargers 2011).

4. Making the Knowledge Triangle Work: Ensuring that Research Results have a Positive Impact on a Region

For centuries the mission of the university has been, almost exclusively, to educate the future governing elites and to *search for true knowledge in solitude and freedom* (the Humboldt model). This ideology, which brought much academic success to the European universities, also created a strong resistance in academia to any interaction with the outside world. Internally, a climate of persistent indifference to the importance of, and the developments in, *other* disciplines, as well as strong competition among them, has contributed to a lack of knowledge integration. These two factors are detrimental to the quality of cutting-edge research, to its relevance as well as to innovation, contributing also to less efficiency in the use of resources. I reaffirm that the ‘Grand Societal Challenges’ can only be addressed by a truly multidisciplinary approach in research and in education.

Furthermore, only recently did European universities include cooperation with society as a part of their mission, and acknowledge the fact accordingly. But it is only through partnership with other private and public players, companies, municipalities, etc. that innovation can be introduced in the knowledge supply chain and strategic advances realised. In 2011, and after a tremendous economic crisis, we started acknowledging that it is still not enough; we need to become *really* attractive to students from outside Europe, to welcome mature national newcomers, to support public policies directed to immigrant integration and family protection.

These challenges raise two questions: i) Can a single institution, the university, respond to the demands of producing high quality knowledge assets that can be made available and be important at a global level, but that also can be made use of locally, by contributing to regional economic development and job creation? ii) Can a single institution educate and train research workers and citizens, and have a policy of curriculum development and learning methodologies which can respond to the needs of mature students?

The two questions could receive a positive answer provided one is not tied to a fixed model of the university and if institutions are allowed to be creative in order to deliver high quality education, research and innovation. Yes, it is possible to have differentiation within the same institution; or to put it in another way, to have a segmented mission within a common set of values, provided that universities are granted the appropriate degree of autonomy and use it accordingly. However, that may not be enough! An appropriate set of incentives is needed to drive change that would transform Europe, which has some of the better universities in the world, into a vibrant region of learning and knowledge creation where multiculturalism is a reality.

Established universities, research organizations and higher education institutions must recognise the absolute need for a reorganisation of the landscape, be it through mergers or other more loosely-coupled forms of association for institutions (not only higher education but research and development and business), to enable a higher degree of coordination, so as to maximise synergies, and achieve the necessary critical mass, avoid waste, and thus guarantee the delivery of integrated research, education and innovation at the highest standard.

5. Improving Governance and Funding: Leadership, Autonomy and Funding

To accomplish the above, the key factors underpinning HE developments that would contribute to achieving smart, sustainable and inclusive growth in Europe are: autonomy, leadership and funding.

The EUA has been monitoring the impact of the economic crisis on European higher education systems and universities since its onset in 2008, and the analysis has shown that in the majority of cases there were cuts (some very severe!) in the public funding of universities. The economic climate has also had a negative effect on collaborative projects with industry, not so much on current ones but in reducing the number of new ones. The economic crisis has also had an impact on institutional autonomy with governments resorting to direct steering mechanisms, regulations and unbalanced accountability procedures.

Governance

Today society expects the following from universities: research, knowledge transfer, lifelong learning as well as teaching, economic development and citizenship training. At the same time financial support from the public authorities is diminishing.

Hence developing funding strategies and sustainable revenue for universities is crucial to the future of Higher Education. This requires not only to diversify funding sources but also to improve leadership and institutional governance.

Universities need to be proactive and entrepreneurial, responsive to the short term needs of the economy, the state and their main stakeholders, and at the same time continue to be the critical conscience of society, guiding reflection and policy making.

Universities need to be autonomous, accountable to the state and the public at large, and be well governed, managed and led. They not only need to adapt to fast changing environment but also to lead the changes.

According to Hirsch and Weber (Hirsch 1999) governance is organizational control and the distribution of responsibility; power and authority for the purpose of decision making and action taking. Governance sets the parameters for management.

Traditionally, universities performed under a system of shared governance which is very decentralized and, so called, democratic. In such a system, where the power to decide is shared more or less equally between all the potential decision makers, decision making is a lengthy, unclear and cumbersome process. Also at the root of the Humboldtian model of a university is the concept of autonomy and freedom of research for the scholars who should be able *to pursue their studies away from political or religious interference*. This over time led to the isolation of the University which kept very much aloof from society at large; hence the well-known epithet of an Ivory Tower.

The system of shared governance served countries and institutions well up to the point when universities started to be key players in the economic world, and consequently driven by market forces, so having to compete for money and expected to respond in a timely way to the increased needs of society.

During the last five to ten years, and in particular since 2006, there has been a strong movement all over Europe to modernize university governance and management, and at the same time make the institutions more responsive, autonomous and accountable to the stakeholders. Hence models of governance like those used in corporate industry are becoming common at universities in many European countries. In these new models of governance there are typically three levels in the organisation: the Board of Trustees, with the participation of representatives of the stakeholders, has competences for strategic decisions and responsibility for choosing and appointing the rector or president; the rector has the competences and responsibilities of a Chief Executive Officer; and the Management Council, presided over by the rector, has a membership that is limited to a few appointed members chosen by the rector. In many cases it is the rector

that appoints Deans or Heads of Departments from among those nominated by a search committee reporting to the rector.

It is expected that this model enables a streamlined process from any strategic decision/plan to implementation. One also expects the institutions not only to adapt more easily and rapidly to any changes, but more importantly to be able to lead the necessary changes.

Here, as in the Bologna Process, there exists a need to monitor the process of evolution. Here, as there, the reforms have been formally implemented; it is time to carefully follow up the results. An EUA survey (Sursock 2010) indicates that in many cases the role of external stakeholders remains controversial. Complaints are heard about limited contributions and involvement in strategic decisions, due to a lack of time and interest, or of interference into academic matters. In any case the changes were necessary. Systems and institutions across Europe need time to adjust; so the implementation of changes should be monitored and an evaluation made after a suitable period of time.

Indeed, changes driven by globalisation go to the very core of how universities organize themselves and how they operate. The modernisation agenda for universities is, together with the Bologna Process and the Lisbon strategy, Europe's response to the main driver of globalisation, market forces. In particular the Bologna process is Europe's response to the need "of providing the educational component necessary for the construction of a Europe of knowledge within a broad humanistic vision and in the context of massified higher education systems" (Sursock 2010).

Autonomy

University autonomy is a concept that requires a common understanding throughout Europe. Nowadays it is widely accepted that university autonomy is linked to the ability of universities to respond to society's expectations, and that the concept of autonomy requires accountability as a counterbalance, and that there needs to be a framework for universities in which they can operate.

Autonomy refers to the relationships between the state and higher education institutions and the degree of control exerted by the State. There are five areas where that degree dramatically influences the performance of universities: organisational autonomy, financial autonomy, staffing autonomy, academic autonomy and student intake. Based on an EUA study on Autonomy (Estermann & Nokkala 2009) I will give a summary (with quotes) of what is happening in Europe concerning these areas.

Organisational autonomy means the ability to determine institutional strategies and to establish internal academic and administrative structures, governing

bodies, university leadership and management procedures. In most cases national legislation contains certain guidelines for the formation or structure of decision-making bodies, as well as the groups represented in them and the selection of their members. In the majority of countries universities are relatively free to decide on their administrative structures and to shape their internal academic structures within the legal frameworks. There is also a trend towards the inclusion of external members in the university decision-making processes, especially where universities have dual governance structures. This is regarded as an important form of accountability but clearly serves other, strategic purposes as well (external stakeholders are also selected to help build links, for multiple purposes, with other sectors and industry). Their role remains controversial though, as external stakeholders may either be seen as showing too little interest and commitment to university affairs, or considered to have too much control over academic issues. Finding the right balance and providing an efficient and appropriate method of including external stakeholders will form a crucial part of current and future reforms to governance.

As far as leadership is concerned, the shift towards CEO-type rectors in certain western European countries appears to go hand in hand with a greater autonomy in management and structure design. On the other hand a significant number of more traditional models exist where the rector is an academic “*primus inter pares*”, and is selected by the internal academic community amongst the professors of the university in question. Moreover, it is clearly true that dual governance structures (with some type of division of power between the bodies, usually comprising a board/council and a senate), as opposed to unitary structures, are on the rise.

Financial autonomy is one crucial factor allowing universities to achieve their strategic goals. If there is not a certain freedom to act independently in terms of financial issues, then the other dimensions of autonomy may well only exist in theory. In the majority of countries universities receive their funding via block grants, but there are still some cases where line-item budgets are used, with universities having no possibility of shifting funding between budget lines. These exist mainly in some Eastern European and Eastern Mediterranean countries. In a small number of cases even self-generated revenue is strictly regulated.

The way in which funding is allocated is another important factor that reflects how independent universities stand vis-à-vis the political authorities. Analysis reveals that intermediary funding bodies often fund research, an area where political interference tends to be restricted to steering by priorities, but that institutional funding largely remains a direct competence of the Ministries themselves.

While in some countries universities are allowed to borrow money, the law sets restrictions by requiring authorisation or limiting the amounts available. This is quite often the reason universities in these countries are established as independent legal entities (if they have the ability to do so), such as foundations, which are allowed to borrow. On the other hand very few systems allow universities to invest in stocks and shares or issue bonds. In this respect, in most cases, governments exert some kind of control over universities' financial activities, or simply do not allow such activities.

In the majority of the analysed countries, universities can collect tuition fees or administrative fees from at least a part of their student population. Nevertheless, this does not mean that these fees reflect a significant contribution to the costs of education or a significant form of income. Additionally there are in most cases regulations and limitations attached to the ability of universities to set fees as a means of generating income.

In general there is a lack of any clear correlation between grant allocation types and other elements of financial autonomy, such as the ability to borrow money, or the ability to set tuition fees. Looking at all the features of financial autonomy collectively, it seems that Western European countries benefit from a greater autonomy than their Eastern counterparts. It can be argued that in general universities in Western Europe have more autonomy to use the public funding they receive, but less autonomy in relation to tuition fees. Countries in Eastern Europe tend to have less autonomy with public budgets, but in many cases have more autonomy to decide on privately-funded study places, and the fees those command. The clearest examples for this are Latvia and Serbia, where universities have line-item budgets, but are able to freely set tuition fees.

In some European countries universities own their buildings. Although cultural differences, perceptions, traditions or indeed the high maintenance costs are to a large extent the determining factors as to whether universities themselves want to own their facilities, it is a crucial aspect of being an independent financial actor. But even in those countries where universities are the owners of their facilities, they are not automatically able to freely decide on any investments regarding their real estate, nor can they necessarily autonomously decide on the sale of these assets. Restrictions range from authorisation to the prohibition of selling.

Almost invariably, universities need to submit financial reports to the funding Ministry, the Parliament, the regional government or other types of public authorities. This financial reporting to the public authorities is one form of ensuring universities' accountability for their financial activities. Accountability is further ensured through the audit of the universities' accounts, which is carried out either by a national public auditing agency, a private agency (or both), or in a small number of cases directly by the Ministry of Education.

One of the important elements of *staffing autonomy* is the extent to which universities have control over the financial aspects related to their staff. This includes control over the overall salary costs and individual salary levels, as well as the degree of flexibility universities have in the recruitment of their staff (even if procedures are regulated to a certain degree).

The analysis reveals that in some countries, universities are gaining a greater flexibility in their staffing autonomy, in particular as in most countries staff are directly paid and/or employed by the university instead of by the government. The ability of universities to define individual salaries is still, however, controlled to a large degree by the government. The fact that in almost half the countries studied all, or the majority, of the staff had civil servant status also shows a need to continue to move to more flexible forms of employment for university staff.

The analysis shows that there are significant differences in the recruitment of staff, ranging from a larger degree of freedom to formalised procedures including external approval, sometimes by the country's highest authorities. Although this is in some countries only a formality, it nevertheless impacts on the length of recruitment procedures and therefore on the flexibility to act quickly in a competitive and increasingly international recruitment environment.

Some Mediterranean countries have very little freedom in respect of staffing autonomy as they have no possibility of determining the number of staff they recruit and hence have no control over their overall salary costs. Even individual salary levels are determined by the national authorities.

In terms of *academic autonomy*, key issues include the ability of universities to decide on their academic profiles, especially educational responsibilities (conferring degrees in certain areas), introducing and terminating programmes and the ability to select students.

The introduction of new programmes usually requires some form of approval by the relevant Ministry, or by another public authority, and is often tied to budget negotiations, which shows again the interdependence of different dimensions of autonomy. In the majority of countries universities have complete authority to independently close programmes, and only in a smaller number of systems do they have to negotiate this with the relevant Ministry.

Admission to higher education institutions tends to be free for all students that meet the basic entry level requirements in the majority of countries (usually a secondary education degree and/or national matriculation exam). In a minority of countries, the decision on the overall number of students is taken by the university itself. In most cases this is determined by the relevant public authorities or decided jointly by the public authorities and universities.

In some European countries, the universities can freely decide on the number of student places per discipline. The allocation in some fields, however, may be subject to negotiations with the relevant authorities, or set within the accreditation procedure. Looking at the overall numbers regarding student intake and the allocation of student numbers into programmes and disciplines, the universities in Croatia, Estonia and Luxembourg appear to have the greatest freedom in this respect. Bulgarian and Turkish universities, on the other hand, have the least power to decide on those elements, as they are entirely determined by the State.

Although the EUA (Estermann & Nokkala 2009) study confirms the existence of a general trend towards an increase in university autonomy throughout Europe, there are still a large number of countries that do not grant their universities enough autonomy, thereby limiting their performance. There are equally cases where autonomy, previously granted, has now been reduced. Quite often there is also a gap between formal autonomy and the real degree of a university's ability to act with substantive independence. In a number of cases a significant increase in accountability measures has effectively curtailed university autonomy, which indicates the importance of finding the right balance in terms of the introduction of accountability tools.

Funding

The public funding of higher education is not in step with the importance conferred on higher education and to higher education institutions.

Public funding remains a major steering tool since, within Europe, it is the main contributor to universities' budgets. The challenge for governments is how to best allocate funding, in an era of economic contraction and instability, in order to increase the qualifications of populations in an effective and efficient way. The challenge for universities is not only to make sound use of the funds available and to obtain and secure new funding sources, but also to demonstrate to governments and to public opinion that these funds are well spent. To make the value of education and research tangible is far from simple, particularly when taking into account that these are long-term goods in a rapidly changing world.

There are many different funding models in use across Europe, from incremental historic models to standard input or output models, or to the trend in performance contracts. Let me highlight some of the tensions that these funding approaches entail, on differing scales from the European to the intra-institutional, and under three different umbrellas: the university mission, territorial cohesion and the development of knowledge domains.

Education and Research funds usually flow along different streams, adhering to very different sets of rules. The amount and availability of funds in these

areas will inevitably influence institutional and individual behaviour, with the risk of creating serious imbalances inside universities. The overlap between the European Higher Education and Research Areas, and the relationship between these areas and competitiveness and innovation policies, demand further attention, in order to enable universities to adequately deliver their triple mission.

One of the possible outcomes for funding models is their redesign, be it deliberately or as an unintentional consequence of national and regional higher education systems. Institutional concentration strategies, through mergers, associations or acquisitions are well-known in many cities in Europe. Aiming to compete at the international or global level, the larger universities may also have a profound impact on the national scale, by attracting not only more funding, but also more students, teachers and researchers. Again, striking the right balance in terms of the number of institutions, their size and profile may prove vital in promoting regional development and territorial cohesion.

One last word on the third aspect mentioned: the development of knowledge domains. Two pitfalls should be avoided: firstly, an excessive concentration on technological domains; secondly, an excessive emphasis on short-term results. The sound development of a knowledge society requires a deep understanding and a long-term approach, which in turn need the contribution of all domains of knowledge and the combination of short-term result oriented approaches with fundamental research and non-vocational training.

Although the EUA has monitored amongst its membership the impact of the economic crisis on university funding during the project phase, it is not yet clear what the long term effects of the global economic downturn on certain aspects of autonomy will be. It might mean that national governments will again resort to more direct steering mechanisms or that tighter public budgets will lead to heavier reporting measures. In a number of cases drastic cuts in public funding were a short term reaction to the economic crisis, which placed universities under strong pressure.

The public authorities need to find ways of steering the universities through performance and information measures, without resorting to excessively burdensome and potentially misplaced reporting measures, or funding that is too short-term. A commitment to long-term stable university funding is crucial for institutional autonomy. Being dependent on state funding, as most European universities are, inevitably limits a university's ability to function independently. The diversification of institutional funding to multiple funding streams, however, tends to create additional accountability requirements, which may prove cumbersome to comply with.

In conclusion, reforms in the field of governance and autonomy will not achieve their aims if they are not accompanied by measures to develop institutional capacity

and human resources. These are necessary for universities to face the new demands placed on them, with a need for efficient and effective management and leadership and new technical and specialist expertise in many areas. This issue needs to be addressed jointly, by both universities and the relevant public authorities.

Conclusion

The EU 2020 targets of having at least 40% of 30-34 year olds completing tertiary education, of reducing school drop-out rates below 10%, and of having 3% of the EU's GDP invested in R&D&I, which translates into having another million jobs in research, can only be achieved if universities are able to respond on different fronts: as excellent knowledge producers, as educational institutions (learning/teaching and behaviour role models), as part of the innovation chain, and as public policy *watchers, promoters and drivers*.

Nevertheless, the huge difference in the pools of potential higher education student populations across Europe is in itself a strong threat to the attainment of these targets and constitutes the most serious problem, which nowadays undermines the economic development of Europe as a whole and threatens its future. In the EU 27, the 20-24 age group will *decrease* by 23.3% by 2050, but in Eastern Europe the figures for this decrease are alarming and range from 36.2% in Hungary to 60.5% in Bulgaria. Five countries, only (Denmark, Luxembourg, the Netherlands, Sweden, and the UK), can expect an increase in the 20-24 age group population.

Addressing these issues requires a modernised idea of the university as an organisation with a segmented mission and clear vision; an institution that recognises the need for knowledge creation through interaction among the different disciplines, from the hard sciences and technologies to the humanities and social sciences, not with the ambition of solving all the problems but to start addressing them in a more adequate way by pooling resources and drawing expertise from different fields.

Above all, it requires institutional autonomy and appropriate incentives, enabling universities to organise themselves internally and so successfully address the need for the reconfiguration of the HE&R&D network, to increase the quality and performance that Europe, again as a whole, needs.

European Universities have a vast wealth of knowledge and competences immensely relevant to dealing with the Grand Societal Challenges: Energy, Climate Change, Ageing, etc. In addition to research Universities can offer multidisciplinary training and networking in a way that no other organisation is able to. Universities can reach and teach the decision makers of the present and of the future. Only Universities are able to train sustainability aware citizens on whose behaviour and performance our common future relies.

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Chapter 3

System Diversity in European Higher Education

Peter Maassen

Introduction

Higher education's role in 'the knowledge-based society' has received growing political attention around the world. The underlying assumption here is that more complex and competitive economic and technological global environments require rapid adaptations of national economies to shifting opportunities and constraints. Higher education is expected to play a central role in this adaptation, since, as the main public knowledge sector, it is assumed to link research and education effectively to the needs of society and industry¹. This expectation has been used as a rationale for reforms aimed at stimulating universities and colleges to develop more relevant and effective institutional strategies, and professionalize their leadership and management capacity. The underlying vision is to stimulate the development of higher education institutions that are dynamic and responsive to socio-economic agendas and that contribute effectively to innovation, entrepreneurship, and competitiveness.

The Lisbon summit and the subsequent Lisbon 2000 Agenda have been important drivers in the promotion of this vision in Europe. Making Europe the most dynamic knowledge economy in the world by 2010 was argued to be dependent on urgent reforms of its higher education systems and institutions. This was clearly expressed in two reform agendas published by the European Commission in 2006² and 2011³. In this chapter the focus will be on the 2011 agenda and its aim to contribute to more effective system diversity in higher education. In our examination of the agenda we will discuss, amongst other things, the consistency of the arguments underlying the Commission's claim concerning its contributions in this.

1 See: ERA in the Knowledge Triangle http://ec.europa.eu/research/era/understanding/what/era_in_the_knowledge_triangle_en.htm

2 This concerns the "Communication from the Commission to the Council and the European Parliament: Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation." Brussels, 10.5.2006, COM(2006) 208 final. (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0208:FIN:EN:PDF>)

3 This concerns the "Communication from the Commission to the European Parliament, the Council, the European Social and Economic Committee and the Committee of the Regions: Supporting growth and jobs – an agenda for the modernization of Europe's higher education systems." Brussels, 20.9.2011, COM(2011) 567 final.

European higher education policy

In the European higher education policy arena the nation state has traditionally been the main actor. Higher education was nationally sensitive and any attempt by the Commission to develop formal competencies with respect to higher education was rejected by the member states. This can be illustrated (Petit 2002) by referring to the member states' overwhelmingly negative responses to the Memorandum of Higher Education (European Commission 1991). Since 2000, however, the political room to manoeuvre with respect to higher education for the Commission has grown (Gornitzka 2007). The two research agendas mentioned above are a clear indication of this growing involvement of the Commission in higher education policy. They go deep into the traditional policy responsibilities of the nation state, the 2006 agenda mainly into the governance, organization and funding conditions under which higher education operates, while the 2011 agenda also addressed the contents of higher education programmes and expressed concerns about the quality of European higher education programmes.

In the 2011 agenda it is argued that higher education institutions are core contributors to the EU's economic strategy. It is stated, for example, that the choice of European citizens to enrol in a higher education programme is (still) sound, even though the current economic prospects are bleak. Nonetheless, the main rationale for the Commission to produce the 2011 reform agenda (European Commission 2011, 2) is that "the potential of European higher education institutions to fulfil their role in society and contribute to Europe's prosperity remains underexploited." On the basis of a relatively limited set of data, and based on general comparisons with traditional and new global competitors, the two main problems of European higher education are argued to be its lack of quality, in the sense of a growing mismatch between higher education and the needs of the private sector, and a lack of diversity. The 2011 reform agenda presents a number of solutions for improving the quality as well as diversity of European higher education systems and institutions.

Why is higher education's apparent non-optimal functioning seen as a problem? For this the emerging focus on socio-economic challenges in the EU's policy developments is of relevance. In recent years the notion of 'grand challenges' has entered European policy arenas. An important role in this was played by the so-called ERA (European Research Area) Expert Group "Rationales for the European Research Area". The group argued that the justification for public investments in research has to lie in the contributions research makes to solving Europe's economic, social and environmental problems and challenges. These 'Grand challenges' concern in addition to economic, environmental and energy-related issues, topics such as the ageing of Europe's societies, the health care

problems, and security. These grand challenges contain in many respects public and private dimensions, implying that effective partnerships between public and private actors are needed in addressing these challenges.

While this line of reasoning, attached to the further development of the ERA, refers in the first place to publicly funded research, the same line of reasoning can be seen in the 2011 agenda when it comes to higher education: public investments in higher education have to be justified on the basis of the contributions higher education is making to solving Europe's grand challenges. Overall, this line of reasoning reflects the growing expectations in political arenas with respect to higher education and research as the transversal problem solvers in Europe. Any analysis about Europe's grand challenges points almost automatically towards higher education and research as the sectors that are expected to play a central role in the development of solutions to these challenges. In this the university is especially regarded as a central institution, since it houses important education and research capacities, including PhD training. It is argued that the university's research and education capacities are linked to innovation in a far from optimal way. Consequently, these high expectations with respect to the role of the university in the European knowledge economy are accompanied by claims that the potential of the university, and in its slipstream higher education systems as a whole, can only be realized if higher education is modernised along the lines presented in the 2006 and 2011 reform agendas (European Commission 2006, 2011). This modernisation includes a better connection of higher education degree programmes to the needs of society and especially the private sector. For this to be successful Europe needs a more diversified structuring of its higher education systems.

Conditions for higher education systems to fulfil their potential: higher education diversity

Higher education diversity has, once again, become one of the core policy issues in European higher education⁴. Like in the 1980s and early 1990s, the lack of inter-institutional diversity is seen as a problem having an impact on the effectiveness and efficiency of Europe's higher education systems and institutions. Traditionally from a governmental policy perspective diversity in European higher education has not been linked to, for example, student demand or student characteristics per se, but rather to structural features of higher education systems. In many continental European countries differences between students have

4 For an analysis of the policy focus on higher education diversity in the 1980s and 1990s, see: Van Vught (1989); Goedegebuure *et al.* (1994), Meek *et al.* (1996).

to a large extent been neglected if not denied in national policies, and the main political starting-points for the governance, organisation, and (public) funding of higher education have for long been equality and equity at all relevant levels. As a consequence, the formation of elite institutions, the selection of students on the basis of merit, using performance in funding and salary systems, and in many countries the use of tuition fees in higher education funding, have been political taboos. What is of relevance here is that over the last ten years cracks have appeared in these traditional ideological foundations with respect to the governance, organisation and funding of higher education in Europe. At the European level, as well as nationally, a new reform agenda has emerged that addresses the issues that higher education policy in Europe has avoided for so long: the introduction of professional institutional leadership and management, a move towards high(er) tuition fees, establishing partnerships with industry, the introduction of performance based salary systems for academic staff, enlarging the diversity of higher education system through the creation of elite or top universities, an organisational and funding separation of the best (institutions, staff, students) from the rest, etcetera. And like in previous higher education reforms efforts (Goedegebuure *et al.* 1994) the stimulation of system diversity is also this time one of the most difficult policy aims to realize. In order to understanding the challenges attached to the diversity aimed higher education reforms in Europe, a conceptualisation of higher educational diversity is presented in the next section. This conceptualisation builds on, and is complementary to, the conceptualisations developed in the 1980s and 1990s (see footnote 4).

Conceptualisation of Diversity

In the late 1980s and early 1990s staff at the Center for Higher Education Policy Studies (CHEPS), University of Twente, the Netherlands, played a prominent role in the conceptualisation of higher educational diversity referred to above⁵. In this the work of classic scholars, such as Darwin and Durkheim, as well as more recent theoretical perspectives from the general social sciences, by scholars such as Hannan & Freeman (1977), Pfeffer & Salancik (1978), and DiMaggio & Powell (1983), were used to develop an analytical framework for studying higher education diversity. In the mid-1990s CHEPS staff joined forces with other European, US, and Australian colleagues to discuss various analytical perspectives with respect to the factors that affect system diversity in higher education; the outcomes of this exercise being presented in Meek *et al.* (1996).

5 See, for example, Huisman (1995, 1998), van Vught (1989, 2009), Maassen and Potman (1993).

Referring to this analytical work Van Vught (2009) has recently presented a number of arguments in favour of promoting system diversity in higher education, stating that a more diversified higher education system:

1. Offers better access to a wider variety of students;
2. Provides more social mobility through multiple modes of entry and forms of transfer;
3. Better meets the diverse needs of the labour market;
4. Serves the political needs of a larger number of interest groups (and creates political stability);
5. Permits the combination of elite and mass higher education;
6. Increases the effectiveness of higher education institutions (allowing for institutional specialisation);
7. Offers more opportunities for creating effective links between basic research and innovation.

In a recent presentation of the analytical framework Van Vught (2009) argues that the specific environmental conditions and organisational behaviour characteristics of higher education institutions lead to low or even decreasing system diversity in higher education. The conditions he is referring to are: a homogeneous student body; low variety in the needs of the labour market; uniformity in governmental regulation; deregulation and increased market coordination; and decreasing financial resources. The organisational behaviour in higher education that causes low or decreasing levels of system diversity are institutional merger processes; a dominance of a 'traditional' academic culture; and a strong impetus to establish academic reputation. Taking these 'natural' conditions and characteristics as a given, Van Vught argues that possible governmental strategies to increase system diversity are the diversification of governmental policy-contexts with respect to institutional missions, profiles, regulation, and funding; and the development of multiple institutional reputation mechanisms, in the form of classifications/typologies, and multiple ranking systems. A number of European centres are currently undertaking a project to develop a multiple ranking system for (European) higher education. This project is referred to in the 2011 agenda as an important initiative for contributing to increased system diversity in European higher education.

The other strategy Van Vught refers to, the diversification of governmental policy-contexts, can be further elaborated and conceptualized by referring to the work of Clark and Olsen. Both these scholars discuss the importance in system level governance of the balance between unity and diversity. In European countries, as elsewhere, the need for system-level coordination is accompanied by the

acceptance of the necessity of institutional autonomy. The drive for strengthening institutional autonomy leads naturally to more diversity (or disorder) within the system, while system coordination is aimed at creating unity in a system, or a minimum level of integration and order. Clark (1983: 136) has described these counter forces as follows:

In an infinitely complex world, the higher education system has difficulties in pulling itself together that belie simple descriptions and answers. Tasks proliferate, beliefs multiply, and the many forms of authority pull in different directions. Yet in each case, some order emerges in various parts: disciplines link members from far and wide, universities symbolically tie together their many specialists, bureaucratic structures, local and national, provide uniform codes and regulations. And the bureaucratic, political and oligarchic forms of national authority contribute to the integration of the whole.

The efforts to integrate European higher education are part of a more general process of integrating sovereign states in a new political and institutional order (Olsen 2007). Taking this general process as a frame of reference it can be argued that the creation of the European Higher Education Area (EHEA) and the European Research Area (ERA) can be regarded as efforts to create a new order in Europe with respect to higher education and research. This implies the need to balance integration and change, unity and diversity, i.e. system-level coordination and university autonomy (Clark 1983; Olsen 2007: 22-23). Maintaining such a balance has traditionally been a responsibility of the national level in Europe. However, the emerging “competence”⁶ of the supranational European Commission with respect to higher education (Pollack 2000; Maassen and Olsen 2007; Maassen and Musselin 2009), and the intergovernmental Bologna process, imply that the efforts to create unity with respect to higher education in Europe no longer take place only at the national level, but increasingly also at the European level.

According to Clark (1983: 205) there are tensions in any higher education system between the forces that create stability and unity, and those that cause adaptations, change and diversity. These forces very much contribute to the complexity of higher education institutions and systems, also because they operate in different ways at different levels in a higher education system. “Hence, it is always necessary, when speaking of a type of academic change, to specify the levels at which it operates, since an opposite disposition is likely to characterize the levels not directly in view” (Clark 1983: 209).

6 Competence refers here in the first place to the formal agenda setting power of the Commission, and not to its formal legal authority.

In principle any higher education system consists of three organizational levels, i.e. the basic academic units, the central institutional administration and leadership, and the system level governance arrangements and actors; or in the words of Clark (1983: 205) the understructure, middle structure and superstructure. In the case of European higher education an additional layer has been emerging that can be referred to as the suprastructure composed of all the agencies and actors, including those representing national authorities, aimed at creating a unity that links together the higher education systems of the EU member states.

Olsen (2007) has discussed from a political science perspective how each society has to find an effective balance between the state level need for unity and integration in the governance of each public sector, and each public sector's need for institutional autonomy and diversity. This balance is not static and stable, but instead societies go through periods of relatively stable balances between order (unity) and disorder (diversity) and periods of renegotiation and reform to the unity / diversity balance. This has been formulated as follows by Gornitzka *et al.* (2007):

Under some conditions change and reform take place routinely and incrementally within a fairly stable institutional framework. Under other conditions institutional frameworks are themselves changing as the shared understandings underlying the political and social order are questioned and possibly modified or replaced.

From the perspective of the search for a new balance between unity and diversity the emergence of the new multi-level governance system is a clear challenge for European higher education. While institutional autonomy is promoted as an aim in itself (Christensen 2011), there is now not only the need to maintain system level unity in the form of an effectively coordinated national higher education system, but there is also an additional expectation for the creation of the integrated EHEA and ERA. How are the fragmented basic academic units of higher education institutions linked to those European level structures aimed at creating unity and order in the EHEA and ERA? How does the integration of higher education fit the general process of European integration? Here we follow Olsen's definition by seeing integration as "a process which turns previously separated units into components of a relatively coherent and consistent system" (Olsen 2007: 21). What are the conditions for creating a coherent and consistent EHEA and ERA with autonomous higher education institutions operating as part of national higher education systems as components?

The European Commission and higher education diversity

As discussed above, traditionally, the efforts of the European Commission to influence the national institutional arrangements with respect to higher education have been met with suspicion and rejection by the member states. Higher education – like the rest of the education sector – is a nationally sensitive policy area closely related to national identity (Gornitzka 2007; Neave and Maassen 2007; Olsen 2007: 78). The Treaty of Maastricht of 1992 confirmed through the subsidiarity principle that the prime responsibility for (higher) education lies at the national level, implying that the European Commission cannot undertake any initiatives itself aimed at converging European higher education (Maassen and Musselin 2009). This starting-point has not been changed legally, but in practice political space with respect to (higher) education has been created at the suprastructure level in Europe (Gornitzka 2007). This is especially true since the turn of the century with the signing of the Bologna Declaration and the agreement reached at the Lisbon 2000 summit between EU heads of state concerning the Lisbon 2000 Agenda. These represent important moments in the apparent change in attitude towards an acceptance of the need for integrating European higher education.

With respect to the implementation of the Bologna process the Ministers of (Higher) Education of the countries involved in the Bologna process decided not to set up a separate joint executive capacity to support implementation other than a small rotating secretariat. As a consequence the implementation of the Bologna process increasingly had to rely on the relevant administrative executive capacity of the European Commission, especially through organizing and funding ‘evaluation studies and progress conferences and seminars’. A complicating factor is that the Bologna process currently encompasses 47 countries, i.e. 20 of the Bologna countries are non-EU member states. This implies, amongst other things, that dynamics of change in European higher education are less driven by the 6 large member states of the EU than is the case regarding the integration processes taking place in the framework of the EU (Olsen 2007, 43). It also means that there is a fairly unclear division of policy responsibility with respect to higher education between the supra- and superstructure, both formally and in day-to-day policy practice. The gradual development by the European Commission of competence with respect to a large number of policy issue areas (including education and research) has been referred to as ‘creeping competence’ (Pollack 2000). This can be argued to represent one of the main challenges with respect to the system level governance in European higher education after 2010: formalizing an effective division of authority with respect to higher education over the relevant system level governance layers: European, national, (and in some cases, sub-national) as well as institutional (Maassen 2009).

How have these developments affected the structure of higher education in Europe? In the following section a brief overview will be given regarding the development of structural diversity in a number of higher education systems, followed by a reflection on the Bologna process's effects on institutional diversity.

System diversity is a multi-faceted concept. It refers, for example, to the distinction between (research) universities and other types of higher education institutions, such as Polytechnics, *Fachhochschulen*, *Hogescholen*, Colleges, and *Høgskoler*. Consequently, an obvious challenge for developing an appropriate balance between institutional autonomy and an integrated EHEA and ERA is the transparency and comparability of Europe's higher education institutions. The following short overview of the structural development of selected higher education systems in Europe is partly based on work underlying the development of a classification system (Huisman and Van Vught, 2009, 27-34), partly on projects undertaken by the HEIK research group at the University of Oslo.

Denmark:

The Danish higher education system is structured as a public binary system consisting of two separated sectors, i.e. a research university sector and a professional college sector. Each sector came for about ten years under the responsibility of a separate Ministry. The university sector has recently undergone two major reforms. In 2003 the autonomy of the universities was increased and the institutional governance structures adapted accordingly, followed in 2007 by a merger process between universities, and between universities and independent public research institutes. Also, the colleges sector has gone through a merger process. The result is two self-standing sectors consisting of 8 universities and 10 colleges. The Danish government expects its top universities to be able to compete with the best universities in the world for staff, students and resources within the next ten to fifteen years. After the recent parliamentary elections (2011) the two higher sectors come once again under the responsibility of one Ministry. The expectation is that the new Ministry will try to integrate the two sectors, and do away with the strict binary divide.

France:

The French higher education system is highly diversified, segmented, and complex. It consists of a small professionally oriented elite sector, *grandes ecoles*, which traditionally did not have a basic research task, a university sector which only relatively recently developed a strong research profile, two types of institu-

tions offering professional higher degrees, and national research centres. Initiatives have recently been taken aimed at blurring the boundaries between the various segments. This is, amongst other things, visible in the so-called PRES (*Pôles d'enseignement supérieur et de recherche*), which are meta-structures in which different institutions, including universities and grandes écoles, can join and develop common activities, such as graduate schools (PhD programmes), and research projects (Musselin 2009).

Germany:

The most important development when it comes to the diversity of German higher education is the so-called Exzellenzinitiativ from 2004. It was inspired by US higher education, and aimed at identifying the best German universities and stimulating them to strengthen their research quality and become world class institutions. Since Germany has been one of the strongest proponents of the equality of opportunities principle in Europe, this initiative can be regarded as 'revolutionary'. Also, in other respects German higher education is going through a dynamic period with many initiatives at the level of the Länder, and at the institutional level aimed at strengthening the basic higher education structure through mergers and innovative cooperation processes.

The Netherlands:

Dutch higher education, traditionally organised as a binary system, is undergoing considerable changes. Traditionally the two sectors, research universities and higher professional education institutions, were strictly separated. Like in other countries, also in the Netherlands, the boundaries between the two sectors are to some extent blurring. This is mainly the result of developments in the higher professional education sector, where we can observe the emergence of a research function, the development of Master level programmes, and the growing use of the term universities of applied sciences. Unlike the situation in some other countries, e.g. Denmark, Finland and Germany, there are no governmental initiatives to develop top universities. Instead of promoting inter-institutional diversity, the Ministry responsible stimulates intra-institutional diversity. One of the results is the emergence of an intra-institutional honours college at bachelor level for the best and most motivated students.

Norway:

Like most European countries Norway has also governed its higher education institutions through a binary structure consisting of higher professional education institutions (colleges) and research universities. However, an important specific characteristic of the Norwegian higher education system is that the Norwegian government has formally opened the boundaries between the sectors and allows the colleges to apply for university status. In addition, all colleges have the right to offer Master and PhD programmes, they have an explicit research task, and they have an academic personnel policy system (Kyvik 2008). Since 2004 the Norwegian university sector has grown from 4 to 8 institutions. In addition to the 8 universities, there are 14 more higher education institutions that are currently offering at least one PhD programme. For a country with not even 5 million inhabitants, this 'lack of diversity' is seen as a challenge when it comes to strengthening the (future) quality and effectiveness of the higher education system.

Taking the above five countries as illustrations, important national reform trends in higher education in Europe can be summarized as follows. Overall, the structural diversity of European higher education systems in the form of the binary divide between universities and institutions, such *fachhochschulen*, polytechnics, colleges, *hogescholen*, and *høyskoler*, seems to be decreasing as the five cases show. However, even in this brief overview it is clear that there is no homogeneous trend in the development of higher education systems throughout Europe. Denmark has, until recently, been strictly maintaining its binary higher education system, as have countries such as Austria, Finland, Portugal and Switzerland. On the other hand, in the Netherlands and Norway we can clearly observe the blurring of the traditional binary divide, which is also the case in Ireland and has been the case in England since the early 1990s. Furthermore, a number of countries do not fit the binary divide characteristic; for example France with a segmented higher education system, and Italy with a university dominated system.

The Bologna process and higher education diversity

When 29 European Ministers of (Higher) Education met in Bologna in 1999 they agreed that European higher education needed to be strengthened. In their view the most effective way to realize this was to create a European Higher Education Area (EHEA). The meeting in Bologna culminated in the Bologna Declaration that was aimed at taking away national barriers that hindered the forming of the EHEA.

What do the studies on the Bologna process, i.e. the process of the implementation of the Bologna Declaration, tell us about the effects of Bologna on higher education diversity? First, it is important to emphasize that the Bologna process is an example of the translation of a common agenda into national contexts, instead of a homogeneous diffusion of the agenda throughout the included countries (Gornitzka 2006). This implies that the common Bologna reform agenda is adapted in each country to national realities. Consequently, while there is some level of convergence between the Bologna countries when it comes to degree structures, and other features of the Bologna Declaration, there are still considerable differences between the countries involved. These differences have been explained by Huisman and van Vught (2009, 23) in the following way:

National policy-makers adjust the Bologna objectives and instruments to fit the particular national context, interest groups within the system have their input in the further operationalisation of the Bologna agenda at the national level, and at the institutional level it is up to institutional leaders, managers and academics to further substantiate the Bologna elements at the operational level. Hence, issues of policy “translation”, wilful influence on or hindrance of the implementation have a considerable impact on what actually happens in reality.

It can be argued that an important diversity-related policy issue in European higher education concerns the definition of a university. In this sense history repeats itself, given that this issue was also central to the development of higher education in Europe in the second half of the 19th century (Gerbod 2004a, 2004b; Gornitzka and Maassen 2007). In the current period of higher education transformation, like in the 19th century, the university is being redefined. An important issue that has a far-reaching effect on the outcomes of this transformation period is research excellence.

Research excellence and innovation policy

Triggered by the increasing political awareness concerning how new knowledge may stimulate innovation and the economy, research policy in Europe is focused on identifying those institutions, groups and individual researchers that stand out from the rest (Aghion *et al.* 2009). These initiatives can in the first place be noticed at the national level. But also at the European level can examples be found of this ‘research excellence drive’; for example, in the form of the establishment of the European Research Council (ERC), and the process of setting up a European Institute of Innovation and Technology (EIT). Hence, while the policy debate may have different labels attached to it, not least the search for institutional diversity and more performance-focused funding schemes, the issue driving the

agenda is a greater concentration of research talents and resources (Geuna and Martin 2003).

Still, as for other policy initiatives in higher education, the effects have so far been moderate. Overall, the distribution of the institutions' funding components has not changed dramatically over the last 20 years (CHINC 2006). On the other hand, the changes taking place should not be underestimated. Even if the share of public funding has been stable, more emphasis is being given to commercialised research and patenting (Bonaccorsi and Daraio 2007) indicating stronger competition among universities.

Compared to the aspirations of the Bologna process, the European Commission wanted a general debate on the role of European universities with the aim of developing a vision for university-based research and innovation for the next 15-20 years (European Commission 2003, 2006, 2011). The backdrop is the emerging knowledge economy and doubts that the universities will be able to contribute effectively in realizing the aims with respect to the European knowledge economy's global competitiveness. The European Commission wants to build a single market for research and to mobilize the brain-power of Europe in order to enable universities to make their full contribution to the realization of the Lisbon Strategy (European Commission 2003, 2006).

It is of relevance here to point to the so-called European paradox, i.e. the claim that EU member states play a leading global role in terms of top-level scientific output, but lag behind in the ability of converting this strength into wealth-generating innovations. The ideas underlying the Commission's research policy (Gornitzka 2007) were very much geared towards better extracting the university's potential for contributing to private sector innovation and economic growth in Europe. In the Lisbon Agenda research policy has been clearly linked to innovation and has an undisputed place as a core element in competitiveness (Larédo 2003). The normative and ideational underpinnings of the EU's existing research policy and policy instruments were not radically challenged by the Lisbon agenda in this respect. A more overt collision of the understanding of the university's research function and its links to the European level is seen in the discussions concerning the ERC (European Research Council) – where the role of the university as the main site of frontier research has been much more the subject of competing visions.

Overall, European and national level policy processes and programmes have led to a strong focus on the role of the university in basic research. What we can observe in Europe is an attempt to create top research universities that can compete with the best universities in the world for staff, students and resources. This implies a gradual emergence in most countries of national 'pyramid' like higher education systems, with one or more universities at the top and the rest of the

system being adapted to these institutions. For this, research excellence and selectivity in student recruitment are taken as an important structural starting point. The missions of all the other higher education institutions in these 'pyramid'-like systems are in essence agreed upon in relation to the missions of the top universities. This does not imply a horizontal set of diverse institutional missions, but a hierarchically shaped system in which the top universities compete and collaborate globally with a limited set of top universities in the rest of the world, and through this competition and collaboration 'feed' the rest of the system with frontier knowledge and high quality new generations of academic staff, trained in top graduate schools. While the UK has been the first European country to go in this direction, we can currently see the same intentions with respect to the national higher education structure in countries such as Denmark, Finland, France, Germany, Sweden, Switzerland, and of late also Russia. Other countries, such as the Netherlands and Norway, try to promote research excellence not through stimulating inter-institutional diversity, but intra-university diversity.

Higher Education Diversity and the 2011 Modernisation Agenda

Taking the above presented theoretical perspectives, analytical schemes and empirical descriptions as a frame of reference, there are strong arguments to assume that:

1. Government regulation is more effective than the marketplace in promoting system diversity in higher education;
2. Inter-institutional diversity is more effective than intra-institutional diversity in realizing the benefits of system diversity;
3. Developing differentiated missions for all higher education institutions in a system is an important condition for developing an effective order, i.e. an effective balance between unity and diversity in any higher education system. These institutional missions should be supported by a funding regime that allows for strategic investments in the implementation of these missions in their own right. In addition, it will be important to develop a mechanism for monitoring the development of the institutional missions in case one or more institutions in a system start to drift away from their agreed upon mission, and there should be a way for the national authorities to intervene.

How does this scholarly understanding of the factors that stimulate the development of system diversity relate to the arguments concerning the development of system diversity in European higher education presented in the 2011 modernization agenda?

In general, the 2011 agenda presents three arguments with respect to the diversity of higher education. The first relates to the observation that there are only a few European higher education institutions recognised as world class. It is argued that the reason for this is that too many European higher education institutions try to compete in too many areas. How should this problem be addressed? According to the 2011 agenda the starting point should be to recognise that there is no single excellence model in higher education: “Europe needs a wide diversity of higher education institutions, and each must pursue excellence in line with its mission and strategic priorities” (European Commission 2011, 2). Strikingly, the 2011 agenda does not promote the ‘pyramid’ type of higher education system structure, but instead recommends that all higher education institutions should aim at being excellent within their own mission. However, the global rankings referred to are in essence based on criteria relating to only one aspect of excellence, i.e. research excellence. Therefore it can be questioned whether this recommendation from the 2011 agenda can help to improve the position of European universities in the global rankings.

The second and third argument have to do with the way in which the diversity of institutional missions in European higher education can be realized. The 2011 agenda follows two lines of reasoning. The first is that governments should promote system diversity through “target funding mechanisms aimed at supporting the needs of different institutional profiles, at encouraging institutions to focus efforts on their individual strengths, and developing incentives to support a diversity of strategic choices and to develop centres of excellence.” The second argument is based on the assumed effects of institutional autonomy; autonomous institutions can “specialise more easily, promoting educational and research performance and fostering diversification within higher education systems.” The 2011 agenda seems to be caught here in circular reasoning, i.e. in order to promote system level diversity higher education institutions should become more autonomous. The professional leadership and management of each higher education institution, it is argued, will ‘naturally’ aim at finding the institution’s own excellence niche. In other words, here the 2011 agenda follows the argument that autonomous institutions in competition with each other will look for their own niche in order to differentiate themselves from their competitors. However, on the other hand, the agenda argues that governments need to introduce targeted funding systems in order to stimulate system diversity. Apparently, autonomous institutions do not ‘naturally’, in competition with each other, develop their own excellence profile.

Riesman (1956) was the first to point to the drive towards decreasing diversity, or isomorphism, in US higher education as a consequence of the strategic behaviour of autonomous higher education institutions who all want to move in

the direction of the ‘status’ leaders when it comes to their mission and strategic profile. According to Riesman, this phenomenon of following institutional leaders in a sector closely can be seen in almost everything higher education institutions undertake. Whether it concerns their organizational structures, or their curricular offerings, the patterns of “the leading institutions” are quickly imitated by other universities and colleges. This original work by Riesman has been continued by, for example, Berdahl (1985), Maassen & Potman (1990), and Massy & Zemsky (1994)⁷. Throughout these works the basic argument is the same, i.e. without some form of regulation in the system structure, autonomous higher education institutions will imitate the institutional leader(s) in their system and shift their activities as close as possible to the leading institution(s). Therefore, some form of governmental or voluntary regulation with respect to the system structure and institutional missions is a necessary condition for system diversity in higher education. Without such system level regulation the maintenance and, if necessary, strengthening of system level diversity in higher education becomes a difficult if not impossible endeavour. The 2011 Modernisation Agenda (European Commission 2011) is unclear in presenting its assumptions regarding system diversity in higher education. It assumes on the one hand that institutional autonomy and professional leadership are necessary conditions for strengthening system level diversity in higher education. On the other hand, it suggests that targeted government funding, and incentives for stimulating strategic institutional choices and the establishment of centres of excellence will lead to system diversity. Like in the 1980s and early 1990s when governments in Europe promoted the need to increase system diversity in many ways, also in this current policy debate there seems to be a limited understanding of the snake-like institutional procession in higher education, and the need to develop an effective balance between unity and diversity at a system level. It can be argued that like California in the late 1950s early 1960s, there is a need for a Master Plan. Like in the US, it can be argued that the most effective governance level for developing such regulatory Master Plans for diversity is the national and not the European level.

7 For a more detailed overview of the relevant literature concerning institutional isomorphism in higher education, see O’Meara (2007).

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Chapter 4

External and Internal Sources of Financing for Universities. The Practice of Good Governance

Maria Hulicka

Introduction

The globalisation of the economy and its knowledge-based transformation brings with it a set of challenges and a series of consequences. In order to cater for the needs of the unrelenting changes in society, a certain blending of education and academic research needs to take place at universities, along with the transfer of knowledge to the economy, based to an ever greater degree on high technologies. Awareness of this fact is also widespread in a Europe striving to defend the idea of the need to realise the Lisbon strategy. On 19th July this year, the European Commission announced that as part of the 7th Framework Programme (FP7 – the largest research programme running from 2007 to 2013 and with a total budget of 53 billion euro) it was designating 7 billion euro for research contributing to the development of modern technologies to solve Europe's greatest problems. These are especially: climate change and energy security, including ways to make better use of energy; an ageing society; provision of public transport; and the growing need for healthy food (www.ec.europa.eu). At the IMUA international conference in Vancouver in late 2009, devoted to university management in a time of globalisation, one of the greatest challenges facing universities was identified as being the need to make them innovative. At a seminar run by HUMANE in 2008, the president of Maastricht University, in an analysis of Dutch universities, presented the following stages of development: until 1968 – oligarchical universities, 1968-1980 – democratic universities, 1981-1995 – bureaucratic universities, 1995-2010 – professional universities, and since 2010 – innovative universities (Ritzen 2008).

The key factors for success in advancing to the innovative university stage are:

- Interdisciplinarity of research and teaching,
- Great flexibility in changing to preferred activities,
- Attracting the best teachers and researchers,
- Generating funds to create leading research groups,
- Involving the most creative, innovative employees,
- Introducing an innovative work and organisation culture.

Carrying out these fundamental reforms requires the investment of additional funds in higher education, but at the same time the introduction of a modern

style of university financial management. This is something which should be discussed vigorously, since the growing competition causes an ever greater gap between the best global universities and those which do not keep up with the changes. Any delay only widens this gap.

The amount of funds that universities have at their disposal depends on:

- Distribution of funds from the state budget,
- The way in which these funds are distributed among universities,
- Diversification of sources of income, including financing from private funds,
- The efficiency of universities' financial management.

An appropriate level of funding from the budget

The OECD report "Education at a Glance" from 2007 (OECD 2007) identified a large disproportion in spending per student among the various member states of the European Union (Dąbrowa-Szeffler and Jabłeczka 2007). Outlay on higher education, measured as a percentage of GDP, was less disparate, but spending on R&D (in 2005 the EU average was 436.3 euro per inhabitant) also varied by a factor of a dozen or more among the various countries. The use of EU funds on research within FP7 varied too. The so-called success rate, i.e. the ratio of applications lodged to funded projects in 2007-2013, at its extremes differed by a factor of 2.

The amount of funds made available to the higher education sector is a decisive factor for its financial standing, and at the same time also for the quality of education and the results of academic research. Since these two areas of activity for universities combine together and influence one another, their financing should also be looked at jointly. In terms of teaching, the mechanisms binding it to an appropriate level of research begin to appear at the second level of education, and are particularly important at the stage of doctoral studies. As a result, in order to talk about a significant improvement in the financing of higher education, both teaching and research need to be funded at an appropriate level. And this in turn has a major role to play in increasing the chance of growth in innovation and the competitiveness of the whole economy.

Evidence of the fact that this kind of activity is worth it is provided by examples of carefully planned government policy. It is worthwhile to cite the example of the US state of North Carolina. Thanks to powerful investment in education, research and infrastructure on the cusp of science and business, it has undergone a transformation from a poor state based on agriculture and traditional industries to one of the most developed regions in the country, with an econ-

omy based on knowledge and the latest technologies. The state university, the University of North Carolina, as leader among three institutions of higher education around which the famous Research Triangle Park is built, is in eighth place among American universities in terms of the value of its research commissioned by industry, and first place among public universities. The number of patents rose from five in 1984 to 791 in 2010, and at the end of this period the university had 1220 contracts signed with various entities regarding licences (www.ncsu.edu/ott/). Furthermore, three Noble prizes have been awarded following work carried out in the park (www.rtp.org).

A concentration of spending constitutes an exceptional chance for achieving a synergy effect. Only universities with a high-quality teaching potential and strong research resources have the capacity to play an important role in shaping a development strategy for the regions and for the whole country. At this point we should mention the opportunities offered by initiatives linking universities together.

Consolidation and competition

One potential way of constructing a strategy to strengthen teaching and research potential at the same time is the process of institutional consolidation. This kind of process is conducted with a fairly wide scale of success in Scandinavia, for example. Consolidation contributes to strengthening the effects of concentration regarding investments and attaining the effects of synergy, particularly in research projects. This is also significant in terms of the rational absorption of EU funds. Whenever merging processes are for whatever reason inappropriate or impossible, strategic alliances can start to come into play. And here a case study on concentration of funds can be provided – on European soil this time – by the process of combining the three state universities in Helsinki: Helsinki University of Technology; Helsinki School of Economics; and the University of Arts and Design Helsinki; with the aim of creating the innovative type of university mentioned above. The combined university will have double the financing: 340 m euro as opposed to 174 m, and is also to receive start-up capital from the state totalling 500 m euro. An additional 200 m euro start-up capital is to come from industry. The merger was a condition of the increased funding, expected to provide a marked improvement in the spending efficiency of the funds invested and contribute to a further rise in Finland's general competitiveness. Of course the amount of funding should, however, be at such a level that will allow funding of the best universities to be increased without detriment to the others.

How should funds be divided among universities?

To generalise greatly, this is a question of choosing between an even-handed covering of costs at all universities and diversified funding, scored according to quality and preferred subjects taught. The latter reasoning suggests that it makes sense to assume that this is not about fairness, but rather the efficient designation of funds.

The problems associated with the distribution of funds among universities are similar in all European countries and each of these countries is striving to solve them in its own way, modifying their approaches every few years.

One possible answer is to go in the direction of building an algorithm, taking into account, other than student numbers: pro-innovation factors, with appropriately established coefficients of cost of teaching, increasing at the second and third levels of study; as well as preferred subjects of study with appropriate weighting or coefficients. This kind of “algorithm game” should result in the objectives projected by a given government being achieved.

An alternative approach to the designation of budgetary funds that is favoured by some countries is the model of performance-based funding. The key reference for distribution of funds here is student numbers. The other important parameter should be *standardised* cost of education of a student, encompassing both direct costs (personal and material), differentiated according to the subject matter, and indirect costs (maintenance of infrastructure and service costs). The amount granted to each university could be adjusted by a premium for quality, preferred activities and achievements.

An advantage of this variation in financing would be its simplicity as well as forcing potential restructuring. A drawback, on the other hand, would be the significant risk of negative financial consequences in the event of imprecise calculations of teaching costs. As a result, careful analysis and cost calculations would be a prerequisite for success in this case.

Co-financing

If we analyse the proportion of total spending for different countries in various parts of the world on higher education, we see a considerable stratification in terms not only of their place on the scale, but also in the role of the private sector. The countries with the highest input: the USA and South Korea (2.9% and 2.3% of GDP respectively) have at the same time the highest proportion of private funds in their financing, i.e. two thirds of all investments in the USA and almost 80% in Korea. The dichotomy between, on the one hand, public higher education, and on the other private education based on tuition fees, provides common ground around the world however, and indicates certain problems des-

ignated by the new trends: treating higher education as a product; technological transformations in all processes, including those connected with teaching; the need for permanent training; and the combination of traditional teaching and e-learning. Diversification of sources of funding is becoming a must in both private and public universities.

For this reason, solutions may be sought in a mixed, public-private model of funding, whereby state participation is supplemented by private sources. The combination of the role of the government and the private sector in financing higher education will have an impact on the functioning of the higher education system; changing its mission, its approach, the mode of its financing and the role of the head of the institution (Sanyal and Martin 2006). UNESCO has taken a following position concerning co-financing of higher education: “With regard to inputs, the general consensus is that financial responsibilities should be shared by all stakeholders. More concretely, increased contributions are expected not only from the state but also from students and their families, and from industry and business” (UNESCO, 2004). The whole process certainly needs to be conducted with care in order not to restrict the general availability of education: e.g. beginning with low fees, increasing gradually until they reach their anticipated size at a given time; or alternatively, as is the case in many countries, BA-level studies can be free, and second- and third-cycle degrees fee-based. Programmes of cost-sharing including tuition fees should be established only after policies are in place for programmes of means-tested financial assistance as well as generally available student loans (Johnstone 2004). So, this would have to be integrally accompanied by the right scholarship policy and accrediting degree programmes with every possible means of support: a system for awarding loans by the state, differing loan amounts depending on the cost-effectiveness of degrees, the possibility of remitting loans in the case of subjects preferred by the state, a timetable for paying off loans that can be adjusted according to post-degree earnings, etc. A separate question is spreading the idea of building the infrastructure of a university based on a public-private partnership, working out a simplified procedure for the acquisition of funds in this model and going so far as to award preferences to this form of funding for universities.

Efficiency in the financial management of universities

The basis for any activity of a university, including academic research and teaching, is financial security, i.e. an appropriate level of income and financial liquidity. In an era of the innovative university, the importance of the field regarding the commercialisation of knowledge is also gaining in importance. This means the need for maintaining a cohesive policy in the management of knowledge and in-

lectual ownership, and also universities developing business activities which can become sources generating additional funds designated for financing technology transfer. The financial standing of a university (like that of any other economic entity) is the result of many factors: the amount of funds generated; costs incurred; the construction of a development strategy; restructuring activities; the quality of financial management, including budgeting and controlling; the application of central cost planning; and appropriate risk management. This all means that the management of the finances of a university conducting diverse, mixed forms of activities with budgets often in the hundreds of millions of EURO has to be done in a *professional way*, using the *most modern methods, including integrated information systems*, with consideration for the *elements of risk*.

Internal sources of funding

Irrespective of the forms of activity of a university or the amount and origins of its funds, all expenses must be made in an efficient and rational way, *guaranteeing the highest possible return on funds invested in higher education*. Furthermore, appropriate management of the two fundamental “cost generators”, i.e. personnel costs and the optimal use of material resources, is perceived throughout the world as an additional/internal source for the acquisition of funds (Sanyal and Martin 2006). In particular, an appropriate staff policy constitutes a potential source for the reduction of university costs. The number of staff is, on the one hand, the basis of intellectual capital and decisive in terms of the level and quality of research and teaching; but, on the other hand, it is an essential component of the costs of each university. This points to the need for a careful analysis and establishment of the best possible ratios: student – academic staff, teaching quality – costs. Indicators showing the number of students per academic teacher show considerable differences among the various universities on a nationwide as well as an international scale, e.g. in terms of Polish universities they differ by a factor of over two.

While the merits of determining the number of positions administratively “in advance” may be debatable, the fact that universities operate in a competitive environment enforces the basing of the personnel policy of each university on economic factors, i.e. calculating the actual requirements for academic staff.

The research and the analysis of factors influencing the need for teaching staff and accompanying simulations show the importance of:

- The complexity of the process of designating a suitable number of academic teachers;
- The high sensitivity of simulated results to changes in any one of the factors,

- The need to pitch each of these factors at the optimum level, maintaining a balance between attention to educational quality and the size of costs,
- The difficulties in “strict” designation of some of the factors influencing the need for academic teachers (e.g. individualisation of study tracks, interdisciplinary specialisations).

The need to search for internal sources of income is all the more pressing amid the conditions of a global crisis; and given the fact that universities, like all other organisations, operate in a competitive environment. The discussion over whether the public university may collapse takes on an international dimension. Only in American higher education, where universities operate essentially according to market mechanisms, is it permissible for a university to fail. In Europe, and even in the United Kingdom, where universities most resemble the American model, matters are not so clear. The fact arises that in terms of budget funding, even when universities compete among themselves on an internal market they do so in quasi-market conditions (Westerheijden *et al.* 2007). The amount of funds granted from the budget is formed by negotiations with the ministry as an administrative decision, and so is the result of the effects of supply-and-demand mechanisms. It therefore seems almost automatic to accept the assumption about failing universities being out of the question, although this does not solve the sometimes rather pressing problems of a financial nature (Newman 2009).

It is important to realise that there can be reserves within a university. This is shown by the diverse departmental costs of teaching similar subjects mentioned above in groups of universities that are similar to one another. This is often caused by a lack of professional management in institutions the size of universities as well as in the administration of finances (the barrier to acquiring suitable staff for the highest positions in university administrations is mainly due to the large disproportions between salaries there and in comparable positions in business), the lack of suitable financial control procedures and cost monitoring, and sometimes also the lack of any apparent determination in terms of taking control of costs. Also indispensable for financial administration are the appropriate tools in the shape of integrated computer software.

Integrated information management systems

Information tools in the form of developed/integrated computer software are crucial in supporting the process of the management of finances, including cost controlling. The implementation of integrated information systems permits:

1. Optimisation of decision making processes on the basis of precise information generated by controlling systems, resulting from an analysis of the costs incurred, income from every type of activity and authorised orders.
2. The possibility of monitoring the realisation of budgets by comparison with the plans and an analysis of deviations, and *often using the information system to simply block any expenses above the amounts agreed in the plans.*
3. Saving time and costs as a result of only entering data into the information system once (eliminating the need for multiple data entry to various non-integrated programs).
4. Tightening the security of all processes taking place at universities (information inputted several times and not shared automatically in various programs and modules can be modified and manipulated), also by means of control procedures implemented in the system capable of detecting irregularities in the university's workings.
5. Automation of purchase systems, reserving funds, automatic coordination of purchases and payment with orders.

ICT tools in particular are useful in realising these tasks, e.g. systems of the ERP-type (Enterprise Resource Planning), as they can be closely associated with implementation, authorisation, generation and reporting of accounting data (Hulicka, 2008).

The axis of any integrated/developed information system is the financial-accounting system itself, which must encompass overlapping areas of activity and diverse sources of funding for an organisation, making the financial engineering of many enterprises particularly complicated. The system must have a high capacity and be flexible, and at the same time be secure and relatively user-friendly, in order to fulfil its expected functionality.

A particular role for an integrated information system as a tool can be realised in the following areas:

- Budgeting and controlling
- Planning and monitoring of cash-flow
- Analysis of costs
- Management of liquidity
- Strategic planning uses e.g. a balanced scorecard.

Unfortunately, research has shown that few universities actually use such methods, mainly as a result of the lengthy, expensive and complicated implementation process. It appears that many universities are unaware of the relationship between the quality of information systems and their influence on financial results and control, although *those universities which have implemented integrated computer systems confirm this to be the case.* Studies show that around

75% of the universities tested use budgeting and monitoring of cost procedures, but often they do so using simple control tools, and only a few have introduced controlling (i.e. cost and order centres). The fundamental aim of implementing controlling is to improve the efficiency of an organisation's workings, since it provides information about the mechanisms which form this efficiency.

Auditing controlling – using an analysis of financial data and cause-and-effect relationships – provides grounds for formulating the means of improving the efficiency of a university. The seven universal keys for improving the efficiency of any organisation are:

1. Finding cheaper resources
2. Improving productivity
3. Better exploitation of existing resources
4. Elimination of waste
5. Improvements in ways working
6. Better adaptation to expectations of clients (students in the case of universities)
7. Adaptation of ways of working to designated strategic aims (Łada 2011).

Below are some of the actions that may be implemented at universities with the aim of improving efficiency.

Finding cheaper resources – An example of an action which reduces purchase costs is the formation of purchase groups through alliances/consortia with partner universities, which increases bargaining power and helps to obtain better prices. An innovative approach to cost reduction is *open-book accounting*. This idea is based on an exchange of information with suppliers and joint attempts to locate resources at reduced costs, e.g. by removing parts of the tender which are rather irrelevant for universities.

Improving productivity – Sustained technological development makes it possible to introduce changes making the use of resources more economical. In analysing the cause-and-effect relationships between a reduction in the use of resources, especially in important positions, and a reduction of costs, benchmarking can be useful. It is possible and wise to compare the departmental costs of other universities, but such comparative analyses should also be carried out between various faculties and departments of one's own university.

Better exploitation of existing resources – Improving the exploitation of the university's infrastructure can bring results both on the side of costs (reduction of unnecessary resources) and on the side of income (exploiting the freed potential to increase the activities carried out).

Adaptation of workings to designated strategic aims – The development strategy should be a fundamental document of any university, and the material

and financial plan for a given calendar year should be embedded in this, and only specify the things to do in the near future and their sources of financing. This means, on the one hand, the need for strong dependence of current actions on strategic priorities; and, on the other, a requirement for cash-flow planning in terms of the year in progress and long-term strategy.

Structure of financial management and personnel selection

The selection of the *optimum financial management structure and the selection of people responsible for operational actions in the financial sphere* are important, especially in the area of tasks delegated from above. This automatically entails very prudent selection of the people earmarked for management positions in the financial department in terms of knowledge, qualifications and competences as well as managerial experience and continuing staff development.

Management of financial risk

Public universities in Poland are required – as a result of the law on public finances – to refrain from partnering enterprises associated with risk. They are therefore not permitted e.g. to invest in the capital markets or put capital into business ventures threatened by forfeiture of public funds. Similar regulations apply in many European countries.

However, even without such involvement in risky enterprises, risk is an inherent element of any activity. There are many areas of risk in a public university, from basic teaching activities to business ventures. Sometimes, simply a badly constructed contract or uninsured asset can cause considerable losses for a university. A new area of risk is the whole realm of projects financed from EU funds.

It is important to stress strongly that the basic risk is failure to attain the goals designated by a university in spite of the involvement of public funds.

This all speaks in favour of the need to identify risks and produce a risk management strategy using preventative actions and risk-reduction procedures. The whole risk management process should encompass several phases forming a system that increases the likelihood of attaining the goals and completing the tasks. This process should be documented and referred to the model – the risk management policy.

Synthesis of proposals for university financial management models

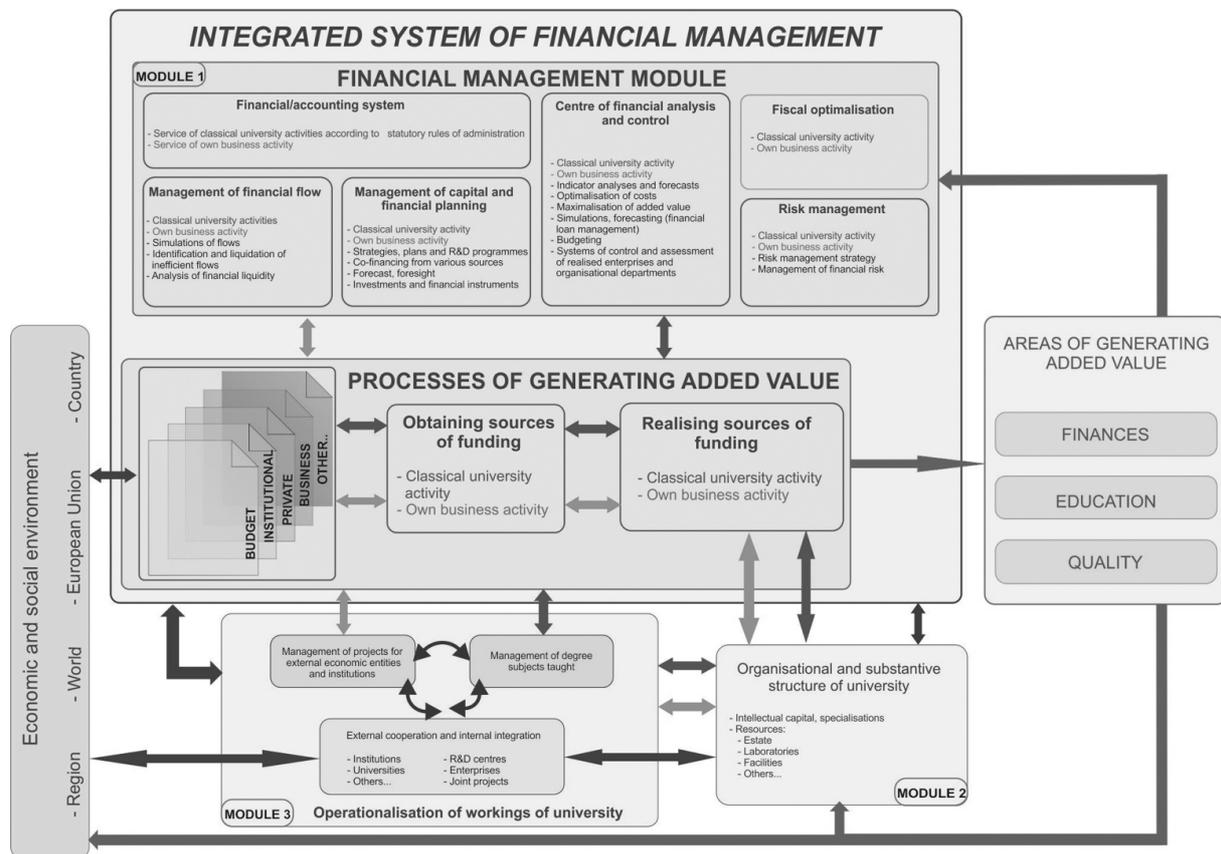
The complexity of the financial management of a university, and its location in terms of its internal and external environment, is shown in Figure 1.

Figure 2 shows a list of the aspects and areas of activity in the process of the financial management of a university, in particular in the field of the optimisation of income and the rationalisation of costs.

The resources and methods constituting a condition for the efficient financial management of a university are depicted in Figure 3.

Figure 4 illustrates a model of financial risks, representing an important aspect and at the same time a method for the financial management of a university.

Figure 1: Integrated financial management model I – as an aspect of university management



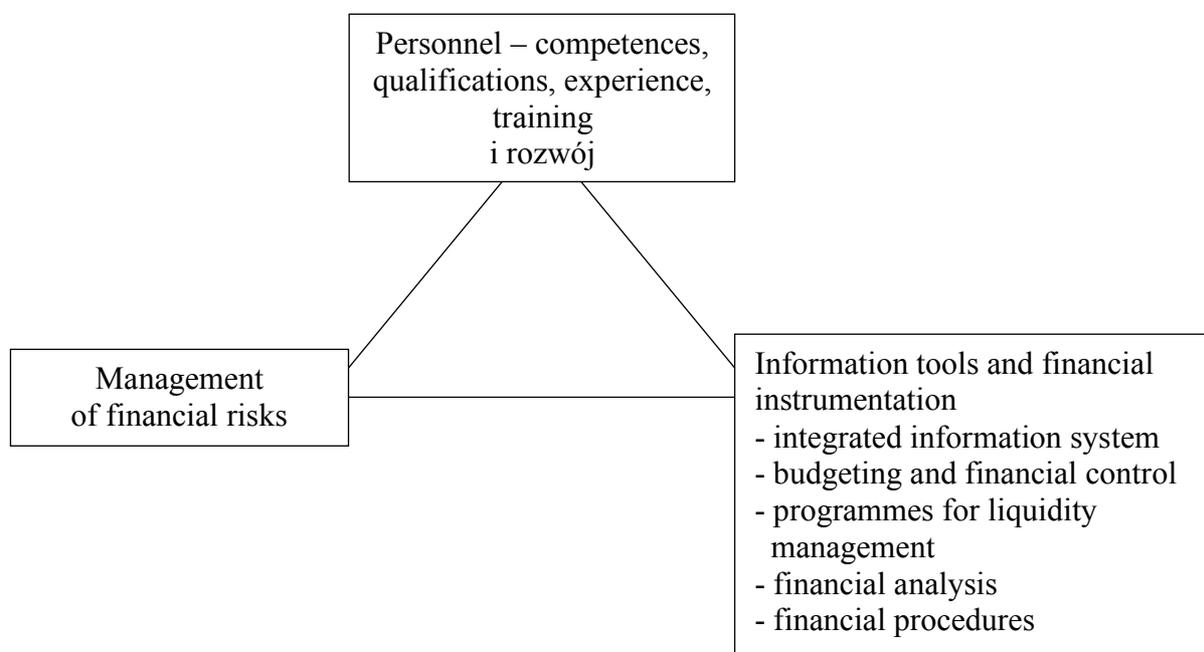
Based on: Okoń-Horodyńska *et al.* 2010

Figure 2: Financial management model II – Areas of financial management

Management of income – optimisation	Management of liquidity	Cost management – rationalisation
	Fiscal optimisation	
	Management of intellectual property	
	Financial investments	
	Investments in infrastruc- ture	
CURRENT ACTIVITIES OF UNIVERSITY (COSTS ≤ INCOME)		
DEVELOPMENT STRATEGY OF UNIVERSITY (INCOME > COSTS)		

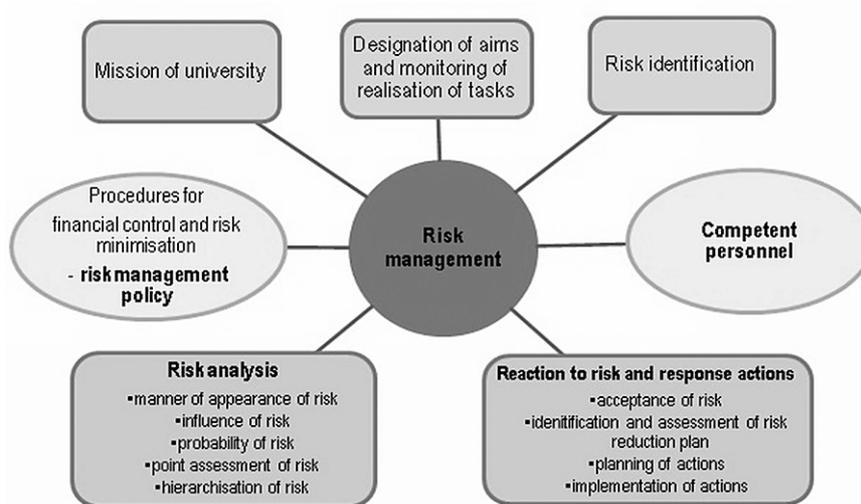
Based on: Du Vall *et al.* 2011

Figure 3: Financial management model III – Resources and methods



Based on: Du Vall *et al.* 2011

Figure 4: Financial risk management model



Based on: Du Vall *et al.* 2011

Conclusions:

1. Spending on higher education and research has to be a priority for governments and be perceived as the best form of investment, which will be returned many times through the stimulation of development in the economy.
2. European higher education and research are unable to compete with the best universities in the world in all areas. It is important to choose and especially support those research areas and education subjects in which we have already achieved successes and which will help to sustain our (potential) competitive advantages compared to the rest of the world.
3. In order to achieve the desired effects, funds must be concentrated at pro-innovation universities which are able to reap the highest possible returns from the funds invested in the form of the highest quality of teaching, scientific and research study results, technology transfer and innovation, while at the same time safeguarding at least the minimum needs of a university in providing good teaching standards, without aspiring to the ranks of research universities.
4. Funding streams should be multifaceted, and it is particularly important to form clearer economic preferences for selected research and innovation activities in order to create incentives for businesses to invest in research.
5. It is important to aim to strengthen the teaching and research potential on the path towards institutional consolidation and also at the level of actions and processes.

6. Higher education itself must in many cases also be redirected in terms of finding internal reserves in many universities. The catalogue of economic and financial operations conducted at universities makes it necessary to introduce a model of organisation and the administration of finances analogous to that used in the private sector. Financial management in entities of the size of public universities, with large budgets and carrying out various activities, must be done in a professional way, using all available financial tools.
7. The fact that universities function in a competitive environment means that all decisions with financial consequences, in particular on any activity conducted by them, must be taken based on economic factors. As a result it is necessary to implement a cost accounting for activities (projects, orders) as well as budgeting at the level of cost centres. This is closely linked to the need for the implementation of controlling, i.e. the continuous monitoring of planned costs and income and an analysis of deviations.
8. A fundamental condition for any university to operate in an undisturbed fashion is maintaining liquidity, which requires the additional management of financial capital as well as of debts and obligations. It therefore becomes necessary to plan financial flows divided into areas of activity, the sources of financing and their time periods.
9. The strategy for the development any university, regarding both infrastructure and quality in the fields of teaching and academic research, must be based on an analysis of the financial possibilities of the university. It must possess working capital, i.e. a surplus of current assets above current obligations. This means on the one hand the need for a substantial focus of current activities on developmental enterprises, and on the other hand the need to plan cash flows from a long-term perspective. This also means managing all assets of the university (material and non-material), and allowing for the possibility of exchanging assets (planned liquidation of given assets with the intention of acquiring/financing other preferred ones).
10. All aspects of financial management must be vigorously supported by integrated information systems.

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Chapter 5

Europe 2050. New Europeans and Higher Education

Dominik Antonowicz

The aim of the chapter is to provide a new and fresh overview on the growing challenges that must be addressed both by national governments and institutes of higher education in Europe. By doing so, the chapter raises serious issues regarding the social cohesion of European societies and tries to provide arguments about the important role of higher education in this respect. It demonstrates that Europe 2050 will be characterized by fewer, older and more diverse populations that will require a supply of human resources from the outside – the New Europeans. Taking into account the new social circumstances, this chapter claims that universities in Europe carry a particularly significant responsibility both for the economic development and the social cohesion of Europe.

Social Dimension of Higher Education

The social dimension of university is a huge complex social concept that is understood differently from one country to another. It has most often been linked to service to the community, but as a theoretical concept it has been the subject of external pressure from political and economic wings. Historically, the university in its modern form (invented 200 years ago in Germany) has traditionally been very closely related to the state. Marek Kwiek (2001:30) describes it as “a tactical deal made between power and knowledge, on the one hand, providing scholars with unprecedented institutional possibilities and, on the other, obliging them to support national culture and to help in the shaping of national subjects, the citizens of nation-states”. Service to society was a flagship idea of the students’ revolution of 1968, and since then it has become an important part of the university’s missions. Arend Zomer and Paul Benneworth (2011:81) provided a very comprehensive and knowledgeable study on the rise of the university’s third mission. They claim that in the 1970s, the prevailing idea of the university was that it was the bedrock of a democratic society, providing citizens with resources to take advantage of better societal opportunities. Hans Daalder (1982) claims that this revolution at universities provided independent intellectual space for students and researchers as well as for citizens. The aim was to free this space from the corporatist state, which favoured private over public interest. It could be said that the Democratic Mass University (see Delanty 2002) reflected the deep social and political changes of Western post-war societies in Europe.

External political and economic changes also marked another shift in higher education, when the Democratic Mass University was replaced by the Entrepreneurial University (Clark 1998) and its social functions were replaced by economic ones. The third mission of the university became more focused on making profits than providing space for intellectual discourse. With the arrival of economic turbulence in Europe in the 1980s, the social dimension of higher education clearly lost its momentum. The difficult financial situations of many national governments in the EU translated into considerable cuts in public spending, including that for higher education. The welfare state could not afford to carry such a huge financial responsibility and therefore made universities seek resources in the private sector. This was accompanied by a structural transformation from an industrial to a post-industrial model of the economy that put universities on the front line in the quest for innovation-based growth (Landa-baso 1999). Kwiek notes (2005: 326) that a large part of both political and academic transnational discourse among higher-education researchers acknowledge that “the current role of universities should be that of engines of economic growth for the new knowledge-driven economy”. And indeed, universities responded to these external signals by opening up to external agencies and actors. They had to redefine their missions and become more engaged in the economy. According to Arend Zomer and Paul Benneworth (2011: 82), “this emphasis has clearly been driven by the wider environmental changes which universities have encountered. But at the same time, their proactive involvement in third mission activities has also contributed to changing stakeholder expectations of what universities can achieve”.

Higher Education in a Post-industrial Society

The advent of globalization changed the nature of the relationship between the university and the state. Previously close ties between the university and the state relaxed, loosened, and slowly evolved into a much more distant relationship. Higher education became the facilitator of economic growth and the driving force for a post-industrial economy. The theoretical framework most responsible for the adoption of education and development policies has come to be known as *human capital theory*. Based upon the work of Schultz (1971), Sakamoto and Powers (1995), and Psacharopoulos and Woodhall (1997), human capital theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of a population. In fact, a new approach regarding access to higher education arrived with the work of Peter Durcker's *The Age of Discontinuity* (1969), in which he elaborated a new model of the economy in which the production of goods would be gradually

replaced by the provision of services. It prescribed a central role for higher education in developing this new type of industry and such human capital knowledge and skills began to play an increasingly important role in building potential in the national economy. Human capital theory emphasizes how education increases the productivity and efficiency of workers. The provision of formal education, in particular higher education, is seen as a productive investment in human capital, which proponents of the theory consider to be equally or even more worthwhile than that of physical capital. In other words, it was believed that a better-educated society would bring added value to an economy. Drucker (1969) only hinted at forthcoming changes, but the concept of a post-industrial economy and society was later developed by Daniel Bell (1973) in his book *The Coming of the Postindustrial Society*. In Bell's view, the coming of a post-industrial society incorporated three major components: economic (the dominance of service trades and white-collar occupations); technological (the development of science-based industry); and societal (a new type of society based on scientific information and technology determined social structures). This view assigns a central role to "knowledge" and "technical information," which reshape (or even revolutionize) the existing social structure. So, Bell claimed that the significance of human capital increases and becomes a determining factor in the emerging new social structures in a post-industrial type of society. Higher education becomes very important for an economy that seeks a well-educated workforce, and, as Bell claims, "the overall picture, however, of the knowledge society depends on how far we go in completing the revolution in higher education which began after World War II" (1973:236).

In this respect, the expansion of higher education includes an economic dimension, where skills and knowledge become a valued form of capital. Therefore the expansion of higher education and a high rate of participation can facilitate a technological and economic revolution requiring higher skill levels among the workforce. The promotion of advanced knowledge and modes of production corresponds to the general increase in demand for highly qualified people in various occupational positions. This all seems to be a transnational trend that has created heavily institutionalized environments. Though Daniel Bell popularized the concept of the post-industrial society, there were others who made a vital contribution to "revolutionized" ways of thinking about mass higher education. These include Alan Touraine's (1971) work *The post-industrial society: Tomorrow's social history: classes, conflict and culture in the programmed society*, and Heidi and Alvin Toffler's (1980) book, *The Third Wave*. Advances in technology and widespread globalization have contributed to changes in the structure of work across the world. Computing technology has allowed companies to aggressively restructure production processes and employ fewer workers using

more sophisticated technology. Modern technologies replace rote manual tasks performed by less-skilled workers, while increasingly sophisticated skills are required to implement and manage that technology. Changes in the structure of work have dramatically increased the demand for higher-education graduates. In 2005, just over 40 per-cent of the European workforce was employed in knowledge-based industries as defined by Eurostat (2010).

The prevailing view that higher education is primarily a purveyor of individual economic opportunity rather than an engine for national economic growth provides too narrow a perspective on higher education. A competitive economy can only be based on a well-educated population as well as a dynamic Research & Development sector. The two components of knowledge – human beings (“human capital”), and technology – have become central to economic development. In an age of globalization, the knowledge economy discourse has become a way to characterize the new relationships between the state, society, and economy. It sees in higher education an increasingly important role in international competitiveness for nation states through the central tasks of generation, application, the dissemination of knowledge, and the training of a highly skilled labour force. The study of Harald Schomburg and Ulrich Teichler (2006: 6) provides evidence that new phases of economic development will need more higher-education graduates. The report “Knowledge Economy in Europe” (2007: 7) shows that most of the new jobs across the EU15 have come from the expansion of knowledge-based industries. In the analysed period of time between 1995 and 2005, employment across knowledge-based industries increased 24 per-cent, as compared with the rest of the EU15 economy which increased by only 5 to 6 per-cent. The development of a knowledge economy is marked by the growing demand for higher-education graduates to drive the dynamically developing sector of the European economy.

Globalization

Society is a dynamic concept that is the subject of continuous and increasingly rapid transformations. As a result, the needs of society have also undergone major changes. One result of the changing external environment of higher education is the rapid development of new means of mass transport and communication that open a wide range of opportunities for international students to cross the borders of the nation-state (see, e.g., McMahon 1992). Data shows that between 1975 and 2005 the number of students enrolled outside their country of citizenship has risen from 600,000 to 2.7 million (OECD, 2007), which is indicative of an emerging social phenomenon of “mass” student mobility. There is little doubt that internationalization of higher education is a dynamic process

that involves a wide range of far-reaching economic and political consequences. National rationales for the internationalization of higher education have been studied at length (see, e.g., OECD, 2004). They include the mutual-understanding approach, the skilled-migration approach, the revenue-generating approach, and the capacity-building approach. The mutual-understanding approach encompasses political, cultural, academic, and development aid goals. The following two approaches seek to attract talented students to work in the host country's knowledge economy or boost the competitiveness of its higher-education and research sectors (Cremonini, Antonowicz 2008). The latter focuses mainly on attracting top students from around the world, in particular from developing countries.

Data shows that international students have mainly travelled to the US, the United Kingdom, and Australia. These three countries are the major players in the international market of higher education, with approximately 45 per-cent of the total number of foreign students. The dominant position of these countries stems from several reasons, one of the most obvious being that they are all English-speaking countries. France and Germany rank as middle powers in the international market for higher education. Together they attract approximately 20 per-cent of the total number of foreign students, which is some 0.5 million students. Japan, Canada, and New Zealand share roughly 13 per-cent of the international student market. Combined, these top eight countries comprise approximately 80 per-cent of the global international student market, having managed to build and develop networks of recruiting centres, impressive marketing strategies, and visa-support-schemes in order to target potential students. Also of note is that these are developed countries that offer a wide range of attractive employment opportunities. Many students choose a country in which to study with an eye towards the country's economic conditions and the development of their professional careers.

The global market for higher education is only one side of globalization; the other side, migration, seems less attractive and profitable. The wealthier developed countries draw not only the young and most talented students but also millions of immigrants; refugees from all over the world who seek a better or safer place to settle down. In recent decades, the number of immigrants has been steadily increasing; for some European countries (Austria, for example), in the UK it has become a serious factor in maintaining demographic balance. According to the OECD report *“International Migration Outlook: SOPEMI”* (2011), the foreign-born population in 2006 accounted for about 12 per-cent of the total population in OECD countries for which data are available, an increase of 18 per-cent from 2000. Certain countries have seen very high rates of increase in the immigrant share of the population since the year 2000, in particular Ireland,

Finland, Austria, and Spain. Immigration has been the main driver behind population growth in most member states: Between 2004 and 2008, 3 to 4 million immigrants settled in the EU-27 each year. Yet the European Union, with a population of half a billion, is facing important demographic changes. While the population is getting older, fertility has been low, and life expectancy keeps growing, the EU continues to attract a large number of immigrants. In 2006, foreign-born employees represented a significant portion of the workforce among the employed population in OECD countries. Still, variations exist among host countries. According to the Demography Report (2010:3) “as the flows of migration from non-EU countries and mobility between Member States have intensified, a growing proportion of the working-age population (15% in 2008) was either born abroad or has at least one parent who was born abroad”. The increase of immigrants’ share in total employment was particularly notable in Spain, Ireland, and Italy. The OECD study provides strong evidence that the labour market seems to value host-country qualifications and educational achievements over foreign ones. This sends a number of immigrants into the lower strata of labour markets, directly translating into occupation type and earning levels. As OECD (2011) revealed, most immigrants in Europe perform low-skilled positions in the labour market, but no research has been done on what proportion of them could take more sophisticated occupations. There is little doubt that at least some of them perform tasks that are clearly below their qualifications or level of education. This leaves room for higher-education institutions to engage these people in the education process at tertiary level.

Europe 2050

The demographic process has been changing the social structure of European societies in the past couple of decades and undoubtedly will continue shaping Europe in the future. The number of immigrants on the continent and their impact on the European economy will continue to grow. But as the Demography Report (2010:3) shows, “by 2060, persons of all nationalities with at least one foreign-born parent are expected to account for close to a third of the EU-27 population”. An even larger percentage of the work-force will be of foreign descent. But according to the OECD study (2011), most of the newcomers reinforce a low-skilled labour force. As the number of immigrants reaches double digits, national governments must think of a better strategy to take advantage of such important human assets. It will be inevitable because the social structure of the European population in 2050 will differ considerably from the existing one.

While the future holds a great level of uncertainty, an analysis of demographic and social trends allows us to develop some predictions about such a

distant future as 2050. Based on the demographic statistics about European societies presented by reliable data sources such as Eurostat (2011), and based on the analysis of migration conducted by the OECD (2011) and European Commission (2010), one can draw some general conclusions about the forthcoming social changes in Europe. If there are distinctive features that will characterize European societies in 2050, they are as follows (in no particular order): (1) fewer, (2) older, (3) more diverse.

Since the beginning of the 1980s, fertility in Europe has declined sharply. The most radical drop took place between 1980 and 2000. In fact, there has been a small increase from 2003, when it stood at 1.47 children per woman, to 2008, when it increased to 1.60. Generally, the driving force behind these changes are countries that joined the EU in 2004 and 2007, including Bulgaria (from 1.23 children per woman in 2003 to 1.57 in 2009), Slovenia (from 1.20 to 1.53), the Czech Republic (from 1.18 to 1.49), and Lithuania (from 1.26 to 1.55). In absolute numbers the population of the EU27 grew by 1.4 million in 2009, which comprised a net migration of 0.9 million and a natural increase of 0.5 million (the positive difference between live births and deaths). According the Demography Report (2010:58) published by the European Commission, “The contribution of net migration to total population growth has become more significant than that of natural increase since 1992 and has peaked in 2003. Since then, the contribution of natural increase to population growth has risen slowly”. History provides evidence that economic turbulence such as that which has shaken some European countries have had a significant negative impact on fertility rates. One can expect that in unstable economic conditions, decisions about family expansion carry some financial risks and might be postponed or even abandoned. The same situation was seen in the late 1970s and early 1980s, when Europe experienced a sharp fall in fertility.

To sum up, the recent population growth in Europe is a combination of two different factors. The major contributor to this growth is net migration in Europe as well as a greater number of live births than deaths, a number that is steadily but gradually narrowing (since 1960). There is solid evidence that allows us to make a legitimate prediction that in the near future the number of deaths will surpass the number of births. According to Rainer Muenz (2007: 7), “Based on the assumptions of the UN medium scenario Western and Central Europe’s (EU25+) work force would decrease to 211 million (-16 million or -7%) in 2025 and to 183 million (-44 million or -19%) in 2050. In the absence of any international migration this decline would be even larger (2025: 201 million; -26 million or -12%; 2050: 160 million; -66 million or -29%)”. If this happens, the extent of population decline or growth will depend on the contribution of migration to total change.

The age structure of the population in the EU-27 is getting clearly older. Growing life expectancy and low levels of fertility sustained for a couple of decades has led Europe to the problem of an aging population. This process is known as aging from the bottom of the population pyramid, and can be observed in the reduction of the base of population pyramids between 1990 and 2010. In the past 50 years, life expectancy at birth in the EU-27 has increased by around 10 years for both women and men, to reach 82.4 years for women and 76.4 years for men in 2008. The life expectancy at birth rose in all member states, and this trend is not expected to reverse. In 2009, the highest life expectancies at birth for women were observed in France (85.1), Spain (84.9), Italy (84.5 in 2008), and Cyprus (83.6); and for men in Sweden (79.4), Italy (79.1 in 2008), and Spain and the Netherlands (both 78.7). Having reached the age of 65, women in the EU-27 could expect to live an additional 20.7 years and men an additional 17.2 years. Europeans will live longer, and with the fertility drop-off, the aging process will continue in the coming decades. As the proportion of older people has increased in recent decades, the top of the age pyramid is getting wider. The Demography Report (2010) suggests that the recent growth in the proportion of older people can be explained by gains in longevity, and is known as “aging from the top” of the population pyramid. Over the past two decades (1990 to 2010), the working-age population (20 to 64 years) in the EU-27 increased by 1.8 percentage points, while the older population (ages 65 and over) increased by 3.7 percentage points. The Demography Report (2010) also makes some projections both for Europe’s near and more distant future. It expects that the population of Europe will be slightly larger (including net migration) by 2060 but leaves no doubt as to its age structure: Europe will get considerably older, with the median age projected to rise to 47.9 years (in 1990 it was 35). The report draws rather worrying conclusions that the working age population will decline steadily but surely in the coming decades. The proportion of the population aged 65 and older is projected to jump from 17.4 per-cent in 2010 to the shocking level of 30.0 per-cent in 2060.

The migration flows of the past decades have been a major contribution to the size and structure of the population of European societies. In the past two decades, immigration has been the main driver behind population growth in most member states: between 2004 and 2008, 3 to 4 million immigrants settled in the EU-27 each year. According to recent studies (EC 2010) a breakdown of the population by citizenship showed that there were 32.4 million foreigners living in the EU-27 member states, accounting for approximately 6.5 per-cent of the total population. Among this number of immigrants, around 12.3 million were EU-27 nationals living in another member state, and as many as 20.1 million were citizens from a non-EU-27 country. In 2010, the largest numbers of

foreign citizens were recorded in Germany (7.1 million), Spain (5.7 million), the United Kingdom (4.4 million), Italy (4.2 million), and France (3.8 million). Obviously, in this case, the size of the country matters, but taking into account that almost 80 per-cent of foreign citizens in the EU-27 live in these five member states, one must conclude that the welfare and employment opportunities bring people to the richest and most developed countries in the EU-27. It should not be forgotten that the stream of European structural funds and the continuing sustainable economic development of the EU-27 will mostly help new member states, and it is a probability that at least some of them will catch up economically with some countries from “Old Europe” in the coming decades. Therefore, the distribution of immigration within the borders of the EU-27 will be slightly more equal. But, on the other hand, the EU-27, with its political stability, dynamic economy, and well-developed welfare system will remain a very attractive destination for millions of immigrants from all over the world. A dramatically aging EU-27 will have to open its gates to newcomers from developing countries. Even the current economic turbulence might not have an impact on the scale of migration into the EU-27, because people driven by poverty, joblessness, and political persecution will always seek out Europe as a safe haven.

New Challenges for Europe

The social structure of Europe 2050 will be considerably different than the existing one. Demographic trends are noticeably strong, and without net migration the population of Europe will fall sharply. In addition, the structure of European societies is rapidly aging, and the EU-27 will have to open its gates to citizens of developing countries who will become the New Europeans. The demographic gap could be filled by adjusting the emigration policy of the EU-27, but this will not be able to address the shortage of well-educated workers in the labour market. A knowledge economy cannot properly develop without a continuous supply of human capital. This requires increasing the number of well-educated employees to provide a comparative advantage for the European economy.

The lack of human resources for the development of a knowledge economy undermines the Lisbon Strategy (2000). With such a demographic disaster – the gradually decreasing and sharply aging population – the European economy will not be able to close the gap between it and the American economy and will likely be overtaken by the Chinese and Indian economies. Therefore the EU-27 must show more interest in the growing population of immigrants in order to utilise them differently from simply industry-sector manpower (as they are today). This concerns not just the limited number of the most talented students who are the subject of competition between the world’s leading universities, but

rather hundreds of thousands of immigrants (most probably from outside the Bologna zone) whose qualifications are not recognized under the EQF framework, or others who, regardless of their talents, knowledge, and attitudes, stay outside the higher-education system. The European economy simply cannot afford to waste such important human assets. Only a few countries in the EU-27 have linked their policies on the social dimension to the Bologna commitment of raising the participation of under-represented groups, including immigrants. Therefore, this should not be surprising, as only a few countries have systematically monitored their participation and set specific targets to improve the participation of under-represented groups in higher education.

European Universities and Their Future Mission

Higher education is now recognized by all as playing a very important role in economic development. The World Bank often affirms that tertiary education is essential for the facilitation of nation building as well as for promoting greater social cohesion, inspiring confidence in social institutions, and encouraging democratic participation through open debate. Higher education should bring about an appreciation of diversity in nationality, ethnicity, and social class. APEID-UNESCO (2008) reported that many individuals consider higher education as a major avenue for social mobility and a *carte blanche* for reaching the upper echelons of society. At the national level, higher education is considered a vital instrument for human capital development, sustaining economic growth, restructuring society, and promoting national unity. Changes in the social structure of the population in Europe set fundamental challenges for national governance in delivering public policy in higher education. They also place some responsibility on the shoulders of various types of higher-education institutions, both public and private. The new demographic composition of European societies requires overcoming stereotypical thinking about pitting the social and economic dimensions of higher education against each other. In 2050, the economic and social dimensions of European universities will go hand in hand. Enterprising higher education cannot be narrowed to the diversification of the university's income and participating in the international markets for teaching, research, and consultancy. On the macro-scale, higher-education institutions have an important role to play in fuelling the post-industrial economy with well-educated graduates. As underlined above, the population of Europe will rely on migration, as will the workforce in Europe.

Until now, the majority of migrants have been allocated to the lower strata of the labour market regardless of their level of education. But over time, the economy will require a growing number of well-educated employees without

whom the knowledge economy cannot develop. As the population of immigrants in member states of the EU-27 grow, they must be taken into account as important assets to the knowledge economy. The problem that needs to be addressed is that they are often less educated than the native-born. Furthermore, many immigrants find it hard to gain recognition for the qualifications they obtained in their countries of origin. Their educational potential is being wasted in both social and economic terms. Higher education must address this problem and bring immigrants into the mainstream of society through education at a higher level. This is not an easy task to perform as the social, ethnic, religious, and national composition of the populations of member states are becoming far more diverse.

Still, for a number of countries in the EU-27, the issue of the participation of under-represented groups in higher education is a peripheral problem with a low priority. It is not an issue that attracts media attention or can bring in a number of new voters, even though it will be a great challenge for systems of higher education. There are three major reasons that this problem requires special attention from policy makers.

Firstly, in most EU-27 countries, higher education is gradually evolving from the concept of a public to a private good, transferring financial responsibility from the taxpayers at large to users (students and their families). This requires private investments in higher education which (at least to some degree) will rely on tuition fees paid by students. This puts candidates for higher education in an uneasy situation due to their non-traditional financial situation which makes them unattractive creditors for banks. In this respect banks and other financial institutions are reluctant to lend money to financially unreliable individuals with unstable legal and economic standing. Banks do not intend to risk their money on students (clients) with no bank records and unstable residential status.

Secondly, engaging immigrants in higher education requires taking a different approach to admission from higher-education institutions. This shift must be supported by national governments, which should develop legal and financial instruments to support affirmative initiatives to ensure that "The student body within higher education should reflect the diversity of Europe's populations." (Leuven Communication 2009) But higher education itself requires a certain degree of flexibility in order to allow students (who have had to stop their education at various levels) to return to university at any time. Because a number of New Europeans might be at different stages in their educational careers, the system must recognize their past achievements and allow them to continue their education at their destination.

Thirdly, these students are at considerable risk of abandoning learning at higher-education institutions. Risk-averse attitudes toward education are quite

typical for groups under unstable economic conditions whose members might be particularly tempted to move into the labour market in order to provide a stable income for their families (see Ratajczak: 1999). The prospect of low prestige and income, but instant and stable employment, often appears more attractive than future employment, which though profitable, is still tentative.

Tentative Conclusions

Zomer and Benneworth (2011: 98) argue that the third mission of universities is a form of response to the demands from government, industry, and other social actors for universities. As a conclusion, it needs to be stressed that the scope of the university's third mission has been largely determined by external economic and political changes in society. First it was the modern nation state in the 19th century, then the students' revolution in the late 1960s, and the changes in the structure of economies as a consequence of the economic stagnation in the 1980s. The university has responded to these societal and economic changes by transforming its structure. The modern university has responded to the needs of the modern nation state, and the culture "*bildung*" (Kwiek 2001), massification, and democratization of higher education has been translated into the Democratic Mass University (Delanty 2002); and the commercialization of higher education has been translated into the entrepreneurial university. All the major transformations of the university were sparked outside of academia. Thus, it should come as no surprise if universities have to rethink their social dimension and structure in order to provide education for the increasingly diverse or, rather, fragmented societies of member states. The coming demographic challenges of Europe require more strategic thinking than simply strengthening the social dimension of higher education. Growing social and economic inequalities will attract an increasing number of immigrants from developing countries, in particular from Africa and Asia. As demographic trends gradually reduce the size of the European workforce, the EU-27 will have to open its borders more widely to emigrants from developing countries. These New Europeans will have to take some responsibility for the European economy, not only as cheap labour for the manufacturing sector but also as part of a well-educated workforce that will make a critical contribution to the knowledge economy. The governments of European countries will eventually have to realize that the New Europeans will create problems for a wide range of social services as well as costs for taxpayers that in various countries have already begun to be questioned. However, they are also important assets and human resources that can no longer be ignored or wasted. Education systems in most EU countries must respond to the external conditions and changing social demands. European governments will have to

rethink their expectations about higher education, and the emerging challenges will have to be identified on a national or supranational level (EU policy framework). This public policy should be responsible for setting university priorities.

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Chapter 6

Higher Education Funding Reforms in Europe and the 2006 Modernisation Agenda

Ben Jongbloed and Harry de Boer

1. Introduction

In recent years, the general political, economic and social conditions under which our universities and other higher education providers operate have been altered drastically. And given the current financial crisis, it is very likely that such changes will continue in the years to come. Higher education has thus become a real-life laboratory for the study of political reform, of stability and change. The recent reforms in higher education governance – in more political terms: its ‘*modernisation*’ – are the topic of this chapter. In particular, we will look at reforms in the higher education *funding* mechanisms – the mechanisms employed by public authorities to allocate resources to research universities, universities of applied sciences and other higher education institutions, as well as their students.

It is becoming increasingly clear that higher education is a critical component of societal responses to emerging challenges, and in ensuring increased welfare and competitiveness (e.g. Veugelers and Van der Ploeg 2008). The ‘wisdom’ of higher education being a major driver for economic competitiveness in an increasingly knowledge-driven global economy has made high-quality higher education more important than ever (OECD 2008). The European Commission's recent ‘Communication on Supporting growth and jobs – an agenda for the modernisation of Europe’s higher education systems’ (EC 2011a) has once again stressed the crucial role of universities in contributing to the economic and social prosperity of Europe and called for further reforms in higher education to strengthen that role. The Commission’s Modernisation Agenda (MA) outlines some of the areas for reform. It follows up on the Innovation Union strategy, launched in 2010 as part of the Europe 2020 strategy (EC 2010a), and it updates the earlier, 2006 Modernisation Agenda (EC 2006). The Innovation Union strategy is aimed at building a more innovative European Union that places knowledge at the heart of the Union’s efforts to achieve smart, sustainable and inclusive growth.

One of the ten key statements listed in the Innovation Union relates to universities:

Our education systems at all levels need to be modernised. Excellence must even more become the guiding principle. We need more world-class universities, raise skill levels and attract top talent from abroad (EC 2010a, 3).

In line with earlier communications by the European Commission (EC 2003; EC 2005), the Innovation Union strategy regards universities as key actors in the transition to a knowledge-based economy and society. Universities are playing a pivotal role in the so-called ‘knowledge triangle’ (research, innovation, education). In the Commission Staff Working document that is accompanying the Innovation Union communication (EC 2010b), the EC states:

The research performance of European universities, however, does not compare well with that of universities in some other parts of the world (particularly the US). In Europe, research talent is spread across a larger proportion of the total university population than in the US, where talent tends to be concentrated in a smaller number of centres. European universities are thus more widely represented in the top 500 of global rankings such as the ‘Shanghai Ranking’ or the ‘Times Higher Education Ranking’...’ (EC 2010b, 35)

Apart from the fragmentation of university research, another reason for the underperformance of Europe’s universities is believed to be the insufficient investment from the public and private sectors in higher education (EC 2010b, 36). The Commission Staff Working document also argues that:

‘... some characteristics of the European university system, such as poor governance, inadequate funding mechanisms, insufficient links with the private sector (especially businesses) and insufficient autonomy (mainly to allocate funds and to negotiate salaries of teachers and researchers), are also to blame’ (EC 2010b, 36).

It is against this backdrop that we wish to look at higher education funding in Europe. As elsewhere, for all European states, funding is a major steering mechanism for their higher education systems. Funding mechanisms are closely linked to the general policy choices and governance arrangements – and the reforms thereof – in the public sector. Section 2 will set out this idea.

To explore the extent to which the various European higher education systems have implemented funding reforms and to learn how these reforms compare to the suggestions included in the 2006 Modernisation Agenda, section 4 of this chapter will present an overview of the higher education funding arrangements in 33 European countries as well as the reforms to such funding mechanisms. This is preceded by a short outline of the Modernisation Agenda (section 3). The materials and information on which section 4 is built were derived from two studies carried out for the European Commission’s Directorate for Education and Culture (CHEPS 2010a; CHEPS 2010b).

We will present a broad overview of how higher education funding in 33 European countries has changed over the period 1995-2008, and to what extent these changes (‘reforms’) are in line with the 2006 Modernisation Agenda. All of this is summarised in a *Funding Reform Scoreboard* (section 5) that shows,

for 33 European countries, what the situation was in the year 2008 compared to the year 1995. The Scoreboard visualises, per country, the situation with regard to the extent to which some of the funding-related aspects of the 2006 Modernisation agenda were implemented in 1995 versus 2008. It therefore visualises the direction of change.

2. Governance reforms

New modes of governance have been widely reported in the literature - in higher education as well as in other public domains (Kehm and Lanzendorf 2006; OECD 2008; De Boer and File 2009; Paradeise *et al.* 2009; CHEPS 2010b). Europe has seen the gradual introduction of systems of governance where elements of markets and networks play a role (e.g. Pierre and Peters 2000; Bell and Hindmoor 2009). When it comes to higher education, nation states have been delegating some of their powers to different levels of government and they did so in three directions (De Boer and File 2009). We are observing three shifts: upward, downward and outward.

The first governance shift is an upward shift to the supranational level - as policy agendas, strategic choices and regulations are increasingly decided upon at, or influenced by, authorities such as the European Commission (despite the principle of subsidiarity) and international agreements such as GATS). While each country has specific national (or federal) institutions and is responsible for organizing its own higher education sector, it is clearly drawing on programmes and examples from abroad. The Open Method of Coordination is a good example of the impact that the European level has on national higher education systems.

The second shift is a downward one, as provinces, local governments and individual higher education institutions themselves are granted greater operating autonomy and responsibilities by their national authorities. Deregulation is a commonly employed strategy whereby the state devolves some of its powers and authorities to lower levels in its higher education system. Here, the overarching theme in higher education governance is 'enhancing institutional autonomy' (De Boer and File 2009; CHEPS 2010b).

A third shift has been an outward one, where the traditional tasks of the state are moved to the periphery, such as to national agencies, or even left to private organizations. Here one can think of the establishment of accreditation agencies, advisory councils, competition watchdogs, or a changing role for existing agencies (e.g. funding agencies). This also includes allowing private education providers to enter the market and deliver their services to meet an often rapidly growing demand for higher education.

These ‘three-way shifts’ in the governance of higher education reminds one of the famous ‘wicked staircases’ drawings done by the Dutch artist M.C. Escher,¹ such as the one called *Relativity* where he shows three sets of interlocking staircases. In his magical pictures Escher focuses on unusual, and often conflicting, points of view. In the world of *Relativity*, three sources of gravity seem to be at work, creating interesting phenomena such as a stairway where two persons are using the same stairway, moving in the same direction and on the same side, but with one person descending while the other is climbing it.

In their efforts to reshuffle authority relations in the three domains of teaching, research and innovation, quite a few national governments have implemented various market-based governance reforms; introducing privatization, contracting out, performance-based budgeting, competitive tendering, and various forms of public-private partnerships (e.g. Dill 1997; Jongbloed 2003; Teixeira *et al.* 2004; Lynch 2005). Public authorities have started to use performance contracts and performance-oriented approaches to shape the budgets of national higher education institutions and research organisations (Jongbloed 2011). These reforms have fundamentally reshaped the relationships between the national authorities and the budget receiving organisations and sometimes created ‘wicked problems’ for the governance of higher education. In the next section we will look in more detail at the ways in which funding arrangements for higher education have been reshaped over the period 1995 to 2008.

3. The 2006 Modernisation Agenda

The European Commission regards the modernisation of Europe’s universities as a core condition for European competitiveness in an increasingly global and knowledge-based economy, as well as being ‘necessary in order to reinforce the societal roles of universities in a culturally and linguistically diverse Europe’. The Commission believes that European higher education faces serious obstacles that prevent it from realising its ambition to make that societal contribution. It therefore urges reforms in governance, funding and degree structures. The prevailing policy belief is that universities in Europe should be freed from over-regulation and micro-management, while accepting in return fuller institutional accountability to their host societies for their results (Eurydice 2000; Eurydice 2008; OECD 2008). Earlier research on the relationships between governance (including funding arrangements) and the performance of universities was carried out by the

1 This analogy was derived from a speech by Jürgen Enders held during the CHEPS 25th anniversary conference. See <http://www.utwente.nl/mb/cheps/CHEPS%2025th%20Anniversary%20Conference/>.

Breughel group (Aghion *et al.* 2009). Here, performance was measured as the position of a university on the Shanghai Academic Ranking of World Universities (Jiao Tong University 2008), thus primarily emphasising research performance. Governance was mainly defined in terms of institutional autonomy, looking at the public/private status of institutions and their autonomy with respect to budgets, buildings, hiring and salary setting. The outcomes suggest that university research performance is positively correlated with university autonomy and funding. Moreover, size ('big is beautiful') and age (the reputation effect) seem to matter in respect of research performance. The researchers also detected an interaction effect: higher levels of funding per student have more impact when combined with budget autonomy. They also argue that their findings suggest a positive relationship between competition (for research grants) and university output.

A broad repertoire of reforms was put forward in the European Commission's *Modernisation Agenda* (EC 2006). The agenda underlines 'the need for universities to have sufficient autonomy, better governance and accountability in their structures to face new societal needs and to enable them to increase and diversify their sources of public and private funding in order to reduce the funding gap with the European Union's main competitors'.

Box 1 lists these funding-related elements of the Modernisation Agenda. We note that this table does not represent the entire agenda, as it leaves out recommendations related to governance and curriculum reform.

Box 1: The funding aspects of Europe's 2006 Modernisation Agenda

- Ensure real autonomy and accountability for universities. Universities should be responsible and accountable for their programmes, staff and resources. Institutional autonomy is a pre-condition to adequately respond to changes
- Provide incentives for structured partnerships with the business community. Structured partnerships contribute to economic development, improve the career prospects of researchers, increase the relevance of education programmes, create more possibilities for patenting and licensing, and can bring additional funding
- Reduce the funding gap and make funding work more effectively in education and research. As put forward in its Annual Progress Report on the Lisbon Strategy, the Commission proposes that the EU should devote at least 2% of GDP (including both public and private funding) to a modernised education sector
- States should examine their current mix of student fees and student support schemes in the light of actual efficiency and equity. Free access does not necessarily guarantee social equity. Money spent on obtaining university qualifications pays returns higher than real interest rates. Student support schemes today tend to be insufficient to ensure equal access and chances of success for students from the least privileged backgrounds

- University funding should be focused on relevant outputs rather than on inputs. Funding should be adapted to the diversity of institutional profiles. Research-active universities should not be assessed and funded on the same basis as others weaker in research but stronger in integrating students from disadvantaged groups or in acting as driving forces for local industry and services. Apart from completion rates, average study time and graduate employment rates, other criteria should be taken into account for research-active universities: research achievements, successful competitive funding applications, publications, citations, patents and licences, academic awards, industrial and/or international partnerships, etc.
- States should strike the right balance between core, competitive and outcome-based funding (underpinned by robust quality assurance) for higher education and university-based research. Competitive funding should be based on institutional evaluation systems and on diversified performance indicators with clearly defined targets and indicators supported by international benchmarking for both inputs and economic and societal outputs
- Break down the barriers around universities in Europe. National grants/loans should be fully portable within the EU

The Modernisation Agenda has acted as the major European policy document concerned with higher education reform.² The 2006 agenda was recently updated (EC 2011a), but the funding-related recommendations are all still very much present in the 2011 version.

The reshaping of funding arrangements encompasses a wide range of aspects. Three of the most pressing questions are:

- Who pays for higher education? What is the extent of cost-sharing in higher education and external funding of universities?
- How is public funding allocated to higher education institutions? What incentives are implied by the various allocation mechanisms?
- How much autonomy do higher education institutions have for their internal resource allocation?

These key issues on the volume, method and conditions of funding also feature prominently in the European Commission's 2006 Modernisation Agenda, with the agenda calling in particular for:

- Increasing public funding for higher education
- Granting more autonomy to institutions for managing financial resources

2 Please note: We do not use the Modernisation Agenda as a normative benchmark. What we are interested in here is the extent to which higher education funding arrangements across Europe match those advocated by the Modernisation Agenda.

- Establishing direct links between results and the amount of public funding allocated
- Encouraging diversification of funding sources as well as the creation of partnerships with research institutes, businesses, and regional authorities

Below, in section 5, we will see to what extent the reforms carried out in 33 European higher education systems have been in line with these elements contained in the Modernisation Agenda. However, before doing that, the next section will provide an overview of the key trends in the funding of higher education in Europe.

4. Funding mechanisms and funding reforms in Europe

This section explores higher education funding reforms in 33 European higher education systems, that is: 27 European Union Member States plus Iceland, Liechtenstein, Norway, Switzerland, Croatia and Turkey.³ It is based on information collected in the course of two interrelated projects, respectively Governance Reforms and Funding Reforms in European Higher Education (see CHEPS 2010a; 2010b). The projects were carried out over the period October 2009-January 2010 by a consortium of five European research centres for the European Commission's Education and Culture directorate (DG EAC). The goal of the projects was to assess the progress made in higher education reforms in 33 countries with respect to the governance and funding-related areas mentioned in the European Commission's 2006 Modernisation Agenda (EC 2006). This section will focus on the funding reforms only.

The first issue to look at is the composition of funding. Table 1 provides information on the *composition* of the revenues of public universities. The three main categories of revenues are:

1. The *operational grant* (or core funding) allocated by public authorities for on-going teaching and/or research activities
2. *Tuition fees* (from national students and students from abroad)
3. *Third party funding* (all project and contract funding received from public, international and private sources; such as research council funding, ministry programmes, EU funds, contract research, and contract teaching)

3 Dividing Belgium into two communities (Flanders and Walloon communities) gives a total of 34 university systems. For this chapter, we chose not to focus on the universities of applied sciences and only considered research universities.

The bottom rows of Table 1 show the difference between the years 1995 and 2008 with respect to the averages for the three main revenue categories for public universities. Detailed averages per country are shown for the year 2008.

Table 1: Composition of revenues for public universities, year 2008 (and European average for year 1995)

Country	Share of Operational Grant from public authorities (%)	Share of Tuition Fees (%)	Share of Third Party Funding (%)
Austria	78	6	16
Belgium – Flanders	45	5	50
Belgium – Wallonia	50	5	45
Bulgaria	55	20	25
Cyprus	80	15	5
Croatia	70	30	0
Czech Republic	75	5	20
Denmark	73	2	25
Germany	NA	NA	NA
Estonia	48	13	39
Finland	65	0	35
France	87	5	8
Greece	NA	NA	NA
Hungary	70	15	5
Ireland	40	35	25
Iceland	65	0	35
Italy	65	12	23
Latvia	50	15	35
Liechtenstein	55	35	10
Lithuania	65	25	10
Luxembourg	92	2	6
Malta	95	3	2
Netherlands	66	6	28
Norway	75	0	25
Poland	71	22	7
Portugal	60	10	30
Romania	70	25	5
Slovakia	94	1	5
Slovenia	50	25	25
Spain	76	21	3

Sweden	88	0	12
Switzerland	76	2	22
Turkey	57	4	39
United Kingdom	38	24	38
Europe-wide average for the year 2008	67	12	21
Europe-wide average for the year 1995	78	8	15

Source: CHEPS (2010a)

Part of the move towards a higher share of tuition fees (from 8% to 12%) and third party funds (from 15% to 21%) may be explained by deliberate reform policies, such as the raising (or introduction) of tuition fees, the introduction (or rise) of project funds, and policies to encourage the entrepreneurial activities of higher education institutions.

We now turn to the mechanisms that determine the size of the public, operational grant allocated to the publicly funded higher education institutions (HEIs) in each country. This is the biggest revenue category – amounting to two-thirds of university revenues. All HEIs are expected to strive for quality, efficiency and equity in fulfilling their missions of teaching, research and outreach services and it is here that funding mechanisms may differ in the extent to which they include incentives for encouraging HEIs to achieve these objectives (Jongbloed and Vossensteyn 2001).

Concerning the mechanisms in place to determine the amount of the grant, we distinguish the categories that have been used in earlier studies on funding mechanisms (e.g. Eurydice, 2008):

1. *Negotiated funding*: The grant is based on negotiations between the ministry/agency and each individual institution about the budget lines (line items) to be allocated. The budget lines relate to the various activities undertaken and the resources required to achieve particular goals.
2. *Incremental funding*: The amount of the grant is based on previous years' allocations (and therefore will reflect past costs). History will play a large role in shaping the HEIs' budgets, giving the funding mechanism the character of an input-based budgeting system.
3. *Formula funding*: This is a formula-based approach, which means that the amount of the public grants for teaching and/or on-going operational activities and, in certain cases, research is calculated using standard criteria (e.g.

normative unit costs, input criteria and performance indicators) that are the same across all institutions. If performance measures play a large role, the funding mechanism resembles a PBB system. If input measures dominate, the system is more like an input-based budget.

4. *Contract funding*: The grant is based on the outcome of a performance contract, meaning that each institution and the ministry/agency negotiate and agree on a number of strategic objectives to be achieved by the institution (e.g. a predetermined number of graduates by field of study) and in return the institution receives a budget. To evaluate progress, a set of performance-related measures is used.

Table 2 shows the extent to which each of the four mechanisms is present in each of the 33 countries – using a four-point scale. This is based on the responses of national experts to an extensive funding survey (CHEPS 2010a). Comparing the years 1995 and 2008 gives an indication of the reforms that have taken place. The table illustrates that countries are using a mix of funding mechanisms. This mix is the outcome of historical developments and policy decisions over time.⁴

Table 2: Degree of importance of four funding mechanisms for determining the public universities' budget: 1995 versus 2008

Country	Negotiation		Incremental Allocations		Formula		Contracts	
	1995	2008	1995	2008	1995	2008	1995	2008
Austria	XX	XXX	XXX	XXX	0	XX	0	XX
Belgium – Flanders	0	0	XX	0	XX	XXX	0	0
Belgium – Wallonia	0	0	XX	XX	XX	XX	0	0
Bulgaria	XX	XX	XXX	X	0	XXX	0	0
Cyprus	XXX	XXX	0	0	0	0	0	0
Croatia	X	X	XXX	XXX	0	0	0	0
Czech Republic	0	X	XX	XX	XXX	XXX	0	X
Denmark	X	X	XX	X	XX	XXX	0	0
Germany	XX	XXX	XXX	XX	XX	XXX	X	XXX
Estonia	0	0	0	0	X	X	XXX	XXX
Finland	X	XX	XXX	X	X	XXX	X	XXX

4 Federal states (Germany, Spain, Switzerland) and countries such as the UK and Belgium consist of a number of separate higher education systems, each having their own mix of funding mechanisms. In these cases, the table provides a summary view, although we realise that the real picture is more complex.

We will now analyse the extent of performance orientation in the funding mechanisms. The underlying criteria (the ‘drivers’) that determine the size of the public operational grant to public HEIs reflect the goals that the public authorities wish to stress. As such the choice of funding criteria is intended to affect institutional behaviour. These criteria may stress the performance of HEIs, but may also be more oriented towards their costs or inputs. In the light of the 2006 Modernisation Agenda it is interesting to learn whether funding mechanisms have become more performance-based over time.

Input-related criteria in funding mechanisms relate to the following drivers:

- Number of enrolled students (grouped according to field and level of study) registered during the previous or current year;
- Number of state-funded study places available at the HEI as agreed with the ministry/agency (grouped by field and level of study);
- Number of staff in the institution; surface area of buildings, rental costs of institutions, past costs, or estimates (or projections) of costs;
- Number of PhD candidates/doctoral students;
- Previous years’ (historical) allocations, including allocations that remain largely fixed from one year to the next.

Output-related criteria concern the following:

- Criteria related to students’ results (such as the number of BA and MA degrees conferred, ECTS credits accumulated, students’ success rates, and number of students completing their studies within a stipulated time);
- Results from national evaluations of teaching quality (e.g. from peer reviews or accreditation exercises) that address the institution as a whole or that are conducted for different subject areas;
- Results from periodic national research assessments that address the institution as a whole or that are conducted for the different subject areas;
- Number of PhD degrees awarded;
- Number of academic research publications;
- Number of quoted references/citations in academic journals;
- Indicators related to the university’s success in winning competitive research grants from research councils and other national/international bodies;
- Indicators related to the number of contract research projects undertaken;
- Indicators related to the commercial use of research results (licenses, copyright, services provided, patenting activity, etc.);
- Awards, prizes and distinctions received by the institution;
- Outcomes of rankings;
- Participation in international scientific research projects.

The importance of input and output drivers in determining the universities' operational grant for teaching, research and on-going activities is shown in table 3. The table shows the importance as judged by national experts in the respective countries.

Table 3: Importance of performance-related funding drivers in the funding mechanism for publicly funded universities: 1995 versus 2008

	1995	2008
Extremely important	Denmark, Sweden, United Kingdom	Belgium-Flanders, Denmark, Estonia, Iceland, Netherlands, Sweden, United Kingdom
Important	Netherlands, Poland	Austria, Germany, Finland, France, Greece, Italy, Norway, Poland, Romania, Slovakia, Slovenia, Spain
Minor importance	Cyprus, Germany, Finland, France, Greece, Iceland, Italy, Lithuania, Norway, Slovenia, Spain, Turkey	Bulgaria, Cyprus, Ireland, Latvia, Lithuania, Portugal, Switzerland, Turkey
Unimportant	Austria, Belgium-Flanders, Belgium-Wallonia, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Ireland, Latvia, Liechtenstein, Luxembourg, Malta, Portugal, Romania, Slovakia, Switzerland	Belgium-Wallonia, Croatia, Czech Republic, Hungary, Liechtenstein, Luxembourg, Malta

Source: CHEPS (2010a)

It is clear from the overview that input-related factors remain very important in all countries. Although some countries have decreased the weight they give to student numbers in favour of more performance-related factors, there is no single country that has a 100% performance-based system. However, compared to 1995, when there were only five countries where output-related criteria played an important (or extremely important) role (Denmark, Netherlands, Poland, Sweden and the UK), there are now 19 countries where elements of performance are driving the budgets of HEIs: Austria, Belgium (Flanders), Denmark, Germany, Estonia, Finland, France, Greece, Iceland, Italy, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Sweden and the UK.

Another interesting issue is whether the performance information considered in the funding mechanisms concerns the actual (or recent) performance of HEIs or the future (say, expected) performance. In other words, whether the system is

backward-looking or forward-looking. An example of the first is funding according to a formula that is driven by the number of degrees or credits accumulated by students in previous years. In a forward-looking system, grants may be allocated in either a negotiation-based or a competitive process, where the funding agency awards budgets according to the plans submitted by institutions. Another example of a forward-looking system is the allocation of research grants by a research council that selectively awards project funds to proposals submitted by research groups. However, these grants are project budgets and are not included in the mechanisms for determining the recurrent funding discussed here.

A performance-oriented approach to budgeting that emphasises *plans* instead of past performance is the *performance contract* (Salmi and Hauptman 2006). Performance contracts between individual universities and their relevant funding authorities define institution-specific (or ‘mission-based’) objectives in line with national strategic priorities. They may be seen as a way of the government ‘buying’ a particular performance from the university. These contracts may be agreed with individual institutions, but may also be signed with the university sector as a whole. They may be very broad and based on framework agreements. This will be the case if they are signed with a collective of universities (e.g. university associations or rectors’ conferences). In the latter case, the contract specifies intentions. Contracts can also be more detailed (Leszczensky *et al.* 2004). In such cases, agreed activities or performances are specified in detail. This may resemble a more traditional funding approach, where specific budget lines (items such as staff costs, maintenance costs, capital costs) are negotiated with public authorities in a system of line item funding.

Unlike a system of formula-based funding, the performance contracts allow authorities to pay more attention to the differentiated missions of individual institutions thus facilitating institutional diversity. While formula funding often will resemble ‘steering by looking in the rear view mirror’, a system of contract funding may allow for a more future-oriented type of funding (Jongbloed 2011). Box 2 presents some examples of countries where contract-based approaches are employed.

Box 2: International examples of contract funding approaches

- Australia: Mission-based Compacts
- Austria: *Leistungsvereinbarungen* (performance agreements)
- Belgium-Flanders: multi-annual agreements
- Denmark: university development contracts
- Finland: performance contracts
- France: *contrat quadriennal*
- Germany - Nordrhein-Westfalen: *Zielvereinbarungen* (target agreements)
- Hong Kong: Performance and Role-related Funding Scheme (PRFS)
- Spain: *à la carte* contract funding (Valencia region)

Authorities often implement contract funding as part of larger higher education reform efforts. In most countries, however, performance contracts are employed as instruments to inject more performance information into the budgeting process - as a kind of performance-informed budgeting. Only in a few countries do the contracts have direct consequences for the actual size of the budget. The latter is the case for Hong Kong (Beerens *et al.* 2010) and the Spanish region of Valencia (de Boer & Kaiser 2007).

In most countries, alongside the recurrent, formula-based funds, there is a stream of project funds that are awarded competitively. This is a common feature for the public funding of academic *research*, where funding takes place through a *dual support system*. This means that research is funded both through a recurrent (operational) grant and through competitive public research grants. The recurrent/operational funds for research can either be part of an integrated block grant for teaching *and* research or consist of a separate block grant for research. The competitive public research grants are allocated on a project-basis by research councils, national academies or other national/federal intermediary bodies. These funding bodies will select those research proposals that best meet the award criteria in terms of quality, relevance and price.

Table 4 provides information on 23 countries that provided data, relative to two years, on the proportions respectively of the operational grant for research and the competitive public research funds.

Table 4: *Shares of public funds for research from operational grant and from competitive research council sources: 1995 versus 2008*

Country	Operational grant for research %		Competitive public research grants %	
	1995	2008	1995	2008
Austria	90	78	10	22
Bulgaria	50	33	50	67
Cyprus	70	70	30	30
Czech Republic	0	0	100	100
Denmark	75	60	25	40
Germany		73		27
Estonia	62	34	38	66
Hungary	95	90	5	10
Ireland		60		40
Iceland		60		40
Italy	84	88	16	12

Latvia	0	40	100	60
Lithuania	80	80	20	20
Malta	1	1	99	99
Netherlands	90	86	10	14
Norway	82	75	18	25
Poland	90	80	10	20
Romania	0	0	100	100
Slovakia	90	78	10	22
Slovenia	0	0	100	100
Sweden	45	46	55	54
Switzerland	80	72	20	28
United Kingdom	40	33	60	76
Average	56	54	44	47

Source: CHEPS (2010a)

Table 4 illustrates that the average share of competitive research council funding in European universities has increased from 44% to 47% over the period 1995-2008. Behind this (rather modest) change, however, lies a wide variety of developments. In 2008, there are four countries where all public research funds are awarded in competition (i.e. the share of competitive research funds is 100%): the Czech Republic, Slovenia, Romania, and Malta. In 11 out of the 34 higher education systems included in Table 4 we see a rise in the share of competitive/research council funding. One may therefore conclude that over the period 1995-2008 the competition for public research funds has increased in Europe. Countries are introducing more competition to improve research quality. In some countries, more funds were made available through project funds, while in others the research component of the direct operational grant for universities decreased or funds were transferred to the research council.

5. A Funding Reform Scoreboard

In section 3 we presented the aspects of the EC's Modernisation Agenda dealing with funding – either directly or indirectly. We will now make an assessment of the degree to which the 33 European countries covered in this chapter have these funding-related aspects of the 2006 Modernisation Agenda in place, and compare the situation in the years 1995 and 2008. This assessment is made on the

basis of a judgement that takes into account the following six items that are mentioned in the 2006 Modernisation Agenda:

1. Financial autonomy
2. Share of third party funding
3. Share of revenues from tuition fees
4. Degree of performance orientation in funding mechanisms
5. Share of competitive research funds in university sector
6. Portability of student grants

These items are presented in a scoreboard that shows the degree to which each item is present in a country's higher education system.⁵

With respect to the first item, *financial autonomy*, we base our assessment on what each country's experts have answered in our survey on four questions relating to the HEIs' 'freedoms' in financial matters:

1. Are public HEIs free to decide on the internal allocation of public and private funds?
2. Are they free to borrow funds on the capital market?
3. Are they free to build up reserves and/or carry over unspent financial resources from one year to the next?
4. Are they free to determine how they spend their public operational grant?

The share of *third party funding* is an indication both of the Agenda's recommendation to increase partnerships with business and its recommendation to revise the balance of core, competitive and outcome-based funding. One may expect that having more partnerships is reflected in a higher share of third party funds. On the same note, a higher share of third party funding indicates that HEIs have been more active in generating revenues from sources such as industry, non-profit organisations, and research councils.

The share of *tuition fee* revenues reflects the degree to which a country has introduced cost sharing – that is the mix of private (through tuition fees) and public contributions (student support, tax allowances) towards meeting the costs of higher education (Teixeira *et al.* 2006). Tuition fees for Bachelor-level students are relatively low across Europe, even though some countries have started to introduce (and raise) fees in recent years. On average, the fees for Master's level students are higher, particularly in the UK, Ireland, Greece, Cyprus, Malta and Spain. In a few countries, differentiated fees are in place (Italy, Spain, Portugal, UK-England), sometimes with governments setting a minimum and maximum level.

5 We do not explicitly assess the Modernisation Agenda aspect of 'removing the funding gap', because, apart from Scandinavian countries and Cyprus, none of the 33 countries meets the criterion of 2% of GDP spent on higher education.

The degree of *performance orientation* in the funding mechanisms, as well as the share of *competitive research funding* in the university sector, is derived from the overviews presented in section 4.

The *portability* of student support is a mechanism for promoting international student mobility, which is an important item in European policies with respect to higher education. Table 5 shows some of the student support arrangements for students going abroad. The table illustrates that, compared to the middle of the 1990s, in more than half of the countries in Europe students who go abroad for a limited period or for an entire programme largely receive the same support as students who remain in their home country.

Table 5: *Financial support for BA students going abroad*

Type of support	1995	2008
No financial support	BG, HR, CY, CZ, ES, HU, IS, LT, LV, MT, NL, PT, RO, SI, SK	BG, HR, CZ, LT, LV, PT, SK
Special grants or loans earmarked for mobility	AT, EE, GR, IT, LU, NO, PL, TR, UK	EE, ES, GR, IT, LU, NO, PL, TR
Support for students abroad is largely the same as for students studying in their home country	BE-nl, BE-fr, CH, DE, DK, FI, FR, IE, LI, SE	AT, BE-nl, BE-fr, CH, CY, DE, DK, FI, FR, HU, IE, IS, LI, MT, NL, RO, SE, SI, UK

Source: CHEPS (2010a)

The criteria for assessing the six Modernisation Agenda items are summarised in a score on a three-point scale (represented visually by means of ‘full moons’, ‘half-moons’ and ‘empty moons’), as follows:

5. Financial autonomy: Based on experts’ assessment on a five point scale and transformed into a three-point scale:
6. high (●), medium (◐) or low (○) autonomy (aggregate of four items: (a) internal allocation of funds, (b) borrowing money on the capital market, (c) building up financial reserves, and (d) flexibility in spending the public operational grant).
7. Share of third party funding: Based on the share in total revenues:
8. high (●): 25%-100%; medium (◐): 11%-24%; low (○): 0%-10% of revenues.
9. Share of revenues from tuition fees: Based on the share in total revenues:
10. high (●): 15%-100%; medium (◐): 6%-14%; low (○): 0%-5% of revenues.

11. Degree of performance orientation in funding mechanism: See table 3:
12. high (●): output criteria are important or extremely important; medium (◐): output criteria are of minor importance; low (○): output criteria are not important.
13. Share of competitive research funds: See table 4:
14. high (●): 25%-100%; medium (◐): 11%-24%; low (○): 0%-10% of revenues.
15. Portability of student grants: See table 5:
16. high (●): support largely the same as for students studying at home; medium (◐): special grants or loans earmarked for mobility; low (○): no financial support for students studying abroad.

We argue that these six items, taken together, give a good indication of the degree to which the funding aspects advocated by the Modernisation Agenda are in place. Table 6 presents this information for the years 1995 and 2008. The table shows that, comparing the situation in 1995 and 2008, the extent to which the European higher education systems meet the funding-related aspects of the Modernisation Agenda has increased on all six indicators. In all countries we observe an increase in the number of ‘full moons’ or ‘half-moons’. The countries that show the largest increase are Austria, Romania, Estonia, Ireland and Slovenia. The UK meets many of the Agenda’s funding aspects, and so do Ireland, the Netherlands and two relatively new EU members: Slovenia and Estonia. What the scoreboard also shows is that there is still some way to go for European higher education systems in areas such as cost sharing and raising the share of third party funds. It is exactly in these areas where HEIs will require the autonomy to set strategic directions and where financial reforms in higher education need to be accompanied by governance reforms (e.g. in the area of human resources). In that respect, the new, 2011 Modernisation Agenda (EC 2011a) is taking the message of the 2006 Modernisation Agenda forward. It will be interesting to continue monitoring these trends – preferably by means of surveys and scoreboards such as the ones presented in this chapter.

Table 6: *A Funding Reform Scoreboard: the degree to which the funding-related aspects of the Modernisation Agenda are met in 33 European countries*

	FINANCIAL AUTONOMY	SHARE OF THIRD PARTY FUNDS	SHARE OF TUITION FEES	PERFORMANCE ORIENTATION	COMPETITIVE RESEARCH FUNDING	PORTABILITY OF STUDENT SUPPORT	FINANCIAL AUTONOMY	SHARE OF THIRD PARTY FUNDS	SHARE OF TUITION FEES	PERFORMANCE ORIENTATION	COMPETITIVE RESEARCH FUNDING	PORTABILITY OF STUDENT SUPPORT
	1995						2008					
AT	○	○	○	○	○	◐	●	◐	◐	●	○	●
BE	●	●	○	○		●	●	●	○	◐		●
BG	●	○	●	○	●	○	●	●	●	◐	●	○
CH	○	◐	○	○	○	●	◐	◐	○	◐	◐	●
CY	○	○	○	◐	◐	○	○	○	◐	◐	◐	●
CZ	●	○	○	○	●	○	●	◐	○	○	●	○
DE	○			◐		●	◐			●	◐	●
DK	◐	◐	○	●	◐	●	◐	●	○	●	◐	●
EE	●			○	◐	◐	●	●	◐	●	●	◐
ES	●	◐	●	◐		○	●	◐	●	●		◐
FI	◐	●	○	◐		●	◐	●	○	●		●
FR	○	○	◐	◐		●	○	○	◐	●		●
GR	○			◐		◐	○			●		◐
HR	◐			○		○	●		●	○		○
HU	○	○	◐	○	○	○	◐	○	●	○	○	●
IE	●			○		●	●	●	●	◐	◐	●
IS	●	●	○	◐		○	●	●	○	●	◐	●
IT	●	◐	◐	◐	○	◐	●	◐	◐	●	○	◐
LI		○	●	○		●		○	●	○		●
LT	○	○	●	◐	○	○	○	○	●	◐	○	○
LU				○		◐	◐	○	○	○		◐
LV	●	○	●	○	●	○	◐	●	●	◐	●	○
MT	◐	○	○	○	●	○	◐	○	○	○	●	●
NL	●	◐	●	●	○	○	●	●	●	●	○	●
NO	○	◐	○	◐	○	◐	●	●	○	●	◐	◐
PL	◐	○	◐	●	○	◐	◐	○	●	●	○	◐
PT	◐	●	○	○		○	◐	●	◐	◐		○
RO	○	○	○	○	●	○	◐	○	●	●	●	●
SE	◐	◐	○	●	●	●	◐	◐	○	●	●	●
SI	◐		●	◐	●	○	●	●	●	●	●	●
SK	○	○	○	○	○	○	◐	○	○	●	○	○
TR	○	●	○	◐		◐	○	●	○	◐		◐
UK	●	●	●	●	●	◐	●	●	●	●	●	●

● = meeting the Modernisation Agenda

◐ = meeting the Modernisation Agenda to some degree

○ = not meeting the Modernisation Agenda

Blank = (complete) information not available

Note: Compressing detailed information into symbols requires simplification. The situation behind the symbols varies across the individual aspects.

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Chapter 7

Ensuring the Quality of Teaching and Learning in the Higher Education Modernisation Agenda

Andrzej Kraśniewski

1. Introduction

Quality in higher education is a very wide topic. In this chapter, we focus on the quality of teaching and learning. We discuss this issue in the context of the statements made in the latest Communication of the European Commission on the modernisation of Europe's higher education systems (European Commission 2011a).

Ensuring a high quality of teaching and learning is key for the competitiveness of European higher education. Therefore, as stated by the European University Association, “quality and improving quality is at the heart of the Bologna Process reforms, and the European QA architecture - the European Standards and Guidelines (ESGs), the European Quality Assurance Register (EQAR), and the annual European QA Forum (EQAF) – are among the most concrete and successful aspects of Bologna” (EUA 2011).

Quality, including quality of teaching, is mentioned several times in the EC Communication. Its significance for the modernisation of higher education is, in particular, underlined in the concluding section of the document where it is stated: “The Commission will also draw upon external expertise to develop progressive policies and identify innovative practices. As a first step, in 2012, it will establish a high-level group with a rolling mandate to analyse key topics for the modernisation of higher education, starting with the promotion of excellence in teaching and reporting in 2013”.

The significance of ensuring a high quality of teaching is recognised not only by politicians, but also by European higher education institutions (HEIs). The outcomes of the survey conducted by the European University Association¹ revealed that quality assurance reforms are in first place on the list of developments that will most affect HEIs in 5 years' time (Sursock and Smidt 2010, 90).

In Section II, we analyse some of the recommendations, relating to quality and quality assurance, made recently by the European Commission. This analysis is followed by a discussion, in Section III, on how policies and regulations at the system (national) level can support the development of a quality culture within HEIs. This discussion is illustrated with an example presented in Section

1 Responses were collected from 821 HEIs and 27 national rectors' conferences.

IV which shows how system-level regulations introduced in the process of modernising higher education in Poland support the development of an institutional quality culture and the reorientation of the higher education to make it more relevant to the needs of the labour market.

2. Looking at the EC Communication

The need for excellence and relevance in higher education, emphasized in the EC Communication on the modernisation of Europe's higher education systems, and the message coming from these recommendations, formulated in the document as the key policy issues for Member States and higher education institutions, can hardly be questioned. A more detailed analysis of some of the statements may, however, provoke certain comments, including critical ones.

In what follows, we quote some of the recommendations for Member States and HEIs taken from the section on “Improving the quality and relevance of higher education” and comment on them.

Adapting quality assurance and funding mechanisms to reward success in equipping students for the labour market

The very first recommendation in the section on quality says:

Encourage the use of skills and growth projections and graduate employment data (including tracking graduate employment outcomes) in course design, delivery and evaluation, adapting quality assurance and funding mechanisms to reward success in equipping students for the labour market.

Although the general message coming from this recommendation cannot be criticised, some of its details can be questioned or at least require comment.

The first concern is about the usefulness of graduate employment data (including tracking graduate employment outcomes) in the process of design and delivery of degree programmes. The problem is illustrated in Fig. 1. It can be seen that it takes some time to complete a degree programme and to enter the labour market. Then it takes some time to collect meaningful graduate employment data - such data normally refers to the situation a year or more after graduation. Also taking into account that degree programmes are not changed every year, it can be estimated that the time between the design of a programme and its components (modules) and the availability of data on the employment of graduates who completed that programme is 5-10 years. This means that, in most cases, at the time when graduate employment data related to some study programme are available, this programme is not taught anymore: maybe over the period of 5 or 10 years it should have been updated, perhaps more than once,

especially in quickly changing and newly emerging disciplines that are of key importance for the development of the economy and society.

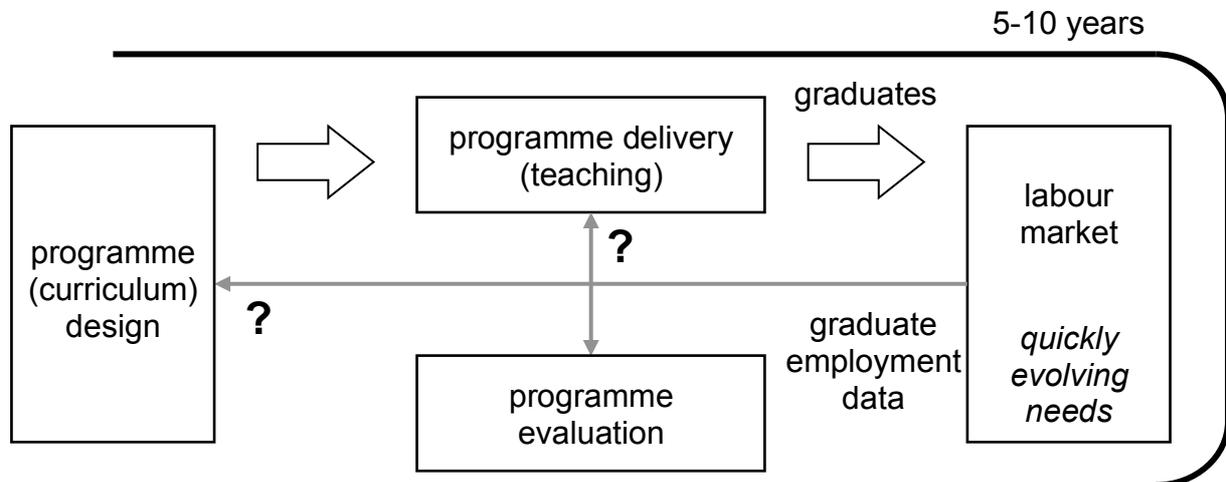


Fig. 1: Using graduate employment data for design and delivery of degree programmes

In other words, it can be stated that graduate employment data

- might be useful as an indicator of the quality of a programme designed and taught in the past (5-10 years ago),
- are questionable as guidelines for updating programmes, and even more questionable for the design and delivery of new programmes, especially in emerging disciplines.

This statement does not mean that graduate employment data are useless. Higher education institutions do not change quickly. Therefore, if the graduate employment outcomes indicate that the graduates who completed a particular programme at some HEI are successful in the labour market, it is quite likely that others whose study this programme (though modified in the meantime) will also succeed in finding a good job – the quality of teaching does not change overnight.

It should however be noted that employability and success in professional careers are not the only indicators of educational quality; personal development for the benefit of a democratic society and personal satisfaction (success in life) are equally important. Therefore, besides “simple” graduate employment data, the outcomes of surveys on the personal satisfaction of graduates and their activities outside the workplace should also be used when evaluating the quality of education offered by a particular HEI.

This is illustrated in Fig. 2 which shows that the process of updating a degree programme (curriculum) or designing a new programme should, to a large

extent, rely on “educated prediction” of the needs of society, including, but not limited to, the needs of the labour market, rather than on the graduate employment data². This is of particular importance for those areas where the needs of the labour market change very quickly as a result of advances in technology or other innovations³.

The skills and growth projections are clearly an essential part in the “educated prediction” of society’s needs. In this context, it is worth mentioning the “EU Skills Panorama” - one of the main actions of the Europe 2020 flagship initiative “An Agenda for new skills and jobs” (European Commission 2010). This on-line tool containing updated forecasting of skills supply and labour market needs up to 2020 will be set up by the Commission by 2012 to improve transparency for jobseekers, workers, companies and public institutions.

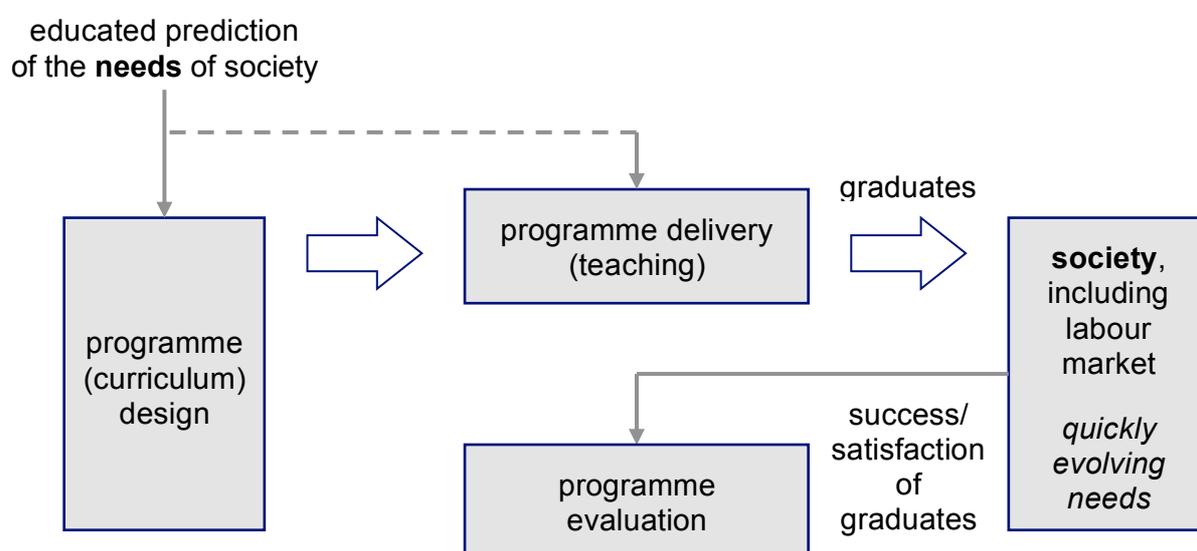


Fig. 2: Using educated prediction of the needs of society for the design and delivery of degree programmes

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- 2 The inadequacy of relying on employments statistics in the process of modernising curricula was discussed in the context of engineering education at the World Congress of Engineering Education in 1998 (Krasniewski and Woznicki 1998).
 - 3 An example is telecommunications where the successive introduction of new generations of technologies in mobile telephony puts continuously changing requirements on the competences of those who work in this area.

Enabling more effective and personalised learning experiences, teaching and research methods

In the section on “Improving the quality and relevance of higher education” the third recommendation (in “key policy issues”) for Member States and higher education institutions says:

Better exploit the potential of ICTs to enable more effective and personalised learning experiences, teaching and research methods (e.g. eLearning and blended learning) and increase the use of virtual learning platforms.

This recommendation should in principle be supported. However, in reading it someone could infer that ICTs (and other technologies) are the main, if not the only means of teaching to make learning more effective and personalised. Clearly, using ICTs; including virtual learning platforms, e-Learning and blended learning; is essential in modern HE, but their impact on the quality of teaching and learning should not be overemphasized. It is also quite surprising that, when talking about “a strong need for flexible, innovative learning approaches and delivery methods: to improve quality and relevance while expanding student numbers, to widen participation to diverse groups of learners, and to combat drop-out”, only exploiting the transformational benefits of ICTs and other new technologies is mentioned.

There are many other ways to improve the quality of higher education. In particular, substantial improvement in learning outcomes can be achieved through innovative teaching methods and techniques, such as problem/project based learning (PBL), and learning environments that allow for interaction and “learning by doing”⁴.

Quality can also be improved through innovative approaches to curriculum design. An example would be a new structure for engineering curriculums, illustrated in Fig. 3. An engineering curriculum traditionally starts with courses in maths and science, seen as a foundation for basic and more specialised engineering courses that, in turn, are seen as a basis and necessary prerequisite for a final-year capstone project. An alternative approach, taken by some leading engineering schools⁵, would be to start the education process with engineering courses, rather than maths and science ones. In particular, a group project combining multiple engineering disciplines (an example would be designing a simple robot) can be offered as a significant part of the first year curriculum. In the course of such projects students are taught only very basic theoretical concepts,

4 Innovation in higher education through more interactive learning environments is mentioned in the EC Communication, but, quite surprisingly, in the section on the knowledge triangle (linking HE, research and business).

5 This can be traced back to the early 1990s (Director et al. 1995).

sufficient to allow them to do the practical part. An advantage of this kind of approach lies in that an early hands-on experience stimulates an interest in engineering and at the same time demonstrates that the maths, science and principles of engineering, taught in subsequent years, are necessary and useful for solving complex practical problems. As a result, a reduction in the number of resignations and in the dropout ratio can be observed.

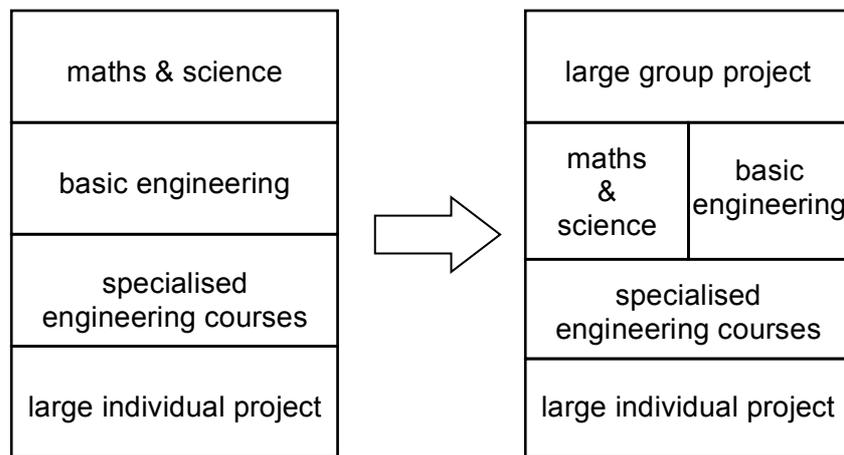


Fig. 3: Reengineering an engineering curriculum

In summary, the positive potential for improvements in higher education lies not only in technology, but also in pedagogy.

Investing in the continuous professional development of academic staff and rewarding excellence in teaching

Another EC recommendation says:

Introduce incentives for higher education institutions to invest in continuous professional development for their staff, recruit sufficient staff to develop emerging disciplines and reward excellence in teaching.

This recommendation is essential. The comments that follow touch on some aspects of its implementation and of its feasibility.

Continuous professional development for the academic staff of universities is clearly necessary. However, this professional development is understood differently by different members of the academic community. For some of them, continuous tracking of recent developments in the specific subject area of their expertise, necessary for successful research, is seen as a necessary and sufficient condition for continuous professional development.

However, such a view, quite popular in many institutions, should not be accepted. Today, rapid changes take place not only in specific subject areas, but

also in teaching. To keep updated and to provide a high quality of educational services, members of the academic staff should enhance their competences in areas like:

- developments in the European Higher Education Area and reforms to national higher education systems (European Standards and Guidelines for quality assurance, qualifications frameworks, recognition of qualifications and learning credits in line with the Lisbon Recognition Convention, etc.) – this is of particular importance for those who decide on teaching and learning policies at the institutional level,
- new teaching methods and techniques (problem/project based learning, exploiting ICTs, etc.).

There are multiple opportunities for continuous professional development in such areas – continuous professional development can be accomplished through formal learning, including regular degree programmes⁶, but also through non-formal and informal learning. The problem is that many HEIs are quite hesitant to invest in such activities and the extra competences gained by academic staff are not sufficiently recognised and rewarded.

The issue of rewarding excellence in teaching, emphasized in the EC Communication, has been the subject of debate for many years. This does not mean, however, that any substantial progress has been made. Just as 10 or 20 years ago, teaching excellence is also not rewarded adequately today. There are no real incentives to strive for excellence in teaching at any level of the higher education system:

- at the level of individuals (members of academic staff), a successful academic career (and also personal income) depends primarily on achievements in research, and not in teaching,
- at the level of institutions, the position of an HEI in national and international mostly research-oriented rankings, its prestige, its budget - all depend mostly on achievements in research, and not in teaching,
- at the level of national higher education systems, the quality of a national system as a whole is assessed – by politicians, the media, and to a large extent by the general public – on the position of national HEIs in research-oriented global rankings.

Another fundamental problem with adequately rewarding teaching quality lies in the fact that all rankings, ratings and assessments, even if they try to take teaching into account, are – for the sake of transparency – based on measurable quan-

6 An example of a degree programme of that type is Master in Problem Based Learning in Engineering and Science - a 2.5-year fully online and highly interactive e-Learning programme offered by Aalborg University; <http://www.mpbl.aau.dk>.

tities. But the quality of teaching is difficult to measure. Quite frequently, what is claimed to be a measure of teaching quality is only a distant proxy of it. For example, in many international rankings, the only “measure” for teaching quality is the staff/student ratio (Rauhvargers 2011).

Some of the problems can, at least to some extent, be overcome by the emerging initiatives to develop new transparency tools aimed at radically improving the transparency of the higher education sector. These initiatives, such as the development of the U-Multirank tool (European Commission 2011b, chapter 1.1) would allow users to create individualised multidimensional rankings, taking into account the various missions of higher education institutions, including teaching and learning. It remains to be seen how such initiatives, going beyond the research focus found in most of today’s comparisons and rankings, would affect those policies at the institutional and national level that praise the quality of teaching in declarations, but virtually ignore it in practice.

Furthermore, even excellent transparency tools will not lead to immediate improvements in the quality of teaching. As was clearly said in the recent position statement of the European University Association (EUA 2011),

the emphasis on transparency tools, often used as a synonym for rankings, cannot replace the important and necessary debate on the improvement of quality in European higher education. ... Rankings and classifications, by putting the performance of institutions in relation to criteria, contribute to the accountability function by informing the public, but they do not contribute directly to quality enhancement, the second function of quality assurance. Thus, rankings and classification tools should not be seen as quality assurance tools.

What is missing?

As stated earlier, in its Communication on the modernisation of Europe's higher education systems the Commission has made several good points on the quality of teaching in general and on the ways in which to improve it in particular. It appears, however, that some key issues relating to the enhancement of quality, seen as very important in the European Higher Education Area, have not been addressed adequately in the text of the document.

In particular, in the EC Communication nothing is said about student-centred learning – an idea which, if implemented correctly, can stimulate and enhance the motivation of students in learning, and thereby improve the learning outcomes and the overall quality of the education process. It cannot be overlooked that, regardless of the efforts taken by HEIs, learning outcomes are attributed to students and their attitude towards learning is a key factor that determines its effectiveness and its quality.

An essential part of the concept of student-centred learning is a shift of focus to learning outcomes. Learning outcomes, including transferable skills, are mentioned in the EC Communication in the context of lifelong learning. Clearly, they are a key concept for the development of national qualification frameworks and a successful implementation of the idea of lifelong learning, but a shift towards learning outcomes in the process of the reorientation of higher education from teacher-centred learning to student-centred learning has a profound impact on the efficiency of teaching, on the competences of graduates, and hence on quality.

Even more surprising is that in the EC Communication there is no mention of the European Standards and Guidelines for Quality Assurance – ESG (ENQA 2005). This document, prepared by the so-called “E4 stakeholder group” (ENQA, ESU, EUA and EURASHE) and adopted by the ministers responsible for higher education at the Bologna Summit in Bergen in 2005, is fundamental as a guide on how to implement quality assurance at the institutional, national and European levels. In particular, ESG, serving as a basis for enhanced exchange and cooperation among Europe’s quality assurance agencies, have been used as criteria for inclusion in the European Register of Quality Assurance Agencies (EQAR), established in 2008. Again, it is somewhat surprising that EQAR is mentioned in the EC Communication only in the context of mobility, as a tool that “would facilitate mutual trust, academic recognition and mobility”, and not in the context of quality.

The ESG have proved to be one of the major achievements of the Bologna Process. They have both direct and indirect impacts on the various aspects of quality assurance in the European Higher Education Area. In particular, they are a primary means for the development of a European dimension in quality assurance. This is essential not only for the European Higher Education Area, but also for the global position of European institutions in global higher education. Therefore, a continued effort is needed to promote ESG, but also refine them.

In 2009 the Commission published a “Report on progress in quality assurance in higher education” in which it recommends revisiting the ESG (European Commission 2009). How to revise the ESG in order to improve their clarity, applicability and usefulness is currently being discussed. The work is, however, to be carried out under the assumption that the current principles would be maintained which indicates that the basic ideas underlying the development of ESG are still valid.

3. System level preconditions and incentives for quality

It is commonly recognised that the primary responsibility for quality in teaching lies with HEIs. This was clearly stated in the Communiqué signed by the ministers at the Berlin Summit in 2003 which says: “consistent with the principle of institutional autonomy, the primary responsibility for quality assurance in higher education lies with each institution itself” (Bologna Process 2003).

Although a quality culture is being developed within HEIs, this process is strongly affected by policies at the system (national) level. The state can support HEIs in the development of a quality culture through appropriate legal regulations and various incentives.

High quality cannot be achieved without adequate funding. This is clearly stated in the EC Communication, where it is said that “the scale of funding required to sustain and expand high-quality higher education systems is likely to necessitate additional sources of funding, be they public or private”. The issue of funding higher education, especially in times of a global economic crisis – although of crucial importance in the context of quality – is, however, a topic in itself and therefore beyond the scope of this chapter.

There are, however, other factors that affect the quality of higher education, and in particular the quality of teaching. One such factor is institutional autonomy. The above mentioned responsibility of each HEI for quality and quality assurance is “consistent with the principle of institutional autonomy” (Bologna Process 2003). Increased autonomy allows HEIs to fully exploit their potential, leading to better performance. There is evidence that institutional autonomy and robust internal quality assurance processes are mutually reinforcing - the greater the institutional autonomy, the more robust are the internal quality assurance processes introduced in HEIs (Sursock and Smidt 2010).

The level of institutional autonomy is quite different in different countries. This is discussed in detail in a report recently published by the European University Association (Estermann et al. 2011). The report, resulting from a two-year project, supported by the European Commission’s Lifelong Learning Programme and carried out in conjunction with EUA’s project partners (German Rectors’ Conference, Universities of Denmark, Conference of Rectors of Academic Schools in Poland and University of Jyväskylä, Finland), compares and benchmarks levels of university autonomy in 26 European countries. The study includes four scorecards which rank and rate higher education systems in four areas of autonomy, including academic autonomy and staffing autonomy – both of which affect internal quality assurance procedures.

Another system-level factor that may significantly affect the quality of teaching is the development and implementation of a national qualifications

framework linked to the European Qualifications Framework. The need for a qualifications framework is mentioned in the EC Communication in the context of the recognition of credits gained abroad as well as the recognition of learning and experience gained outside formal education and training. However, with regard to quality, the benefits come primarily from that fact the qualifications framework redirects the whole education process towards learning outcomes. And, as stated earlier, a move towards learning outcomes is key to the successful implementation of the idea of student-centred learning, which in turn has a profound impact on the efficiency of teaching, the competences of graduates and therefore also on quality.

In the next section we present the latest changes in the system of higher education in Poland intended to support HEIs in enhancing the quality of teaching and learning, in particular in the context of the relevance of higher education to the needs of the labour market.

4. Case study - Poland

The system of higher education in Poland is facing a number of challenges related, *inter alia*, to its dynamic expansion – the number of students has increased from 400 000 in 1990 to almost 2 000 000 today, and a participation rate of more than 50% has been achieved. The situation is nicely characterised in the OECD report on higher education in Poland (OECD 2007): “Polish tertiary education has changed dramatically in the short period since the fall of communism. In many important respects Poland has joined the ranks of countries with a modern, responsive and creative system of tertiary education. ... However, ... the process of modernisation is incomplete, and some of the most challenging requirements of such a system are not yet in place.”

Some of the most visible weaknesses of the Polish higher education system are clearly pointed out in the above mentioned OECD analysis and in other studies. The Bologna Process stocktaking reports, including the latest one, published in April 2009, ahead of the ministerial Bologna Summit in Leuven (Rauhvargers 2009), indicate that major challenges for Poland are in the area of lifelong learning, including the recognition of prior learning, and the development and implementation of a national qualifications framework.

Following a nation-wide discussion, a modernisation agenda for Polish higher education, addressing those challenges, was proposed in 2009. This initiated a process that resulted in changes in the *Law on Higher Education*, adopted by the Parliament in March 2011. These changes, along with regulations in lower level legal acts issued by the Minister as follow-ups to the decisions of Par-

liament, form a legal basis for the implementation of necessary and desirable reforms.

The changes in the law that came into effect on 1 October 2011, with some regulations coming into force in 2012, affect various areas of the higher education system. However, as commonly perceived by the Polish academic community, the most significant and far-reaching reforms are associated with the general reorientation of the educational process towards learning outcomes and with a formal introduction of the National Qualifications Framework for Higher Education.

Learning outcomes and the National Qualifications Framework for Higher Education

A large number of regulations in the new *Law on Higher Education* that relate to study programmes, curricula, the organisation of teaching, internal quality assurance systems and accreditation procedures are formulated using the concept of learning outcomes and focus on proving that the intended learning outcomes are relevant and have actually been obtained by the graduates. In particular, learning outcomes are the key term used when defining the qualifications framework.

The regulations on the National Qualifications Framework for Higher Education, included in the new law, are based on a proposal made by a group of national experts who have been developing the Framework since 2006⁷. This group has designed the Framework so as to make it compliant with:

- the Qualifications Framework for the European Higher Education Area – the so-called Bologna Qualifications Framework (Bologna WG on Qualifications Frameworks 2005),
- the Polish Qualifications Framework for Lifelong Learning⁸ that, in turn, is compliant with the European Qualifications Framework for lifelong learning, defined in the Recommendation of the European Parliament and of the Council (European Union 2008).

7 The same concepts were also presented in the document “Higher Education Strategy: 2010-2020”, published in 2009 as an outcome of an academic community project, coordinated by the *Conference of Rectors of Academic Schools in Poland, the Conference of Rectors of Vocational HEIs in Poland* and the *Polish Rectors’ Foundation*.

8 The Polish Qualifications Framework for Lifelong Learning is still under development, but the assumptions underlying its development guarantee that no essential problems with the mutual compatibility of the two Polish NQFs (for higher education and for lifelong learning) will occur.

The introduction of the National Qualifications Framework for Higher Education, hereafter referred to as NQF, provides the Polish higher education system with a number of new features, some of them being rather unique. Its key characteristics can be summarised as follows:

- For all study programmes offered by HEIs, leading to a degree, certificate etc. (including doctoral programmes and non-degree postgraduate programmes) the expected learning outcomes must be defined and made known to the public.
- A two-level hierarchy of learning outcomes is introduced. At the higher level, the “generic” learning outcomes corresponding to the basic qualifications – Bachelor degree and Master’s degree – are defined. At the lower level, learning outcomes that characterise Bachelor and Master’s degrees in 8 wide subject areas are defined so as to comply with the higher-level generic descriptors. The selection of these 8 subject areas – the humanities; social sciences; exact sciences; life sciences; agricultural sciences; engineering and technology; medical and health sciences; and arts – is based on the OECD/EUROSTAT/UNESCO science and technology classification. Each degree programme offered by a higher education institution must comply with the learning outcomes for some area or – in case of interdisciplinary programmes that span over two or more areas – with appropriate combinations of learning outcomes from the relevant areas.
- For each first-cycle and second-cycle degree programme offered by a higher education institution, a profile must be defined – the programme must be either academically oriented or practically oriented⁹. Therefore, the above mentioned learning outcome descriptors that characterise Bachelor and Master’s degrees in 8 subject areas are defined for both academically oriented and practically oriented qualifications. The programme profiles (degree profiles) are not related to the types of HEIs¹⁰ and the learning outcomes are defined so that both profiles are relevant to the labour market. There are no dead-ends in learning paths, i.e. an easy progression to an academically oriented second-cycle programme upon completion of a practically oriented first-cycle programme is possible.

9 This regulation was introduced, *inter alia*, in response to the observation stated in the OECD report on higher education in Poland (OECD 2007) which says that Poland has no clear concept or strategy for the development of vocationally oriented higher education.

10 Polish HEIs are classified by law into academic HEIs, i.e. those institutions that are eligible to award doctoral degrees, and vocational HEIs, i.e. those institutions that are not eligible to award doctoral degrees.

The introduction of the NQF, along with some other new regulations, has significantly increased the autonomy of HEIs. Before the new regulations were introduced, an institution could in principle offer a degree programme only in one of 118 fields of study (predetermined by the Ministry), and for each of these fields, the curriculum was partially defined at the national level. With the new regulations, these constraints have been lifted. The institution is free to decide on the name, on the learning outcomes and on the content of the programmes, as long as the learning outcomes comply with the general subject area requirements.

Strengthening links with the labour market

The new law includes many regulations intended to strengthen the links of HEIs with the labour market. In particular, HEIs are required:

- to engage external stakeholders, including employers, in the process of designing curricula;
 - to perform an analysis of the needs of the labour market as a prerequisite for the development of a new degree programme;
 - to track graduates' careers (and use the outcomes for quality enhancement);
 - to clearly define and verify learning outcomes for internships and placements.
- In addition, for practically oriented programmes, HEIs are required:
- to engage practitioners in teaching;
 - to offer a learning environment that provides the students with opportunities to gain work-related experience.

Quality assurance

The new regulations regarding quality assurance are to a large extent a natural consequence of the shift towards learning outcomes and the development and implementation of the NQF. They obviously comply with European Standards and Guidelines (ENQA 2005).

The key regulation is that an institution that runs a degree programme must have an internal quality assurance system which includes mechanisms oriented towards the improvement of that programme. Such a system should focus on proving that the intended learning outcomes defined for the programme are relevant and have actually been achieved by all the graduates.

An external quality assurance system is based on a programme or institutional accreditation done by the Polish Accreditation Committee. The evaluation of a programme or institution, being a key part of the accreditation process, should – according to the new law – focus on the effectiveness of the internal

quality assurance system and, in particular, on the mechanisms used for verifying whether or not the learning outcomes defined for the programme and its components (individual modules) are being achieved by the students.

As a means of promoting the development of a quality culture in HEIs, it is stated in the new law that a part of the higher education budget for 2012 and the following years will be used to support the quality oriented initiatives of institutions. In particular, the Ministry will award – on a competitive basis – grants to faculties that propose and successfully introduce innovations in NQF implementation and in the enhancement of their internal quality assurance systems, so as to adjust them to the new, learning outcomes oriented approach to teaching.

Involvement of stakeholders

In parallel with the last phase of NQF design and the development of new regulations, an unprecedented effort took place to inform the academic community about the forthcoming changes, so as to receive much needed feedback for the refinement of the draft regulations and to prepare HEIs for the implementation of the new law. The following actions were taken:

- A handbook was written which describes the principles of the NQF and presents the learning outcome based approach to the design of curricula and individual modules. The handbook is available in electronic form from the Ministry website; in addition 6,000 printed copies were distributed to HEIs.
- A comprehensive information and training campaign was organised by the Ministry and related agencies. More than 100 conferences, seminars, workshops and other events took place in almost all academic centres around the country in a period of less than a year (from September 2010 to June 2011), with an estimated participation of more than 10 000 members of academic and administration staff from HEIs. One of the major objectives of these meetings was to explain why the proposed reforms are necessary and how institutions and students will benefit from them.

One of the most essential outcomes of this campaign has been a change in the attitudes of academic staff towards the NQF. A shift from a massive and clearly demonstrable resistance some two years ago, resulting mainly from a lack of knowledge and understanding of the qualifications framework concept, to at least a partial acceptance of the forthcoming reforms has been observed.

These information and training seminars will continue in 2012. Special training sessions offered to members and experts of the Polish Accreditation Committee, which started in late 2011, will also continue.

There is still a long way to go, but the encouraging results obtained so far make it likely that the development and implementation of the NQF will have a positive impact on the quality of higher education in Poland.

5. Conclusion

Ensuring the high quality of teaching and learning is central to the competitiveness of European higher education. Therefore, improving quality is at the heart of the Bologna Process reforms that are taking place at the European, national and institutional levels. It is also not surprising that its significance for the future of higher education has been emphasized in the latest Communication of the European Commission on the modernisation of Europe's higher education systems, where several recommendations relating to the quality of education have been formulated.

Recognising a number of good points made by the Commission on the quality of teaching, it appears, nevertheless, that some issues essential to the European Higher Education Area are missing or are not addressed adequately in the text of the EC Communication. In particular:

- nothing is said about student-centred learning (a reorientation of the education process from being teacher-centred to being student-centred);
- the issue of learning outcomes, central to quality, is only mentioned in the context of lifelong learning;
- there is no mention of the European Standards and Guidelines for Quality Assurance – a fundamental document underlying the recent developments in quality assurance within the European Higher Education Area – either at the institutional, national or European level.

The primary responsibility for the development of a quality culture lies with HEIs. This process is, however, strongly affected by policies at the system (national) level. Clearly, adequate funding is crucial. But there are also other measures, easier to implement in times of financial crisis, which can contribute to an enhancement of the quality of higher education, in particular of the quality of teaching. One such measure is to provide HEIs with a high level of autonomy, thereby allowing them to fully exploit their potential. Another system-level provision that may positively affect the quality of teaching is the development and implementation of a national qualifications framework supporting the successful implementation of the concept of student-centred learning.

The examples presented of the reforms taking place in Polish higher education show how such system level mechanisms, that support the development of a quality culture at HEIs and the reorientation of education to make it more relevant to the needs of the labour market, can be implemented.

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Chapter 8

The Social Dimensions of Modernizing Higher Education. A Czech-Dutch Comparative Study on Student Finance and Equity¹

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1. Introduction

The Czech Republic is facing significant reforms in student funding consisting of the implementation of tuition fees and new systems of student financial aid. In searching for efficient systems of student funding that may serve as models for the Czech reforms, the Netherlands is one of the most interesting candidates. The aim of the chapter, based on data from the EUROSTUDENT IV project (2009) and EU-SILC survey data (2005), is to contribute to a better understanding of the impact of financial conditions on higher education participation among students from different socio-economic backgrounds by comparing the Netherlands with the Czech Republic, two countries with important similarities as well as differences in their education systems, student funding and participation patterns in higher education. We posed the question whether student funding instruments have an impact on the likelihood of attending tertiary education for students from different socio-economic origins. The presumed role of tuition fees and student support in the decisions of students to attend college has been addressed by a wealth of both sociological and economic studies (e.g. Dynarsky and Clayton, 2006; Kane, 2003; Bound and Turner, 2006; Vossensteyn, 2005). From a *sociological* perspective, student choice is mainly driven by family background characteristics and peer opinions, whereas an *economic* perspective puts much greater emphasis on the relative price of education (Hossler *et al.*, 1999). Regardless of such perspectives and research results, public policies and debates arguably assume an important *ex ante* role for financial issues in shaping enrolment decisions. Our study argues that the impact of funding instruments might be particularly pronounced for lower socio-economic background students, not only through the absolute level of expected student support but partic-

1 The work on this chapter has been made possible through the research project “Higher Education Students’ Social Profiles” supported by the Internal Grant System of the University of Finance and Administration in Prague (project IGA 7741). The participation of the Czech Republic in the Eurostudent IV project has been made possible through the project “Reform of tertiary education” financed from the European Social Fund, programme “Education for competitiveness”.

ularly in the way it is delivered and conditioned in terms of flexibility and accessibility.

2. Access, student choice and cost-sharing: a theoretical perspective

Access to higher education can be dependent on a multitude of factors at a macro level as well as a micro level. At a macro level one can think of:

- demographic developments, e.g. the number of people in the relevant age group
- the relative number of people qualifying for higher education
- macro-economic developments, like the demand for higher educated employees
- the budget and number of study places made available for higher education

This means that the demand for and access to higher education can be influenced by a number of factors. In addition, whether students who qualify for higher education will actually attend higher education is subject to another set of variables, namely student choice variables. These are variables that impact on the individual decisions whether or not to enrol in higher education and are widely studied in the student choice literature. Student choice models are traditionally divided into status-attainment or sociological models, and economic models (Hossler *et al.*, 1999).

The status attainment or sociological models are rooted in sociology and consider (prospective) students as '*homo sociologicus*'. Individuals are assumed to act according to what they think is expected of them. As such they associate themselves with the norms, purposes, duties, procedures, methods, practices and techniques of their constituent group (March and Olsen, 1995). So these models focus on the socialisation processes that shape the possibilities and ambitions of students, including family conditions, peer interactions, and school environments (Hossler *et al.*, 1999). The following variables are said to be dominant in explaining student choice: learning performance, aspirations, motivation, family background characteristics (parental encouragement, parental income, education and occupation), gender, ethnicity, and the influence of peers (e.g. teachers, friends).

The economic models focus more on the rationality of individual decision-making, regarding individuals – students – as '*homo economicus*' with clear goals and transparent and consistent preferences. Rational decision-makers take action if and only if the marginal benefit of the action exceeds the marginal costs (Mankiw, 2004). Therefore economic college choice models argue that students

choose to attend higher education and select particular institutions or programmes if and only if the perceived benefits of that choice outweigh the perceived benefits of other alternatives (opportunity costs). Economic college choice models focus on how individuals with certain characteristics (e.g. gender, ability and parental socio-economic status) differ in the extent to which financial variables are deemed important in college choice. Key variables here are: tuition fees, other study costs (e.g. books and equipment), living expenses, foregone earnings (opportunity costs), financial support (grants / scholarships, loans), expected future earnings and prestige.

More recent models integrate both perspectives into a more comprehensive model of student choice with a multitude of factors that can have an impact on individual choices on whether or not to enrol, what institution and study programme to choose, and whether to stay enrolled (persist) and graduate. These are the *combined models*.

Since the 1990s, the impact of economic factors has gained importance in student choice research as a result of the growing role of private contributions to the costs of higher education. Not only in the U.S. and Europe, but also on a more global scale, this tendency, called cost-sharing, shows that the costs of higher education are being increasingly borne by students and their parents rather than by governments and tax payers (Johnstone, 2008). Cost sharing can take various forms, such as the introduction or increase of tuition fees or other user charges, a reduction or abolition of grants, an increasing emphasis on student loans, as well as on parental contributions or the students' own resources, e.g. from job earnings. This shift in funding higher education has occurred in most developed economies, including the Netherlands and the Czech Republic.

The reasons for cost-sharing are threefold: the often high private benefits of higher education, limited public budgets, and improved efficiency (Johnstone, 2008). A number of studies have documented that the private benefits of higher education in the form of increased lifetime income, higher prestige, labour market opportunities and lifestyle options are often considerable (Blöndal *et al.*, 2002; Card, 1999; Machin and McNally, 2007; Munich, Švejnar and Terrell, 2005; Švejnar, 1999). This private benefit argument also contains an important equity dimension, as a disproportionate number of higher education participants come from higher socio-economic status families, which implies that public subsidies for higher education might to a large extent benefit relatively well-off families, particularly in societies with relatively flat tax systems.

The second rationale for cost-sharing relates to the sheer need for additional resources in fast growing higher education systems, whereas public budgets in many developed economies face other important investment areas like health or pension systems. In transition economies this strain has become even more

prominent as the modernization of the economic infrastructure requires prime attention. Finally, cost-sharing is said to provide efficiency gains as (higher) private contributions to the costs of education make individuals more conscious about their choices. Both in the Czech Republic and the Netherlands this argument is particularly significant due to perceived long average duration of studies and high dropout rates.²

The notion of cost-sharing is of particular interest for studying issues of access, as it introduces the dynamics of policies and perceptions into the theoretical and analytical frameworks. Cost-sharing implies a change in policy and practice in relation to tuition fees and student support which create more instability and uncertainty among (prospective) students about the costs of attending higher education. In addition, recent student choice literature recognises the fact that particularly changes in student funding rather than absolute levels of fees, grants and loans may have an impact on students' perceptions of their financial positions (Hoxby, 2004; Vossensteyn, 2005; Johnstone, 2008). The extent and nature of cost-sharing developments in the Czech Republic and the Netherlands will be an important explanatory variable in the present comparative study.

3. Cost-sharing, student support policies and higher education participation

In recent years, developed countries as well as transition countries aimed to increase their participation rates in tertiary education while the respective budgets available for higher education were under pressure. Policymakers were therefore stymied over the question of how to attract sufficient funds into higher education, including student support. In this section, we will show some international facts regarding the relationships between participation, cost-sharing and student support policies.

Funding shortfalls can generally be alleviated either by lowering costs (e.g., increasing student-faculty ratios, merging institutions, etc.) or by supplementing public revenues with private revenues (Johnstone, 2008). The first class of measures has already been embodied in the reform agendas of many governments. Therefore greater attention nowadays is paid to the latter set of measures, usually identified with tuition fees and student financial aid schemes. Tuition fees are becoming increasingly common, even among European higher educa-

2 In the Czech Republic, the survival rate is quite low (65% in 2004), whereas the Netherlands ranked among the top for OECD countries with a 76% survival rate (Education at a Glance 2007, Table A3.6). This hides the fact that many students drop out of an initial programme and later continue in studies that better suit their interests and capacities.

tion systems that were traditionally tuition free. The UK, which implemented its first-ever tuition fee in 1998, was followed by Austria in 2001 (tuition fees were in effect there only between 2001 and 2008 when the tuition fees were abolished again, while their re-introduction is currently being discussed again), while Germany allowed their states (*Länder*) the possibility of introducing fees in 2005. In addition to the UK, Austria and Germany, there are other European countries where tuition fees are a core element of tertiary education finance, such as the Netherlands with relatively high tuition fees (€1565 in 2008 and €1713 in 2011). The Czech Republic has no tuition at public universities. However, the current Czech government coalition announced the plan to introduce during its term (2010-2014) tuition fees and the new system of student financial aid.

To visualise the notion of cost-sharing, Figure 1 depicts the share of household expenditure spent on tertiary education on the horizontal axis and financial aid to students on the vertical axis. The figure shows some interesting results. Financing tertiary education in the Czech Republic is characterized by a very small share of private funds and a similarly negligible amount of student financial aid. By contrast, the Netherlands and Scandinavian countries provide highest student financial aid in Europe as a share of public funds. If we assume student support to be a major mechanism to stimulate access to higher education, this introductory figure indicates differences in the priority given to access to tertiary education.

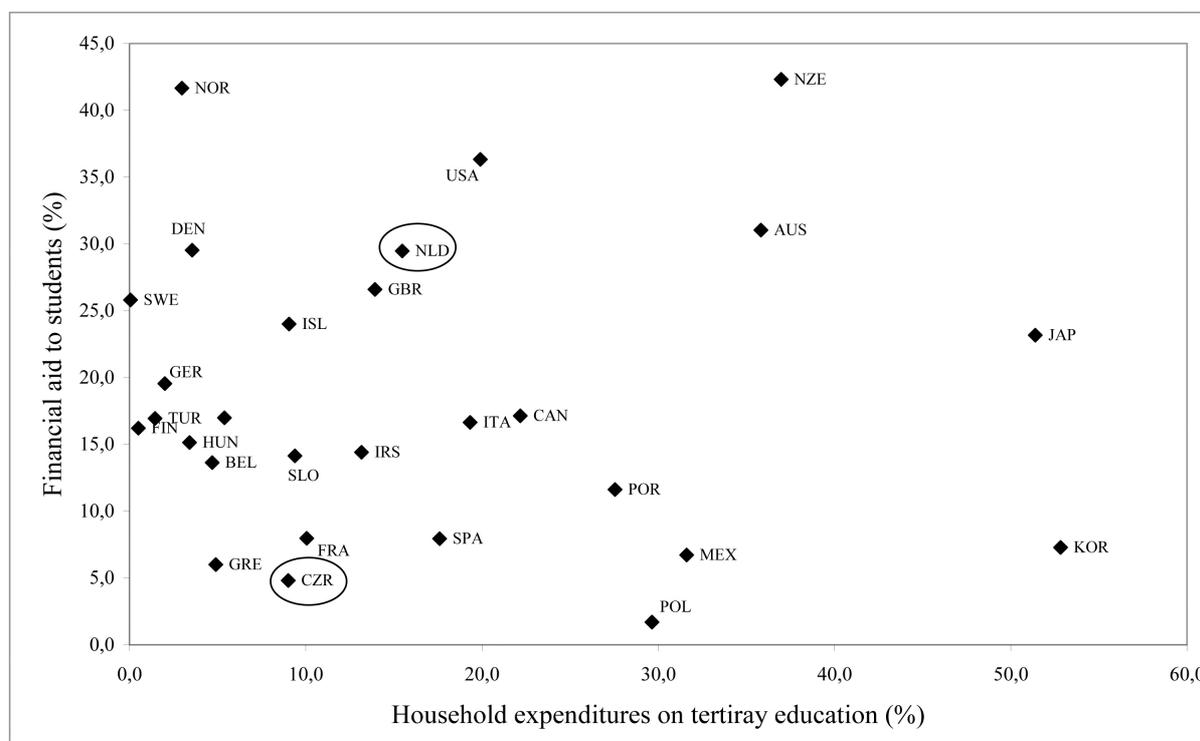
Empirical evidence on the relationships between student funding (incl. cost-sharing) and participation generally leads to the conclusion that higher private contributions in general do not negatively impact access to tertiary education. A prominent example can be found in the UK where the introduction of tuition fees and the replacement of student grants with loans in the 1990s did not have a significant effect on application and participation rates (UCAS, 2000; Universities UK, 2007). On the contrary, the enrolment rate of ethnic minorities and women rose slightly. Even though students from lower socio-economic backgrounds indicate they are more adverse to debt (Callendar, 2006), their participation rates did not decline after the policy shift from grants to tuition fees and loans (UK Department for Education and Employment, 2001).

A similar picture holds for Australia where tuition fees were re-introduced in 1989 (Vossensteyn and Canton, 2001). Though some voices indicated that without tuition fees application rates would have been higher (Andrews, 1997), most other research revealed the opposite and even showed stronger results as applications and participation in Australia went up dramatically without a negative change in the socio-economic composition of the student body, both after

1989 as well as after major increases and differentiation to tuition tariffs in 1997 (Chapman, 1997 and 2006).

New Zealand's 1992 introduction of tuition and a loan schemes coincided with an increase in participation rates for all groups (Barr, 2004), including those of Maori and Pacific Island minorities. While the study by the New Zealand Ministry of Education (1999) remained rather conservative on the matter, it still concluded that the 1992 policy shift had no observable effect on participation growth.

Figure 1: Financial aid to students as a percentage of total public expenditure on tertiary education and household expenditure on tertiary education (tuition fees) as a percentage of total expenditure on tertiary education in OECD countries (2007)



Source: OECD, *Education at a Glance 2010* (Tables B3.1 and B5.2).

Note: Household expenditures on tertiary education in the Czech Republic (around 9%) is mainly due to tuition fees charged at private colleges, whose students currently represent about 10% all students enrolled in tertiary education.

The OECD's tertiary education review (Blöndal *et al.* 2002) covering a number of countries' experiences claims that a simultaneous increase in tuition fees accompanied by more student loans might promote equality while keeping the efficiency of the system intact. They conclude that easier access to student loans may be important for improving opportunities for all individuals to develop their full potential, particularly for those from disadvantaged backgrounds.

The aim of this chapter is to provide complementary empirical evidence on student support, cost-sharing and participation in the context of two countries with relatively similar secondary education systems but different systems of tertiary education funding: the Czech Republic and the Netherlands. Do funding differences have an impact on participation and can we detect differences for students from various socio-economic backgrounds?

4. Czech Republic and the Netherlands: two interesting cases

To analyse the relationships between access and student funding, we compared the cases of two countries with important similarities and differences: the Czech Republic and the Netherlands. As far as the justification for our selection is concerned, the two countries show similar long-term historical development with democratic traditions rooted in religious movements in the 16th century. Despite different paths of economic development, their cultural and social developments have shared much in common. Before WWII, both nations belonged to highly industrialized and culturally developed countries. After the war, the former Czechoslovakia started a period of “building socialism,” while Dutch society followed the pattern of other advanced European industrial nations with market economies. It is important to know that in the former Czechoslovakia social and educational reforms explicitly followed the communist ideology of “mitigating class inequality” including the redistribution of educational opportunities among the social classes (e.g. by introducing the so-called “quota system”).

Secondly, Czech – Dutch comparative studies on educational mobility and educational attainment published in the early 1990s (Matějů, 1990; Matějů and Peschar, 1990; Matějů, 1993) have shown different patterns in the development of educational inequalities in the two countries. Surprisingly, these data revealed higher social inequality in access to higher education in the Czech Republic than in the Netherlands. Educational mobility analyses showed, unexpectedly, higher levels of educational inequality in socialist countries, including the former Czechoslovakia, and showed higher equality in the Netherlands (Boguszak, Matějů and Peschar 1990). Furthermore, Matějů and Peschar (1990) concluded that, though the direct effect of socio-economic status on educational attainment was weaker in Czechoslovakia than in the Netherlands, the role of the economic resources of families on educational attainment turned out to be stronger in Czechoslovakia (Matějů and Peschar, 1990).

Thirdly, comparative studies on developments in educational inequality suggest that the Netherlands belongs to a very small cluster of countries in which inequality decreased over the last few decades, while in most countries,

including the Czech Republic, there has either been stability or an increase in inequality. Shavit and Blossfeld (1993:15) conclude:

In one country, in particular (the Netherlands), there is a decline in the effect of both father's education and father's occupation across cohorts. In six of the societies examined there has not been any significant change in the effects of either indicator of social origins on educational attainment (Germany, England and Wales, Switzerland, Hungary, Poland and the case of the Israeli Arabs). The remaining five studies report mixed results: a decrease in the effect of one variable, and stability or increase in the effect of the other (United States, Italy, Taiwan, Japan, and Czechoslovakia). Interestingly, the study for Czechoslovakia reports a decline in the effect of father's education on educational attainment for cohorts educated immediately after the introduction of the socialist reform. However, this was followed by an increase in the effects for more recent birth cohorts.

However, Maas and Ganzeboom (2007) found that there has been a decrease in inequality of participation in Dutch tertiary education. An analysis of a large data set combining 35 survey data files proved that the association between the completion of tertiary education (HBO and WO) and the father's occupational status weakened between the 1920 and 1970 birth cohorts.

Fourthly, comparing the Czech Republic and the Netherlands can be both theoretically and analytically beneficial, namely because both countries maintain highly stratified systems of secondary education, generating substantial levels of social selectivity before entry to tertiary education. In fact, an analysis by Matějů *et al.* (2007) looking at upper secondary education enrolment, the number of school types, participation in vocational programmes, and expenditure on educational institutions found that the two countries have among the most stratified and selective secondary education systems in the 31 countries that participated in the OECD PISA project. These similarities in secondary education systems provide good grounds for comparing the effects of funding policies on access to tertiary education.

Finally, a Czech - Dutch comparative analysis is worthwhile because for a time both student support systems were mainly based on indirect forms of support through the students' families. Only in 1986, when the Dutch government implemented the Student Finance Act (WSF), Dutch policies went into another direction by re-channelling all support directly to students (Vossensteyn and De Jong, 2006). In the Czech Republic direct cash support to students remained a relatively small proportion of the overall amount of support. Most are tax benefits and family allowances as the used to be in the Netherlands before 1986.

5. Student financing in the Czech Republic³

There are no official tuition fees in the Czech Republic, as the state assumes financial responsibility for all studies at public higher education institutions. However, there is a *quota* that determines the maximum number of students than can be enrolled each year under existing financial limits (i.e. the state subsidy to public universities). Until recently the quota implied quite serious admission restrictions: In 2004/05 the admission rate (admitted/applied) was only 60%, even though in the year 2000 the Czech Republic introduced the so called “dual track system” permitting public universities to admit students above the quota, who then have to pay tuition fees set by the institution, but due to the restrictions applied to such students (their status is not identical to regular students, they are not entitled to some student benefits, etc.) their number is negligible and not even statistically reported.

Student support in the Czech Republic is largely (though not entirely) an indirect and parent-based system. In particular, before the amendment to the Higher Education Act of 2005 (effective from 2006), which introduced rather modest social stipends for students from low-income families and housing allowances granted on the basis of the distance of their permanent residence from the school, the legal status of a student did not imply any special financial aid geared directly towards a student due to his or her status as a tertiary education student. The entitlement to social benefits is rather connected with the financial situation of a person dependent on his/her parents (family). Furthermore, the entitlements to certain social benefits, such as social grants, state-paid health insurance, tax relief etc., are subject to an age limit stipulated by law.

The student welfare system thus consists of three main pillars: a) benefits distributed directly to students, b) benefits to families with students, c) other forms of indirect student support.⁴

Benefits distributed directly to students include scholarships and tax benefits. A scholarship is a grant students may receive from the higher education institution. Social assistance scholarships are given to only a few students (less than 2%) and due to such scholarships families may lose entitlements to other social benefits. Students younger than 26 years old, or a Ph.D. candidate younger than 28 years old, can increase their non-taxable earned income to about 30%

3 More details on the Czech and Dutch systems of student funding can be found in the country reports on the Czech Republic and the Netherlands in “Public/private funding of higher education: a social balance” (Schwarzenberger, 2008).

4 Since the analysis is based on data collected in 2004, we describe the system of student financial aid as it existed in the Czech Republic before the amendment of the 2005 Higher Education Act.

above the basic non-taxable income. In 2005 a student's non-taxable income was 49,440 CZK, (about 1,700 €), whereas the basic non-taxable income was 30,040 CZK (1,060 €).

Benefits to families with students take two main forms: child allowances and tax relief. *Child allowance* is a subsidy designed to help compensate a family's costs for raising and nursing a child.⁵ A family is eligible for child allowance for students under the age of 26 if the average income per household member was lower than a certain amount. If the student is physically disabled and needs special care under social legislation, the tax relief amount is multiplied by two. In 2006 the tax relief was 25,560 CZK (about 900 €) per year [*Act on Income Taxes (1992)*, Sec. 15 (1 / b)].

There were a number of other forms of student support:

- a) Subsidized accommodation and meals;⁶
- b) Health insurance: for students under 26, insurance premiums in publicly organized and compulsory health insurance schemes are paid out of the state budget;
- c) Public transport discounts: students up to the age of 26 get a discount on public transportation (bus or train) from their home to higher education institution;⁷
- d) Pension insurance: students at higher education institutions are included in pension insurance during a period of six years of study above the age of 18 without having to pay any premiums;
- e) Health insurance up to the age of 26 covered by the State

6. Student financing in the Netherlands

Unlike the Czech case, students of publicly funded higher education in the Netherlands have to pay a uniform tuition fee that has been set by the government since 1945. The nominal value of the fees remained rather low and stable up to 1972. It was increased to NLG 500 (€227) in 1974 and remained stable

5 However, *dependent children* over the age of 18 (which applies generally to students) qualify to receive this social grant directly.

6 Until 2005, accommodation was provided to students by the public higher education institutions through their own publicly subsidized accommodation facilities. Since 2006, public subsidies for accommodation are distributed by universities to students in need through subsidies on accommodation.

7 While overall public support in this category might prove relatively important, neither official statistics nor public budgets contain adequate information on this matter. For this reason we decided to exclude funding in the form of public transport discounts from further analysis.

again until 1980. Since then, tuition levels have gradually increased to €1,565 in 2008/09 (€1713 in 2011/12), with annual increases often exceeding the rate of inflation. As a result, a larger share of the costs of higher education has been gradually shifted to students and their families which may be seen as a threat to access.

Until the mid-1980s, student support was characterised by mainly tax benefits and family allowances for the students' parents as well as small bursaries and loan programmes. In 1986, a new and relatively generous system of student aid was implemented in which all indirect support was changed into direct support to the students themselves. The major characteristics of the system since then have been:

1. A basic grant (*basisbeurs*) for all full-time students, which varies in amount between students who live with their parents and those who do not;
2. A means-tested supplementary grant for a limited number (about 30%) of students;
3. Loans that can be taken up on a voluntary basis, carrying a below-market interest rate;
4. Parental contributions and students' own income. The parental contributions are strongly interrelated with the (parental) means-tested supplementary grants and loans;
5. Finally, students can earn up to €10,631 per annum (in 2006) before they start to be disqualified from receiving any of their grant entitlements.

These components together add up to a given amount that students are expected to need for their studies and living costs according to annual estimates by the Ministry of Education, Culture and Sciences.

On the basis of demographic developments the government expected a decline in the number of students after 1986 and thus believed that a relatively generous system for students would be feasible from the viewpoint of public finances. However, the opposite happened resulting in a large number of changes to the system (Vossensteyn, 2002):

1. Tuition fees were increased in real terms;
2. Basic grants were reduced several times;
3. Supplementary grants were increased to compensate for tuition increases, inflation, and reductions in the basic grants. This was to guarantee access for students from disadvantaged backgrounds (about 30%, based on a means-test).
4. The duration of grants was reduced (in 1991 and 1996) to the nominal duration of courses (4-6 years);

5. Student loans have gained in importance, thus compensating for reductions in the basic grant, increases in tuition fees and inflation. In addition, since 1995 students could replace (assumed) parental contributions with student loans, and since 2007 students have been able to take out additional loans to pay tuition fees (*collegegeldkrediet*);

Performance requirements were imposed in 1993 and 1996, implying that students are only entitled to grants if they graduate within a limited time frame (10 years), otherwise the grants are regarded as loans.

Due to these developments and substantially increasing patterns in students' expenditure, an emphasis on parental contributions and the students' own resources (from gainful employment) gradually increased. This means a real situation of cost-sharing, but with an attempt to compensate socially disadvantaged students.

7. A comparison of the Czech and Dutch student funding arrangements and changes in access to higher education

Our analysis draws on two main data sources. All data on students, their income, expenditures, housing and social background have been obtained from the Eurostudent IV database (Orr *et al.* 2011).⁸ The database was created from the data collected by national students surveys carried out between the years 2009 and 2010 in 25 EU countries. The data collection was coordinated by the Eurostudent IV project consortium.⁹ The target population of the surveys was defined as follows:

- Students who currently have a permanent residency in their respective countries and who have finished their prior education in their respective countries, independent of their citizenship;
- Both full-time and part-time students, differentiated by their formal status;
- Students in ISCED 5A programmes (Bachelor, Master's and all other types of national programmes at ISCED level 5A);
- Students at all higher education institutions offered programmes at ISCED level 5A (specialist higher education institutions such as military academies being excluded);

8 The authors would like to thank Dominic Orr and his colleagues from the Eurostudent IV Project Consortium for making the Eurostudent database available for the Czech-Dutch comparative analyses presented in this paper.

9 A synopsis of indicators containing basic information on the surveys, the definition of indicators and the main results is available at http://www.eurostudent.eu/download_files/documents/Synopsis_of_Indicators_EIV.pdf

- Distance students, provided that they are not at a dedicated distance education institution (such as the Open University in the United Kingdom or the FernUniversität Hagen in Germany), (Orr, 2011, p. 14).¹⁰

To analyse shifts in the chances of attaining tertiary education for individuals of different socio-economic backgrounds, we used data from the Survey on Income and Living Conditions of Households (EU-SILC) for 2005, namely its module “Inter-generational transmission of poverty” in which questions were asked on parents’ education and occupation, and any financial problems in the household when the respondent was a teenager. The same data are used to show the development of the proportion of secondary and tertiary education graduates, which we use as a proxy for the expansion of tertiary education. The analysed data files cover the population between 25–65 years of age. Data for the Czech Republic contained 8,628 cases representing 5,844,895 individuals, while the Dutch data file contained 17,853 cases representing 9,163,936 individuals.¹¹

Structure of student income in the Czech Republic and the Netherlands

Data from the Eurostudent project surveys show substantial differences between countries in respect of the financial resources students may use to cover their study related and living expenses, which – of course – vary greatly according to the costs structures in individual countries. Median monthly incomes for students living with their parents (not including transfers in kind) across all countries amounts to € 426, with the highest level in the UK (€ 1,201), and the lowest in Romania (€ 155). The Czech Republic with € 209 is very close to the lower boundary, while Dutch students living with their parents have exactly the median income. Students not living with their parents, whose income includes trans-

10 For our analysis it would have been more appropriate to focus only on full-time students in public (or state) colleges and universities. This has not been possible since the primary data from national student surveys have not been made available to members of the Eurostudent Network for their own statistical analyses.

11 A legitimate question may be raised why the data from Eurostudent III collected between 2005 and 2008 were not used as background information on student funding instead of data from Eurostudent IV collected between 2009 and 2010, especially if the EU SILC data on access refers to the year 2005. One of the main reasons was that the data from student surveys carried out under the Eurostudent IV project were of better quality, particularly in the Czech Republic (the Czech Eurostudent survey carried out in 2005 used a snowball sampling procedure which did not yield representative data even after a complex reweighting procedure). Also, the questionnaire used in the Eurostudent IV project was better designed than in the previous round.

fers in kind,¹² have at their disposal twice as much as those living with their parents: the median amounting to € 850 (€ 415 in the Czech Republic, € 791 in the Netherlands).

Given the large differences in cost structures between individual countries, absolute levels of student income are not as important as their structures. Although the primary data from student surveys should allow an analysis of the sources of student income in greater detail, the Eurostudent database provides only four main categories of income sources: family and partner; public sources (i.e. grants, stipends, subsidies, state guaranteed student loans, etc.); student self-earned income; and other sources (savings, private loans, etc.). Though these categories are quite broad to cover all the potentially interesting differences between countries in the structure of student income, they shed light on the most important issue of student finance: the role of the public (state) and private (student and his/her family) sectors in endowing student budgets.

Figures 2 and 3 present the structure of student incomes according to their housing status. On average, private sources (student's earned income and contributions from his/her family) cover more than two thirds of student disposable incomes (68% in the case of students who live with their parents, 70% otherwise), public sources cover only 22%. However, both figures reveal substantial differences between countries. The proportions of public sources range from 1% in the Czech Republic to 60% in Sweden and Denmark.

The survey data also confirm that the two countries we focus on in this study represent two clearly different models of student finance. Due to the very weak role of student financial aid, students and their families in the Czech Republic have to cover 96% of their study related expenses, regardless where they live. A similar situation is also found in other East-Central European countries (Slovakia, Poland, Romania).¹³ In the Netherlands, students may cover about 40% of their expenses from public sources (38% if they live with their parents, 46% otherwise). In this respect the Dutch is similar to the Norwegian, Swedish, and Danish systems, and – despite differences in other significant aspects of stu-

12 According to the Eurostudent project guideline conventions, for students living with their parents transfers in kind were not included in the calculation of total disposable income, as it was deemed too difficult for these students to estimate this kind of support. By contrast, students who are not living with parents were asked to report transfers in kind, and these were included in their disposable income. Due to this approach to the calculation of total disposable income it is important to note that the income and expenses of students living with their parents cannot be compared to those of students who are not living with their parents.

13 Hungary, which introduced an efficient student loan system in 2006, did not participate in the Eurostudent IV project. We therefore cannot evaluate the effect of introducing this significant policy measure on the structure of student budgets.

dent finance – also to the system recently implemented in the UK. In all these countries public sources play a very significant role in student finances, primarily allowing students to reduce the contributions from their families.¹⁴

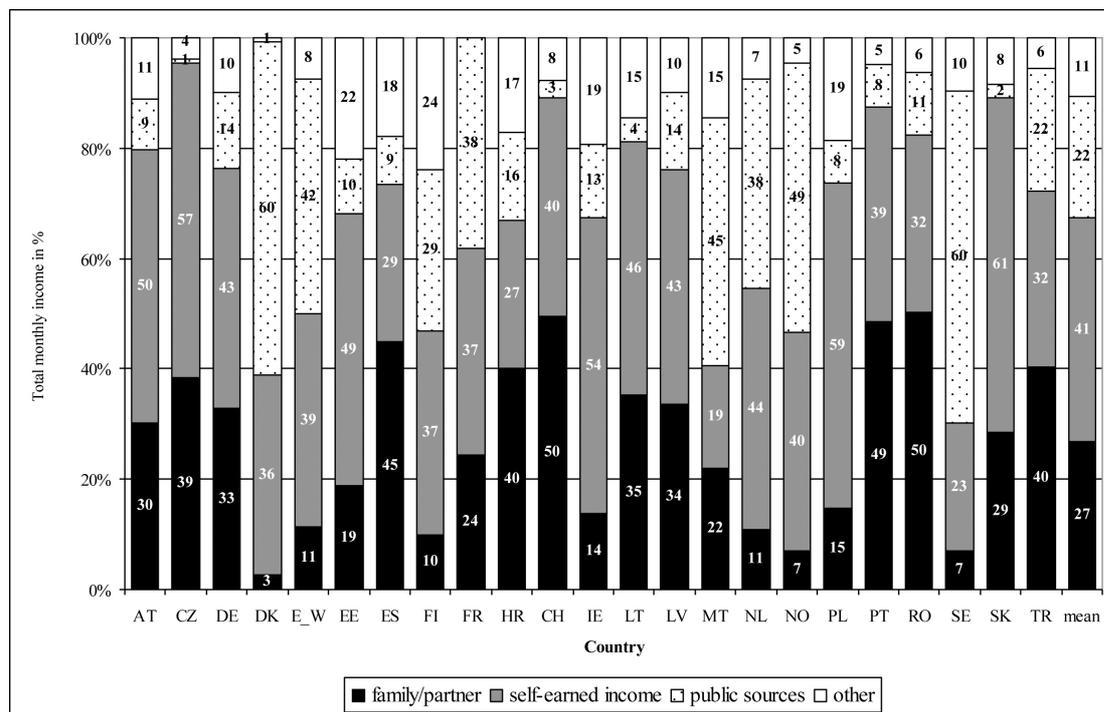
Student financial aid systems are designed primarily to help students from lower social strata to facilitate their decisions to continue studying, and – if they ultimately decide to study – to cover a significant part of their study related expenses. From this point of view it is important to know how student financial aid systems affect the income structure of students from different social backgrounds. Figure 4 comparing the Czech Republic and the Netherlands is especially instructive. The average values show that European systems as a whole are not very efficient and do not help, primarily, students from low social backgrounds. Though students from low social backgrounds clearly receive less from their parents (28% of their disposable budget compared to 41% in the case of students from high social backgrounds), public sources do not seem to compensate for this gap. Therefore, students from low social backgrounds have to earn more to meet their study related expenses. This trend is particularly visible in the Czech Republic, where students from low social backgrounds receive only 11% of their income from their parents (compared with 42% in the case of students from high social backgrounds), therefore the gap in their budgets has to be wholly compensated for by self-earned income.

In the Netherlands, though low social background students also have to rely more on self-earned income than high social background students, public sources play a more significant role. In the Netherlands, the proportion of students receiving public support is over 80% (with a negligible difference between students from low and high social backgrounds due to the *basic grants* available to almost all students); and public sources represent 57% of income in the case of low social background students (44% in the case of high social background students). In the Czech Republic, the share of recipients of public support is less than 5%, and this income source makes up only 30% of budgets of low social background students (14% of disposable budgets in the case of high social background students). How different the Czech and Dutch system are is clearly demonstrated in Figure 5.

We may conclude this part of the analysis by stating that the Czech and Dutch systems of student financial aid produce very different conditions for college and university students to meet their study related and living expenses. We may assume that - in the long run - these conditions significantly affect their decisions regarding entering college as well as continuing their studies.

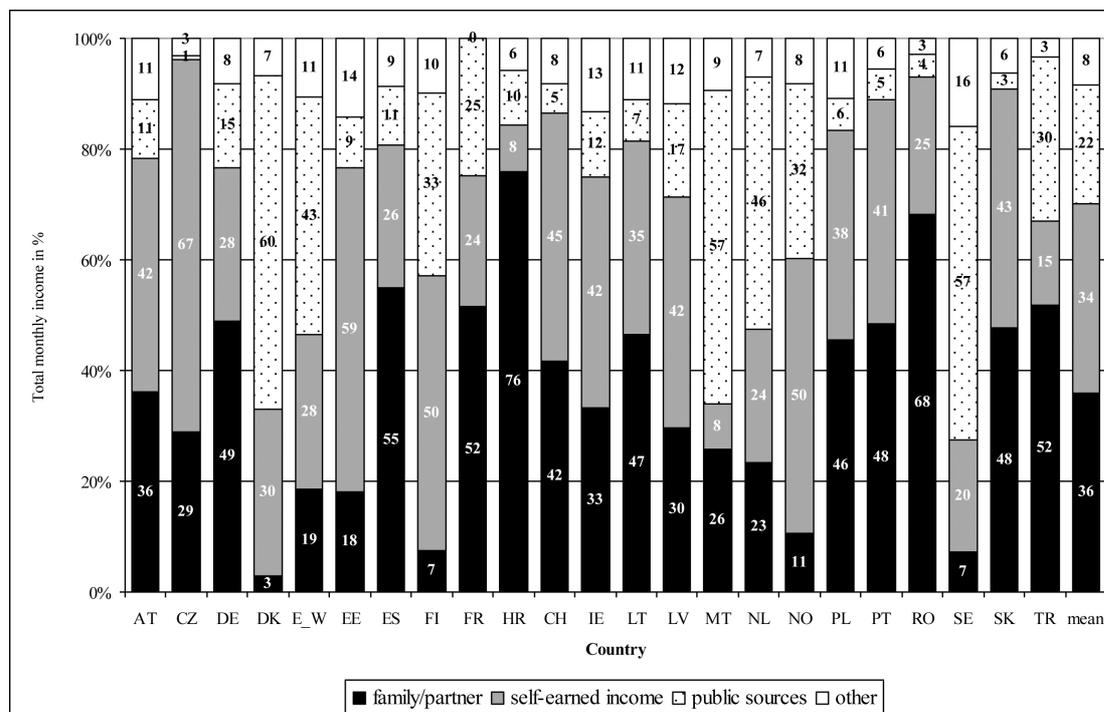
14 Self-earned income remains a very significant source in all countries, ranging from 23% to 57%. By contrast, family contributions are more sensitive to the potential role of student financial aid, ranging from 3% to 50%.

Figure 2: Structure of student income – students living with parents



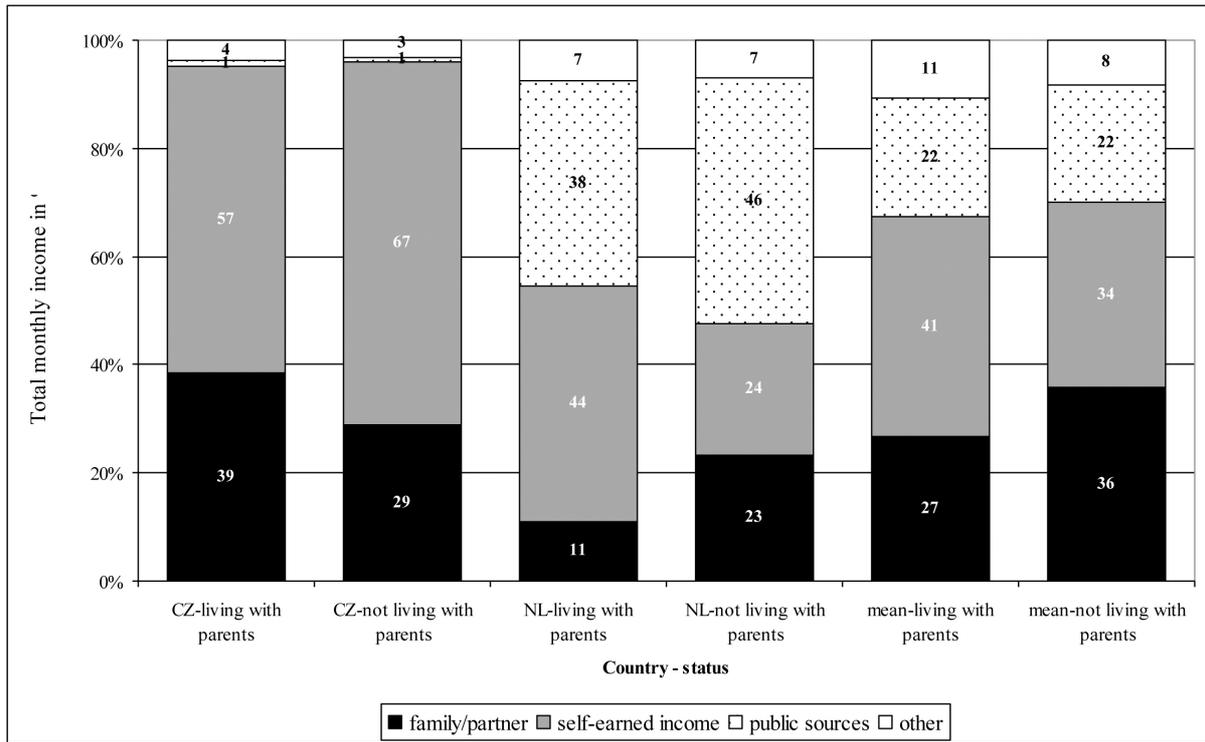
Source: Eurostudent IV database.

Figure 3: Structure of student income – students not living with parents



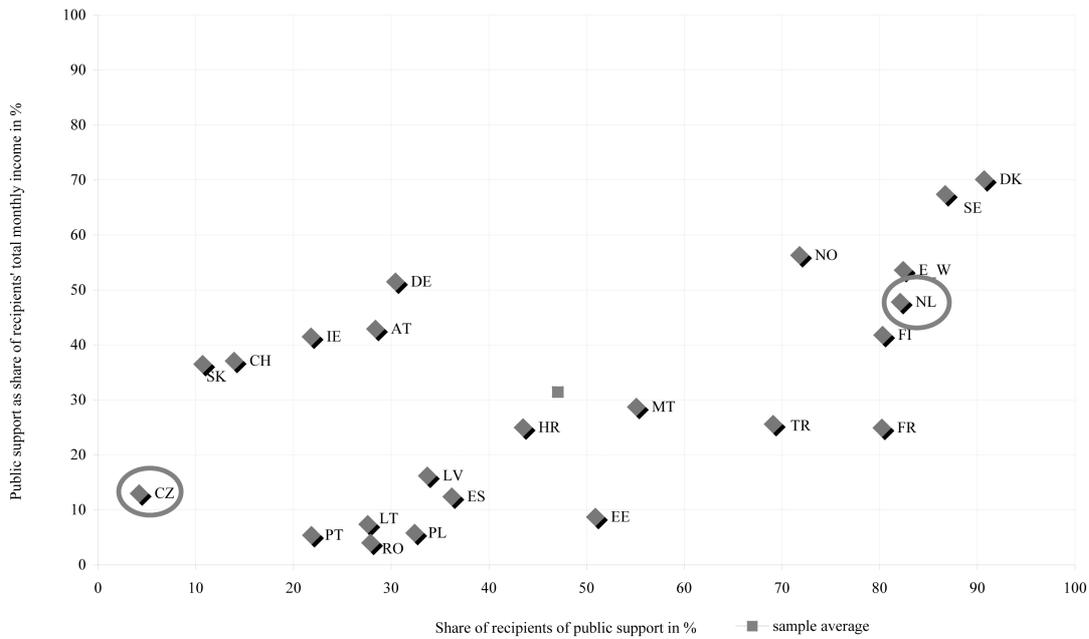
Source: Eurostudent IV database.

Figure 4: Structure of student income by social background



Source: Eurostudent IV database.

Figure 5: Percentage of recipients of public support and percentage of total monthly income from public sources (in %)



Source: Orr *et al.* (2011)

In the following subsection we link the structure of the respective student support systems and their impact on student incomes to the development of inequality in access to tertiary education in the two countries. Our attention will mostly focus on the chances of attaining tertiary education for respondents coming from different socio-economic backgrounds.

Socio-economic background and participation patterns

In the Netherlands, the introduction of direct student support mechanisms in the mid-1980s coincided with the notable opening up of the system, particularly for those coming from lower socio-economic backgrounds. By contrast, after the fall of communism the relatively less open Czech tertiary education system relied more heavily on indirect forms of support that did not improve access for upcoming groups.

The overall distributions of variables used in the analysis are displayed in the appendix in Table A1. The education of the respondent (variable REDU) and the respondent's mother and father (MEDU and FEDU) were originally coded according to the ISCED classification. For our analysis, these education variables were recoded into four main categories representing primary, lower secondary, upper secondary and tertiary education. The information on respondent's education (REDU) has been used as the dummy variable TEREDUC; equalling one if the respondent had tertiary education, and zero otherwise. In order to obtain comparable figures across age groups, for the youngest (25-35 years), in which some individuals were still continuing their studies, respondents with completed higher secondary education who at the time of the survey were university students were also treated as individuals with tertiary education. We employed the variable TEREDU as our dependent variable in all subsequent estimations.

For an evaluation of the relative chances of transition between the secondary and tertiary educational level, a similar indicator variable SECEDU was created. SECEDU equals one in the event the respondent has completed or has been in a course of upper secondary education, and zero otherwise.

To emulate the socio-economic dimension of social background, we entered two variables in the analysis: father's class (FCLASS) and a variable indicating financial problems in the household when the respondent was a teenager (POOR). The respondent's age was transformed into a ten year age-group variable (AGE4: >55, 45-55, 35-45, and <35). Note that Dutch respondents aged between 35 and 45 years were the first to benefit from the 1986 Student Finance Act, which introduced a substantial shift towards direct forms of student sup-

port. In 1989, the corresponding Czech age group experienced the introduction of market reforms in the context of economic and political transition.¹⁵

As the distributions of key variables displayed in Table A1 suggest, there are particularly large differences between the two countries in the background variables (father's and mother's education, father's occupation). A similar problem was identified when comparing age groups, due to the significant changes that occurred after WWII. To reduce the effects of these different distributions of individual background variables, as well as to link the chances of attaining tertiary education to relative position in society, we decided to create one composite variable, FAMSES, representing the socio-economic status of the background family; centred (z-standardized) for each country and each age group separately. Therefore, we applied the principal component analysis on four background variables (FEDU, MEDU, FCLASS, POOR) for each country and age group separately. As reported in the appendix, the factor loadings are very similar, both across countries and age groups, particularly in terms of the role of the father's and mother's education, and the father's class.¹⁶ The resulting latent variable (FAMSES) was then transformed into quartiles, again within each age group separately (FAMSES4).

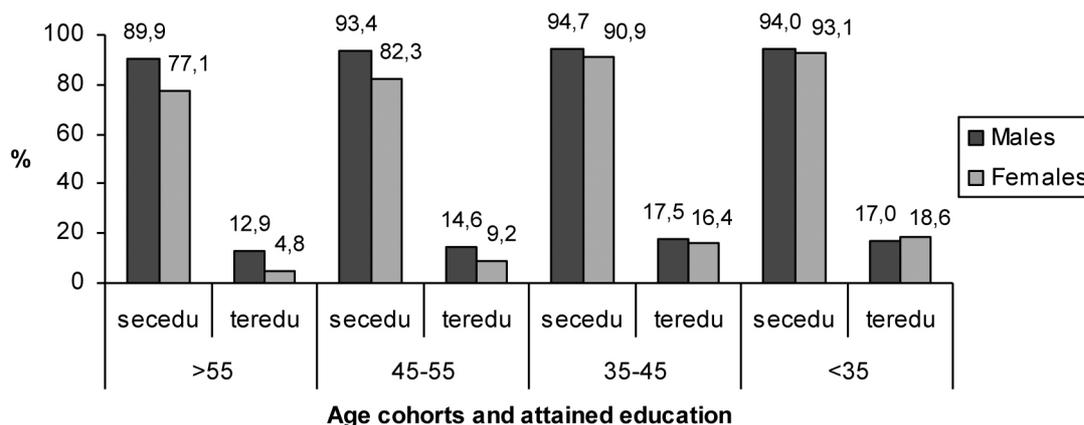
Since the participation of different social classes in tertiary education to a large extent depends on overall enrolment rates, we will start with the development of opportunities to study both at the secondary and tertiary level. As Figures 6 and 7 indicate, the proportion of people with completed secondary education is higher among Czechs than among the Dutch, across all age groups. The figures likewise suggest that while secondary education enrolment in the Czech Republic seems to have achieved saturation point, in the Netherlands it is still on the rise. On the other hand, the percentage of respondents with completed tertiary education is higher among Dutch than among Czechs for all age groups. These figures correspond to OECD statistical data on tertiary education enrolment: according to *Education at a Glance* (OECD, 2007), net entry rates in the Czech Republic in 2005 were only 38% (36%

15 As a complementary exercise, we also used alternative age ranges spanning >51, 41-51, 31-41, and <31 years, where the group aged 31-41 was the first one to experience the fall of the Communism. Subsequent estimations nonetheless did not lead to any qualitative change in our results. These results can be provided to an interested reader upon request.

16 We decided to keep the variable POOR in the analysis even though its factor loadings turned out to be lower than those associated with MEDU, FEDU and FCLASS, particularly in younger age groups. Though it is based on a subjective assessment, it is the only available indicator for the economic situation of the background family at the time the respondent's decision to study at the tertiary level was determined. This decision was also supported by the principal component analysis, which showed that all four variables correspond to a single dimension (factor loadings for CZ: FEDU 0.844, MEDU 0.750, FCLASS 0.761, POOR 0.511; for NL: FEDU 0.856, MEDU 0.779, FCLASS 0.655, POOR 0.407).

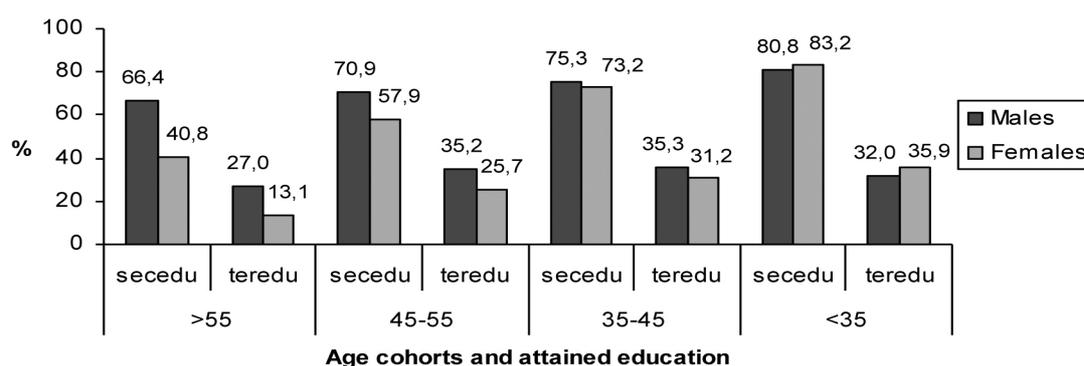
for men, 41% for women), while in the Netherlands it was 56% (52% for men, 61% for women).¹⁷ As a result, we can conclude that, over all age groups, there is generally a higher participation rate in Dutch higher education as opposed to Czech tertiary education. Whether this also reflects higher accessibility will be analysed below.

Figure 6: *Proportion of individuals attaining secondary and tertiary education in the Czech Republic by gender and age group*



Note: Variable “SECEDU” stands for completed secondary education (including those who continue and/or have completed tertiary education), variable “TEREDU” stands for completed tertiary education (in the youngest age group this includes those who were still students of tertiary education at the time of the survey).

Figure 7: *Proportion of individuals attaining secondary and tertiary education in the Netherlands by gender and age group*



Note: Variable “SECEDU” stands for completed secondary education (including those who continue and/or have completed tertiary education), variable “TEREDU” stands for completed tertiary education (in the youngest age group this includes those who were still students of tertiary education at the time of the survey).

17 OECD average in 2005 was 53%, (48% for men, 59% for women).

We ran sample-weighted logit regressions conditioned on gender for all age groups in the respective country, and then compared the estimated odds ratios.¹⁸ In particular, for each country and age group separately, we used binomial logistic regressions maximizing the following Log-likelihood functions:

$$L = \sum_{i=1}^N [w(i)y(i)\ln \pi(i) + w(i)(1-y(i))\ln (1-\pi(i))],$$

(1)

where

$$\pi(i) = \exp(x_i' \beta) / [1 + \exp(x_i' \beta)]$$

and

$$x_i' \beta = \beta_0 + \beta_1 * \text{famses4}(i) + \beta_2 * \text{sex}(i),$$

$w(i)$ stands for the sample weight of individual i ; $y(i)$ is an indicator variable equal to one if an individual has tertiary education and zero otherwise; and $\pi(i)$ represents the probability of attaining tertiary education assumed to be a function of famses4 and gender.

Since we are interested not only in the chances of attaining tertiary education, but also in the relative chances for transitions between the secondary and tertiary level, we ran our regressions both on a full sample and a restricted version containing only respondents who have completed (or at least pursuing) upper secondary education as distinguished by the variable SECEDU .

Figure 8 contrasts the estimated odds ratios for the Czech Republic and the Netherlands across age groups, using the full sample. These odds ratios have been obtained from our specification in (1) with TEREDU as a dependent variable. It can immediately be observed that during the communist era, tertiary education in the Czech Republic absorbed relatively more individuals from lower socio-economic backgrounds than in the Dutch case. In particular, the relative chances of those from the lowest socio-economic background for the age groups 45-55 and >55 were generally higher in the Czech Republic than in the Nether-

18 The chances represent the ratio of the probabilities of success or failure for an event with a dichotomous outcome. In other words, if the probability of success equals 75% and the probability of failure 25%, the chances are equal to $0.75/0.25=3$. The chance ratio is the ratio of chances. If the explanatory variable in a logit equation is dichotomous e.g. gender, the chance ratio corresponds to $\exp(\beta)$ and tells us how much the estimated chances of men and women differ. In our specification, the relative chances in Figure 8 correspond to the chance ratio of students e.g. with the socio-economic backgrounds in the third quartile relative to students with the lowest (1st) quartile. The lower their chance ratio, the more equal the participation ratios are between students from the two respective socio-economic groups.

lands, which can be at least partly explained by the proletarian ideology of the regime. The shift towards direct forms of student support in the Netherlands in 1986 and the collapse of Communism in 1989, however, coincides with the reversal of the above-mentioned pattern immediately after for the second age group (45-55). For the two younger Dutch age groups (aged less than 45 years), the odds ratios begin to fall considerably and ultimately go below or at least remain at the levels observed in the Czech Republic. This trend is particularly pronounced for the relative chances between the highest and the lowest quartile of socio-economic background (4/1), but visible also in other contrasts displayed in the figure (3/1, 2/1).

To see whether our hypotheses gain some statistical support, we pooled the data for the two older age groups (45-55 and >55), that received education largely before the mid-1980s, and the two younger age groups (<35 and 35-45), and then tested for the statistical difference between their respective odds ratios. For estimation purposes we defined two auxiliary variables. The dummy variable Post-1986 equals one in the case of individuals i belonging to the age groups <35 or 35-45. The interaction term FAMSES_86 is the product of Post-1986 and the variable FAMSES4 described in previous paragraphs. As before, the estimations are related to the respondent's gender. Our objective is to compare the corresponding odds ratios of the two pooled age groups and check for their statistical differences.

This condenses into testing the following null hypothesis:

$$H_0: \exp(\beta_{\text{Famses_86}(j/1)}) = 1 \text{ or } \beta_{\text{Famses_86}(j/1)} = 0 \quad \text{for quartiles } j=2,3,4$$

against

$$H_1: \exp(\beta_{\text{Famses_86}(j/1)}) \neq 1 \text{ or } \beta_{\text{Famses_86}(j/1)} \neq 0,$$

where $\exp(\beta_{\text{Famses_86}(j/1)})$ is the ratio of two odds ratios (post- and pre-1986) for j 's quartile relative to the lowest quartile $j/1$. If the two odds ratios are equal, $\exp(\beta_{\text{Famses_86}(j/1)})=1$.

Figure 8: Comparison of the relative chances of different SES groups to participate in higher education in the Czech Republic and the Netherlands: logit, whole population

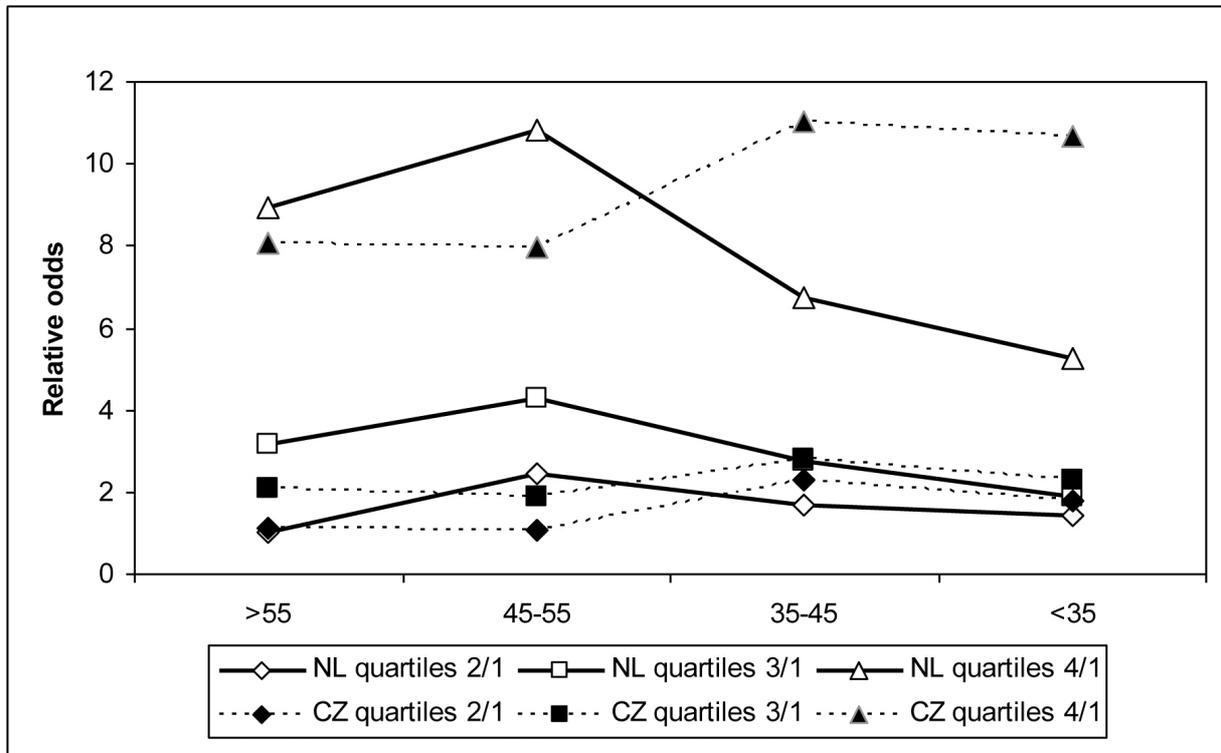


Table 1 summarizes the results of pooled logit regressions covering the whole population. The exponential values of FAMSES4(j/1) represent the estimated odds ratios j/1 of the pooled 45-55 and >55 age groups and serve as a static benchmark referring to the pre-1986 period. In years before 1986, for example, the relative chances of a student from the fourth quartile relative to a student from the lowest (1st quartile) socio-economic background were almost eight times more (7.729) in the Czech Republic, whereas in the Netherlands the difference was even larger with a nearly 10-fold increase (9.783). FAMSES₈₆(j/1), the coefficients of primary interest to us, capture the dynamics between the pre- and post-1986 era. The trend-break in the late 1980s captured by FAMSES₈₆(j/1) coefficients is in fact statistically significant regardless of the relative j/1 chance and the estimation technique. All odds ratios of the pooled 35-45 and <35 age groups have increased significantly in the Czech Republic, which is reflected in the positive coefficient estimates of FAMSES₈₆(j/1). Over the same time period, the Netherlands observed the opposite (and again statistically significant) trend.

Table 1: Contrasts of logit regressions for the whole population, pooled groups (45-55/>55 and 35-45/<35). Dependent variable TEREDU

Country		β	Std. dev.	Wald statistics	P-value	Exp(β)
CZ	Famses4(2/1)	0.148	0.009	285.364	0.000	1.159
	Famses4(3/1)	0.640	0.008	6479.338	0.000	1.897
	Famses4(4/1)	2.045	0.007	84027.394	0.000	7.729
	Famses_86(2/1)	0.612	0.011	3143.379	0.000	1.844
	Famses_86(3/1)	0.211	0.010	423.544	0.000	1.234
	Famses_86(4/1)	0.324	0.009	1258.449	0.000	1.383
	Post-1986	-0.216	0.008	676.997	0.000	0.806
NL	Famses4(2/1)	0.659	0.005	16566.529	0.000	1.933
	Famses4(3/1)	1.373	0.005	80006.697	0.000	3.946
	Famses4(4/1)	2.281	0.005	223806.488	0.000	9.783
	Famses_86(2/1)	-0.131	0.006	433.268	0.000	0.877
	Famses_86(3/1)	-0.472	0.006	6007.903	0.000	0.624
	Famses_86(4/1)	-0.423	0.006	4817.845	0.000	0.655
	Post-1986	-1.021	0.005	43707.071	0.000	0.360

Variable(s) entered: famses4, famses_86, post-1986, gender

A qualitatively similar situation can be observed for the transition between secondary and tertiary education based on the variable SECEDU (see Table 2). In this case, the estimated odds ratios follow relatively similar paths in both countries until the 1980s. In subsequent years, younger age groups in the Czech Republic experienced a notable increase in the odds ratios and hence lower access to tertiary education for individuals from relatively low socio-economic backgrounds.

In the Netherlands, on the other hand, the odds ratios have basically stagnated or moved only slightly. Unlike the relative chances of attaining tertiary education, the trend break is unambiguous and statistically significant only for the Czech Republic. In the Netherlands, the odds ratios (though significant) moved in both directions. Nonetheless, the Czech shift towards a more closed tertiary education system and the most pronounced shift in odds ratios for the fourth quartile seem to have been preserved.

In other words, in the Czech Republic, despite the fact that tertiary education is tuition free, individuals from the least privileged social strata (the lowest SES quartile) tend to lose out against the most privileged (the highest SES quartile). This holds for the relative chances of attaining tertiary education as well as for the success in making the transition between secondary and tertiary education. On the contrary, in the Netherlands, the chances of attaining tertiary education have been falling since the late 1980s, the period when tuition fees were rising and simultaneously the new system of student support was implemented.

Figure 9: Comparison of the relative chances of different SES groups in the Czech Republic and Netherlands: logit, transition between secondary and tertiary education

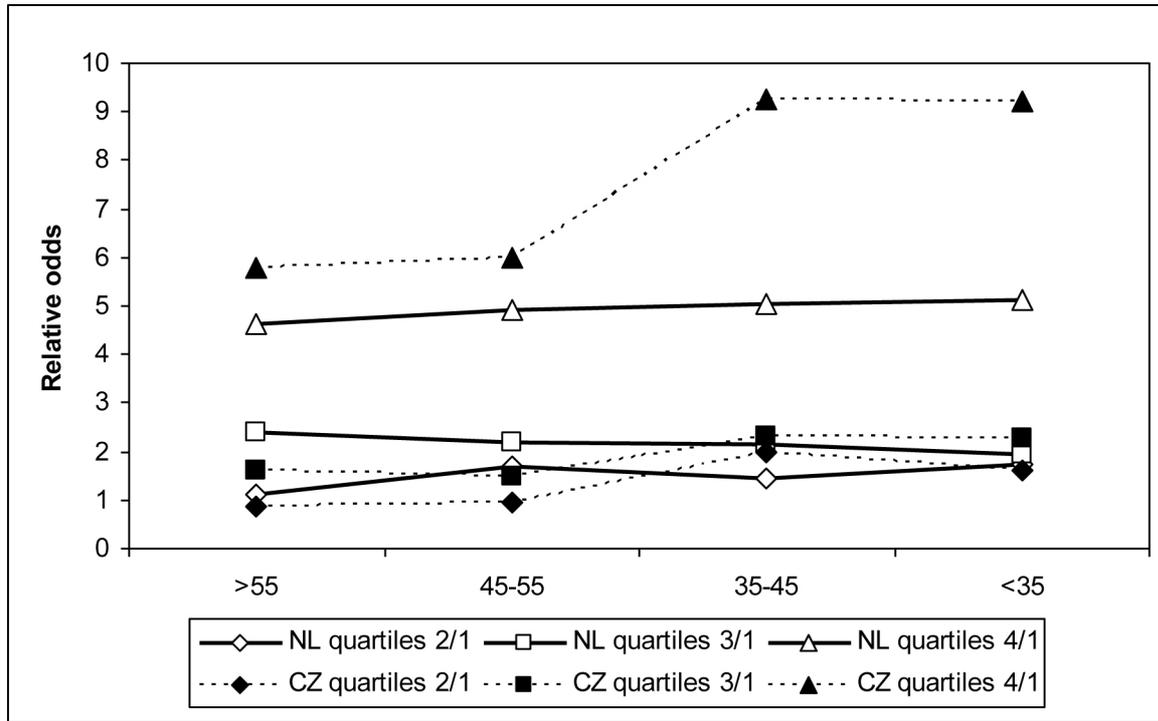


Table 2: Contrasts of logit regressions for the transitions between secondary and tertiary education, pooled groups (45-55/>55 and 35-45/<35). Dependent variable TEREDU

Country		β	Std. dev.	Wald statistics	P-value	Exp(β)
CZ	Famses4(2/1)	-0.059	0.009	45.475	0.000	0.942
	Famses4(3/1)	0.365	0.008	2064.297	0.000	1.440
	Famses4(4/1)	1.729	0.007	58774.034	0.000	5.635
	Famses_86(2/1)	0.702	0.011	4085.445	0.000	2.054
	Famses_86(3/1)	0.367	0.010	1267.012	0.000	1.443
	Famses_86(4/1)	0.494	0.009	2877.618	0.000	1.639
	Post-1986	0.001	0.008	.014	0.905	1.001
NL	Famses4(2/1)	0.407	0.006	5156.464	0.000	1.502
	Famses4(3/1)	0.858	0.005	25650.635	0.000	2.357
	Famses4(4/1)	1.562	0.005	86862.099	0.000	4.769
	Famses_86(2/1)	0.120	0.007	298.916	0.000	1.127
	Famses_86(3/1)	-0.106	0.007	255.504	0.000	0.899
	Famses_86(4/1)	0.093	0.007	195.688	0.000	1.097
	Post-1986	-0.395	0.005	5536.599	0.000	0.674

Variable(s) entered: famses4, famses_86, post-1986, gender

8. Conclusions

The main objective of this chapter was to assess the possible effects of student funding models on the levels of inequality in access to higher education. We are aware of the complexity of the processes and enormous variety of factors determining educational decisions made by individuals and their parents, particularly regarding participation in tertiary education. Relevant sociological theories tell us that students' parents and other peer groups have an overriding impact on student choice. This is probably one of the reasons why in basically all education systems around the world the proportion of lower-SES students decreases with the level of education. On the other hand, scholars inquiring into the possible role of policies in explaining differences in the likelihood of attaining higher education have traditionally utilized similar analytically traced and statistically proven differences between countries. To be sure, one of the key roles in the modern social sciences is to reduce the entropy regarding the effects of policies, and to contribute to debates about their efficiency.

Our decision to compare developments in the chances of attaining tertiary education on the basis of a detailed analysis of the Czech and Dutch student support systems was led by the following observations:

1. There is a great deal of similarity between the two countries in terms of their long term socio-cultural development;
2. After WWII both countries underwent different socio-political developments and policies in terms of student funding with possible consequences for access;
 - a) While during the early stages of the communist regime in the (now) Czech Republic the government implemented strong egalitarian policies, the post-communist transformation after 1989 has not brought about any significant reforms in student funding. The Czech Republic has not introduced tuition fees, student loans provided or guaranteed by the state, universal study grants, etc.
 - b) In the Netherlands, with no deep educational reforms in the post-war period, there was a radical student funding reform in 1986 that has substantially raised tuition fees, basic grants and universal loans since then.

This study has reached important results concerning the potential relationship between student financing and the equality of participation in higher education in the two countries observed. It is shown that the communist reforms in the Czech Republic, based on a redistribution of relatively limited opportunities to study via the quota system, brought about only a short-term decrease in the inequality of access to higher education. The post-communist transformation peri-

od, particularly in the 1990s, has brought about a significant increase in inequality. Despite increasing opportunities to enter tertiary education through more student places and the government's resistance to the introduction of tuition fees, inequality in participation grew in relative terms. This reverse development can be explained by two other factors: a) a high level of diversification in the Czech secondary school system that has generated strong social background effects regarding participation in different types of schools and therefore in the transition decisions for continuation in higher education; b) student financial support in the Czech Republic is geared more towards parents than students themselves, with higher SES parents benefitting more than lower SES parents. We believe that tuition fees could be an instrument for generating more resources for opening up additional study places in higher education, as well as for targeting more direct student financial support to attract more lower SES students into higher education. Tuition fees can also bring in the required extra resources to expand the higher education system, without any negative effects on higher educational access for underprivileged students as is shown in the Netherlands and many other countries.

In respect of the Netherlands, previous studies indicated a very slight decrease in the effect of social background on educational attainment, even before the 1986 student funding reforms. Our analysis demonstrates that despite gradually rising tuition fees, particularly after 1986, participation patterns regarding different socio-economic backgrounds reflect a significant decrease in inequality since the 1980s. This may in part be due to the changes towards direct student support, as other circumstances remained more or less constant (like the existence of tuition fees and a stratified secondary school system). The differences between the Dutch and Czech developments may be partially explained by one additional factor: apart from its research universities, Dutch higher education has a relatively large number of students (65%) at universities of applied sciences that for their professional education attract to a large extent students from lower SES groups. This segment of tertiary education was missing in the Czech Republic until 2001, since when it has been gradually developed as part of the Czech implementation of the Bologna process.

Though our research does not show a direct causal relationship between student support systems and levels of inequality in access to tertiary education, we believe that the similarities between many aspects of Czech and Dutch societies and education systems, accompanied by different student funding approaches, lead to significant variations in access opportunities. It can be said to be at least striking that in the Czech tuition-free tertiary education system with predominantly indirect student financial assistance via the parents has led to a significant increase in inequality of education opportunities for students from lower socio-economic strata.

Finally, the facts of access and student funding developments shown in the Czech Republic and the Netherlands indicate that there is a strong need for theoretical and policy debate about the true role of tuition fees and student financial support in relation to access to higher education in order to develop better models of higher education funding that incorporate the economic and social dimensions of efficiency and equity.

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Appendix

Table A1: Distribution of variables used in the analysis (%)

Variable and categories	Czech Republic	The Netherlands
Number of analyzed respondents	8 628	17 853
Respondent's education (REDU)		
Primary or less	0.3	6.9
Lower secondary	10.0	21.3
Upper secondary	76.1	39.9
Tertiary	13.5	31.9
Attained secondary education (SECEDU)	89.7	71.4
Attained tertiary education (TEREDU)	14.3	32.6
Father's education (FEDU)		
Primary or less	0.9	34.4
Lower secondary	19.3	31.1
Upper secondary	71.4	17.8
Tertiary	8.3	16.6
Mother's education (MEDU)		
Primary or less	1.6	40.4
Lower secondary	40.2	40.9
Upper secondary	54.8	11.4
Tertiary	3.4	7.3
Father's class (FCLASS)		
Unskilled manual	8.1	6.2
Skilled manual	60.5	37.3
Non-manual	21.6	33.9
Professional	9.8	33.8
Financial problems when teenager (POOR)		
Most of the time	8.5	6.2
Often	12.3	9.6
Occasionally	29.1	17.2
Rarely	23.3	17.0
Never	26.8	49.9
Age group (AGE4)		
55 and higher	21.2	20.2
45 – 55	25.2	25.1
35 – 45	22.5	28.1
Less than 35	31.0	26.6

Source: Survey on Income and Living Conditions of Households 2005.

Table A2. Principal component analysis: factor loadings after Varimax rotation.

	Czech Republic				The Netherlands			
	>55	45-55	35-45	<35	>55	45-55	35-45	<35
FEDU	0.829	0.832	0.847	0.853	0.851	0.846	0.847	0.847
MEDU	0.723	0.734	0.744	0.719	0.762	0.737	0.759	0.779
FCLASS	0.781	0.753	0.791	0.781	0.608	0.638	0.642	0.748
POOR	0.424	0.473	0.448	0.486	0.409	0.355	0.434	0.248
% of var.	50.0	50.5	52.4	52.3	46.0	44.8	47.3	48.6

Chapter 9

Effective Universities: Some Considerations of Funding, Governance and Management

Paul Temple

Introduction

The European Commission's September 2011 Communication on "the modernisation of Europe's higher education systems" (European Commission, 2011) indicates a clear proposed direction of travel so far as structural issues affecting European higher education are concerned. Institutional consideration of strategic priorities, performance-based funding for public universities, seeking diversified funding sources, and improved methods of internal management are highlighted, as well as the autonomy and improved management that institutions will need to achieve these objectives. What seems in fact to be proposed is that European universities should aim to become "entrepreneurial universities" broadly on the model set out by Burton Clark well over a decade ago (Clark, 1998), and which was also considered more recently in the context of a Framework 6 project, a summary of which was published under the title *Entrepreneurialism in universities and the knowledge economy: diversification and organizational change in European higher education* (Shattock, 2009).

This chapter will consider ideas and findings which bear on these topics and suggest how these priorities might be achieved in practice. What further steps need to be taken to realise some version of the entrepreneurial university – and how will European universities look if they do move in this direction?

European higher education in context

The expansion of higher education that has been seen globally in recent years - usually seen as a response to the demands of developing knowledge-based economies - has posed financial and managerial challenges to both governments and universities. When elite higher education systems were the norm in most European countries, admitting perhaps less than 10% of young people in the school-leaving age group, unit costs may have been high but the cost of funding such systems largely from public sources was modest as a proportion of public spending. The beneficiaries of this elite system tended mainly to be young people who had attended selective, academically-oriented high schools, and who then mostly went on to join the national elite. A study of the UK underlines the

continued dominance of Oxford and Cambridge Universities in supplying recruits to the national elite at the end of the twentieth century, despite these institutions forming a much smaller proportion of national higher education provision than they did at the start of that century (Williams and Filippakou, 2010). It is easy, then, to imagine how public funding for a small, elite system was maintained when it was largely the preserve of the national elites.

The creation of higher education systems across Europe that are moving towards mass higher education provision of around 50% of the relevant age group – currently Poland’s participation rate at 41%, is around the OECD average – has meant that, in most countries, some form of cost-sharing for higher education has arisen, or is at least being debated (Santiago *et al.*, 2008: 163). This is never an easy policy to design and implement, being unpopular with potential students, their families and often with academics (the views of taxpayers who do not attend universities are rarely heard), and usually provides a convenient cause for politicians in opposition to the government. Nevertheless, OECD data show that private contributions to the costs of higher education are increasing steadily, across Europe and around the world (Santiago *et al.*, 2008: 172) – a notable outlier being Ireland, where tuition fees were introduced and then abolished in 1996, when a new government came to power having campaigned for their removal.

Research funding is another area that has come under increased scrutiny across Europe. There is a debate about whether league tables which are largely driven by research outputs, such as the Shanghai “Academic Ranking of World Universities”, adequately reflect the work of European universities (CHERI, 2008). The impact of league tables on national governments (and of course individual universities), around the world, has been remarkable, and has thrown into sharp relief the perhaps overlooked role of the university as a symbol of national pride (Watson *et al.*, 2011: 13). This is perhaps a paradoxical result when the European university, at least, was often thought of as a trans-national institution, concerned with knowledge wherever it was found, rather than an instrument for purely national economic or other ends – though as Watson *et al.* point out (5), the history of higher education provides examples of institutions with different missions, from professional formation in the middle ages, to nation-building in Europe and the United States in the nineteenth century, to for-profit businesses in the twentieth century.

A number of European countries have considered how advanced research can be organised in order to achieve better results from existing levels of funding. The UK has perhaps gone further than most through its regular series of Research Assessment Exercises (Elton, 2000), starting in 1986 with the next one due in 2014, which have led to a concentration of public research funding in a

small number of universities which have been able to demonstrate research “excellence” – and which has helped to ensure that the UK has usually between four and six universities in the European top-ten in most league tables.

Changes in European higher education systems

Recent research carried out on behalf of the European Commission (CHEPS, 2009) has shown that higher education systems across Europe are changing at a speed that might be considered to be surprising – certainly by readers of the Commission’s 2011 Communication, with its “must do better” message to Europe’s universities. Other recent research has concluded that “state investment in university institutions in Europe provides a necessary platform from which diversification and entrepreneurialism can take place” (Shattock, 2009: 8). This is an important point: state funding of higher education, when it is provided to institutions that are reasonably autonomous, and thus able to respond quickly to changing circumstances, can provide the basis for entrepreneurial developments – entrepreneurial in the sense of recognising new opportunities, moving in new directions, and taking some risks; not necessarily making large profits. State funding and entrepreneurialism are not necessarily in opposition.

In the years since the mid-1990s, for example, these studies show that formula-based funding of public universities (that is, financial allocations made on the basis of a transparent algorithm, normally driven largely by student numbers by subject, level and mode of attendance) has become the dominant basis of financial arrangements between national ministries of higher education and the universities that they oversee. This changed funding methodology is set, in an increasing number of European states, within a framework of quasi-markets, contracts for the provision of services by universities, and at least partial deregulation over matters such as staff employment, curriculum design and control over premises. Naturally, the picture across Europe is mixed; and it also seems that in some places the formal picture of deregulation and increased institutional autonomy may not be matched by the position found in day-to-day practice (Temple, 2011).

Universities across Europe have also begun to diversify their sources of income, including income from student fees (which is becoming particularly significant in central and eastern Europe, even if the fee structures in some countries appear to be regressive in practice (Kwiek, 2008)) and from research and knowledge transfer contracts with public and private organisations of all kinds (Jongbloed and Zomer, 2012). Governance too is changing, although again the picture across Europe is mixed (Mora and Vieira, 2009). These more diverse, less centralised higher education systems are also adopting new modes of evalu-

ation and accountability, which, whatever their drawbacks, are leading universities to give more consideration to external constituencies in ways that were largely unknown just a few decades ago (Temple, 2011).

These changes can be seen as moving universities in the direction of becoming entrepreneurial, in Clark's (1998) sense of the term. Yet one of the defining features of the entrepreneurial university – Clark also called it the “stand-up university” – is that it should set its own priorities and not tamely accept those proposed by the state and reinforced through the state's funding mechanism. There is an inevitable tension here between what the state – which, at least in the EU, can legitimately claim to be speaking on behalf of citizens in general, and taxpayers in particular – wants, and what universities might want. This tension is not addressed in the 2011 Communication, which apparently sees no difficulties inherent in universities becoming simultaneously more independent of national governments and yet continuing to meet the requirements of their national governments.

This tension is, of course, not a new one. In some countries, it is addressed, at least in part, through a binary system of higher education, where “classical” universities pursue scholarship and pure research, normally with higher levels of autonomy, while technical institutions might respond more directly to needs in the economy and society, with closer oversight from national or regional government. This was the basis, for example, of the UK's binary system of universities and polytechnics, which existed from the early 1970s until the early 1990s, where the two sectors were described as having “autonomous” and “service” traditions (Burgess, 1982). There is a question over whether knowledge can be neatly packaged-up in this way: medicine, for example, is usually taught in high-status universities, yet its purpose is to produce competent professionals, rather than abstract thinkers, of the type more usually associated with technical institutions. Barnett approaches this problem by describing “two rival versions of competence”, operational competence and academic competence (Barnett, 1997), which more or less map on to the division usually found in binary structures – and this divide has clearly been found workable in practice in many different national settings.

This tension between national policies and the wishes of autonomous institutions may be observed in action at present (2011/12) in England. Here, the government proposes to introduce an extreme form of cost-sharing in the 2012 academic year, by requiring (generally speaking) undergraduate students to meet the full costs of their courses, using income-contingent government-backed loans. A large proportion of universities are expected to charge undergraduate tuition fees of about €10,000 per year. The UK government (though these arrangements are to apply only in England) believes its proposals will “tackle the

micro-management that has been imposed on the higher education sector in recent years and which has held institutions back from responding to student demand. We must move away from a world in which the number of students allocated to each university is determined [by central government]. But universities will be under competitive pressure to provide better quality and lower cost” (BIS, 2011: 2).

This paints a picture of autonomous institutions, competing in an unconstrained open market. In fact, because of the continuing need to control student numbers, due to the public expenditure implications of their student loans and other support, and because of the government’s wish to manage the market to encourage low-cost providers, both public and private (high-cost but high-status universities are also to be rewarded through extra student places), detailed central oversight (or micro-management, to use the government’s terminology) will remain a feature of English higher education. Put another way, as long as the higher education system remains significantly dependent on public funds (even, as in the English case, where there is a large proportion of private funding as well), then government intervention is, effectively, unavoidable. There will thus continue to be a tension between the Commission’s suggestion that universities should “have the autonomy to set strategic direction” (European Commission, 2011: 9) and what happens when this strategic direction runs counter to what suits the national government at that particular moment.

There will also be new tensions between universities and students. As students, or their families or employers, make ever-larger contributions to the costs of their university educations, their relationship with the university may change. In England, the government expects universities to respond to this change by improving “the student experience” and treating students more as customers, or even as consumers. Many academics see this as problematic, as it seemingly overlooks the role that students themselves have in managing their learning.

A further tension seems likely to be created if, as part of providing an enhanced student experience, universities seek to increase the number of hours of contact between students and academic staff. (Though the alluring metric of the “contact hour” crumbles on close inspection.) But universities have increasingly required their academic staff to undertake externally-funded research and consultancy: in Britain and many other countries, the budgets of research-intensive universities reflect this: undergraduate teaching is a minority activity for academics in many places. Thus, the diversification of income streams that has taken place – a usual indicator of “the entrepreneurial university” – and which have been strongly encouraged by governments, has inevitably moved the focus of attention away from undergraduate teaching in particular.

Universities have often found themselves pulled in unexpected directions by external pressures: as Clark remarked, they are too often “over-extended, under-focused; over-stressed, under-funded” (Clark, 1998: 146). In this case, the shift towards mass higher education, with the inevitable move to cost-sharing that this implies, is creating tensions with other conceptions of the contemporary university. Students will be attracted to universities high in the league-tables, positions typically gained to a large extent through excellence in research, but may then complain about teaching quality. The “contract” between students and their university, and the university and its public paymaster, will need to be re-negotiated, and this will have challenging implications for government and management.

Markets in higher education

Funding and governance issues come together when higher education markets are considered. The development of quasi-markets for organising the funding, and sometimes, as a result, the structuring of higher education can provide substantial challenges for institutional governance: a university operating in such a market will need to make important decisions affecting its future, and this demands strong internal governance. As the European research noted above (CHEPS, 2009; Shattock, 2009) shows, quasi-markets have become widespread across Europe, though used in varying ways in different countries.

These market-like mechanisms have to an extent replaced direct state control and bureaucratic, or politicised, allocation methods (Dill *et al.*, 2004; Jongbloed, 2003). Usually, the rationale for adopting these methods has been improved efficiency and effectiveness, believed to result from the reallocation of resources from worse-performing to better-performing institutions, driven by the choices of students or other individuals, and leading to better performance all round (Massy, 2004). Ideological preferences for market solutions have also played a part, as was the case in the UK in the 1980s, and subsequently (Kogan and Hanney, 2000: 63). I will leave aside the many important questions begged here, covering the validity and reliability of performance measures of universities and the availability of accurate consumer information and its limitations for users; and, above all, the problem inherent in all applications of markets to education, that of the consumer being also to a significant extent the producer, as well as being a product (Barnett, 2000: 160). So the higher education market is a very unusual type of market indeed.

Although all or most of the money channelled through the market mechanism to higher education institutions may still formally be public, control of its allocation will in part have shifted from the state educational bureaucracy, and

perhaps politicians, to private individuals. Various devices may have been employed, perhaps a government-backed loan system (as in England from 2012), a voucher system, or a “money follows the student” central allocation process. We have seen this happening to some extent in the UK when variable tuition fees were introduced from 2006: although here the private contribution is deferred until after graduation, some of the “student as paying customer” expectations arising as a result of the new fee regime have, in seems, led to a new focus by institutional managements on “the student experience”.

Although the individuals able to exercise market power will welcome it - so giving the idea some political traction - there may be a downside for society more generally. Examining the operation of markets in US higher education, Dill suggests that while there may be private benefits to students in marketised systems compared with ones based on state control, there may also be public costs. These result from a "positional arms race" as institutions scramble for prestige - in order to protect student recruitment - at the expense of arguably more fundamental goals (Dill, 2003). One effect of this competition, for good or ill, and visible in both the US and the UK, has been the increasing differentiation (seen in selectivity of student admissions and levels of research income) between what were once broadly comparable public universities (Hossler, 2004: 151).

This is one reason why many governments keep a tight grip on their higher education market: it becomes apparent when, for example, binary higher education systems are policed centrally to prevent drift across sectors. Another reason is the wish to “substitute a well-informed buyer (the state) for under-informed ones (the students)” (Massy, 2004): though, if the state knows so much better than individuals, much of the rationale for having a market mechanism in the first place is removed. A third main reason for central control of the market is to do with “knowledge society” considerations, which are giving higher education an increased salience in public policy in all Western countries. A government wanting universities to operate as the national “knowledge factory” is unlikely to stand idly by if the market it created seems to be having damaging consequences for the “factory’s” operation.

We are considering, then, a regulated quasi-market: ultimately, a tool for achieving the policies which governments now look to higher education to implement on their behalf - economic, social, regional, cultural, as well as educational.

This perspective raises the question of how intervention from the centre in these quasi-markets should be managed. Various writers have given their own labels to the means of control available in such “principal-agent” situations. Often, intervention is in the form of restrictions on the freedom of action of institutions: Jongbloed (2003), for example, describes how the Dutch government limits institutions' abilities to set their own tuition fee levels - as is also the case in

the UK (although the level will rise sharply in 2012) and other countries. We may think of such cases as intervention by *constraint*. Another form of intervention, with the market framework brought into play, is where market signals are used to encourage, or discourage, particular forms of behaviour: encouraging student recruitment by moving funding to a per capita basis, for example. We may think of this as intervention by *incentive* (or disincentive). A third form is where the market framework is set aside in a particular case, and central planning approaches are used: this is intervention by *direction*. In many countries, we can see all three types of intervention in operation simultaneously. Jongbloed (2003) draws attention also to the possibility of a fourth type, intervention by “enforced self-regulation”, where government promotes self-regulating practices among suppliers. National higher education bodies such as rectors’ conferences may perform this role.

One of the paradoxes arising from the operation of quasi-markets in politically sensitive fields such as education - healthcare offers similar examples - is that although market principles have been introduced in order to improve efficiency or to widen choice, government intervention still occurs when market-driven change has a negative impact on public perceptions - in other words, when the market produces a politically inconvenient result. This is not strictly the “moral hazard” issue, which arises when the interests of the principal and agent are misaligned, thus encouraging the agent to act in his/her own interests rather than those of the principal, but a situation where the agents’ actions (amongst other factors) have produced outcomes that are not what the principal anticipated. In the UK, a case in point has been government anxiety about the effect of falling student demand for some science courses, which has led to additional support for “STEM” (science, technology, engineering, mathematics) subjects being provided under the new student fee regime. Either in cases of this sort, or simply when an adjustment seems to be needed to the functioning of a quasi-market which appears otherwise to be working reasonably well - in the sense that institutions are changing what they do in order to meet changing demand - the forms of intervention need to be considered. In particular, if an intervention fails to take account of the operation of the existing market processes, it may lead unwittingly to a misallocation of resources.

In Europe, the UK was an early adopter of market-like mechanisms for the allocation to higher education of public funding. Over the last twenty or so years, the provision of higher education courses (as distinct from the provision of institutions or overall funded student numbers) has changed from being determined essentially by central planning, to being determined by supply and demand factors, albeit within a highly-regulated marketplace (Williams, 2004). British universities and colleges responded to this changed environment by de-

veloping what Burton Clark has called "collegial forms [of] entrepreneurialism" (2004: 184) - some, naturally, more collegial, and some more entrepreneurial, than others. Even so, by the start of the present century, the managerial dynamics of the typical English higher education institution had been utterly transformed. Managements had become focused on maintaining and expanding crucial income streams, and, generally, driving through whatever internal changes were deemed necessary for these purposes. This was allied with national and international alliance-building, vertical and horizontal integration, predation on weaker institutions, and marketing to maintain or expand market share: rather like any other corporation, in fact (Temple, 2006).

For most (though for different reasons, not all) English universities and colleges, the dominant factors in determining income have been the policies of the Higher Education Funding Council for England (HEFCE) towards the funding of teaching and research (HEFCE, 2010). Since the mid-1980s, these policies have, in essence, funded institutions on the basis of their abilities to recruit UK and other EU students, and on the quality and quantity of their research, as assessed by the regular Research Assessment Exercise (the RAE – from 2014, the “Research Excellence Framework”, or REF). This HEFCE research funding (known as “QR”) provides the basis for obtaining further research funds from public and private sources. Thus, quasi-markets, albeit of a monopsonistic character, have been created in both teaching and research, whereby universities and colleges benefit financially by responding promptly and effectively to the Funding Council’s market signals, its “manipulation of the small print of the [funding] formulae” (Williams, 2004: 249).

Although these are quasi-markets in a technical sense, they are real enough for those working within them. Failure to recruit target student numbers, or a reduced RAE score, has a relatively quick and possibly highly-damaging effect on institutional income. Furthermore, institutional reputation will suffer as a result, and in a competitive student market a potentially disastrous downward spiral of falling student numbers, falling income, and a worsening image in the eyes of potential students, can follow. Similar dynamics will operate where an institution has suffered a decline in its RAE standing, affecting perceptions of institutional status among academics, students and the wider community. In both instances, jobs will be at risk. University and college managers have, accordingly, become highly sensitive to changes that may affect their institutions in these ways, and attempt both to prevent problems arising in the first place, and to limit the damage if they do happen. Or, if they are thinking positively, they will "encourage a climate of innovation and development, where new ideas are supported and initiative is rewarded" (Shattock, 2003: 41). Either way, the unwavering focus on market-driven priorities cannot be doubted.

Some implications for university governance and management

In order to operate successfully in an environment of the kind described here, university governance needs to meet a number of criteria. One is that it should have the information it needs to make informed decisions available to it. One way of doing this is through “shared governance” (Shattock, 2002), where an academic body (a senate or academic board) and an overall governing council (which may have members drawn from outside the university) share responsibility for decisions, based on a charter or other constitutional document which sets out their respective powers and responsibilities. An advantage of this mode of governance is that a range of perspectives and experiences are brought to bear on key decisions. As the 1998 Glion Colloquium on “The University at the Millennium” noted, “universities have prospered to the extent that they have developed and share an effective and responsive pattern of shared governance” (cited in Watson, 2000: 44). But the Glion statement goes on to observe that some governing bodies “have become more politicised than has historically been true, asserting authority over areas once viewed as faculty prerogatives” (44). When universities go through difficult times, financially or in other ways, it is almost inevitable that a governing body will become more involved in what, in good times, would be considered matters of purely academic concern. The dividing line between “a purely academic matter” and a financial decision is typically blurred – almost any significant academic decision (other than, say, to study one topic rather than another in a curriculum) has financial consequences; and many decisions taken on financial grounds in a university turn out to have (sometimes unanticipated) academic consequences.

This leads us to the consideration of the distinction between governance and management in universities. The two functions are interrelated; more than that, they need to work together to support the development of an effective university. Strategy (from the governing body) and execution (by the management team) are separate, but also connected: there is no point in the governing body proposing a strategy that cannot in practice be implemented; equally, executive action needs to be undertaken within a framework of objectives and policies that reflect the institutions values and vision. The academic body, represented through the senate or its equivalent, also has to play a part, to create a dialogue. The 2011 Communication mentions university management in passing (European Commission, 2011: 9), but does not suggest that its role is any more than a subsidiary one of dealing with presumably routine matters to allow “teachers and researchers the necessary academic freedom to concentrate on their core tasks”. I propose that the task is a great deal more significant than that.

Let us begin by asking to what extent is the management task in the university distinctive. Is the university a unique organisational form, or is it, in its essentials, the same as any other knowledge-intensive organisation employing expert professional staff? I suggest that there are, in fact, important *organisational* features that do raise distinctive management issues - in other words, the difference is not because the work of an academic lawyer, say, is not the same as a lawyer working in a law firm (thinking perhaps of academic freedom – though of course this *does* raise another set of managerial concerns), but because of structural issues.

A large part of the university's uniqueness is because the university is what we may call an "integrative" organisation; and such organisations do not have single, clear aims (Temple, 2008). Although there are many individual examples, integrative organisations are all found within just a few organisational categories: as well as universities, examples are local governments and police forces. National government in general is also integrative of course - that is (or should be) its purpose in large measure – but in practice, other than at the top-most levels, only certain specialist elements of it actually are. The difficulties that most governments have in operating in integrative ways provide a large part of the daily news agenda, often being about conflicts between competing government priorities.

By contrast, most organisations are "purposive": they are animated by a single, over-riding aim. All normal business firms are purposive, as they have the fundamental aim of making profits (though they may choose to put this aim into practice in various ways). Most voluntary organisations and NGOs are purposive: Oxfam exists to help starving people. Most governmental departments and agencies are purposive: a department of transport rarely has to concern itself with foreign policy. The purposive/integrative boundary, then, is not the one between the private and public sectors.

When making both strategic and tactical decisions, the chief executives of all purposive organisations can ask themselves, "How will this affect our main purpose?" – increasing profits, helping the poor, improving transport infrastructure, or whatever it is. This is not to say that the decision will thereby become easy: there will be alternatives to be evaluated, costs and benefits to be assessed, risks estimated, the reactions of consumers, competitors, politicians or regulators to be predicted, and so on. But the desirable outcome from the organisation's point of view will be clear enough: the problem will be how to achieve it.

The governing body and chief executive of an integrative organisation, such as a university or a local authority, cannot appeal to an overriding aim – other than one so vague ("to advance learning", "to serve the community") that it merely highlights the absence of any real, sharp aim. Instead, the chief executive

finds on her desk competing demands for resources to serve ends that cannot be compared with one another, because there is no common unit of measurement, either operationally or in terms of outcomes: this is the problem of incommensurability. A university chief executive has to reconcile demands for resources as between different subjects, as between the teaching of different types of students (undergraduates, postgraduates, full and part-time, and so on), as between teaching, research, and service to the community, and other demands. To some extent, as with all integrative organisations, these questions may be solved in practice by appealing to accountancy considerations: which group of students will bring in the most fees, how profitable will the research be? But no normal university is driven strategically by such considerations: if it were, it would quickly become a commercial training organisation, a consultancy firm, or a contract research centre. Although the chief executive's problem would often be eased if budgets were larger, allowing vociferous internal claimants to be bought-off, the inherent difficulty of the decision itself would remain – and would re-appear in the next budget round. (For national governments, the relatively recent imperative of environmental sustainability is creating new conflicts with a range of other policy areas - macro-economic policy, transport and housing, to name a few - because of this problem of incommensurability. There is no sensible way that the future of life on the planet can be assessed on a measuring scale against airport expansion, but that is in effect the choice that has to be made, between two utterly non-comparable possibilities).

The way that decisions are actually made by integrative organisations has been the subject of theoretical and empirical work stretching back decades; Simon (1965, first published in 1945) was perhaps the earliest, but the common conclusion is that no objective basis for decision-making, under the conditions described here, exists. There have of course been various attempts over the years to introduce into integrative organisations the kind of decision-making discipline which is available to purposive ones. One important such attempt was by the use of cost-benefit analysis, a method which became briefly popular in UK central and local government in the late 1960s and early 1970s, precisely because it seemed to offer a solution to the incommensurability problem. The application of this technique to public policy in the UK reached its zenith, or (depending on your point of view) its nadir, in the 1971 Roskill Report on the options for the third London airport, when the process demanded that a financial value be placed on, for example, a Norman church. The failure of cost-benefit analysis to live up to the hopes for it demonstrates the intractable nature of the difficulty.

The purposive/integrative distinction, incidentally, offers an explanation of the common observation about the interchangeability, not to say vagueness, of the mission statements of organisations like universities, local authorities and

police forces. The mission statement cannot be strikingly original when each such organisation has broadly the same range of demands to juggle with, and when no single goal can be identified. The strength of the mission statement then comes to depend more on literary skills than on the quality of the strategic choices made.

In integrative organisations such as universities, particular demands are made on governing bodies, management and staff in general. The absence of an obvious purposive goal – make a bigger profit, save people from starvation – means that more subtle organisational targets have to be devised. These are typically to do with the way in which the organisation works as whole, although individual unit-level achievements naturally contribute to the sense of organisational well-being, or lack of it (Watson, 2009). We may note that the integrative nature of the university tends to mean that most of any given university's academic units will be of comparable academic standing: the unusual (and probably unstable) situation is where, say, a poorly-performing institution in research terms has one or two world-class departments, or vice-versa. There are several reasons for this, including peer-pressure and staff ending up in institutional settings with which they are comfortable, but the difficulty of making sensible resource allocation decisions between departments with very different levels of academic achievement must be one of them: are you going to take resources from a high-achieving group in order to develop an under-performing one, or are you going to try to develop your stars even further? In contrast, many companies consist of operating units with persistently varying performances, though every chief executive would obviously like them all to be stars. Takeovers are often driven by this gap in internal performance, with the belief that a new management can extract value from this situation.

What does the idea of the integrative organisation mean for university governance and management? It means that:

- Internal networks need to work well, so that information gets to top management, and hence to the governing body, and gets from here to the rest of the organisation, quickly and accurately. Internal movement of staff helps this, as do social and other events that produce mixing, and social spaces in the buildings.
- The political nature of the integrative organisation must be understood. The test of many decisions will be whether or not they work in political terms, whether they are broadly acceptable to key internal and external constituencies.
- But at the same time – and this is another reason why management jobs in universities and other integrative organisations have different characteristics

to jobs in other sorts of organisations – top management must be seen as being impartial in adjudicating between rival claims. In a purposive organisation, by contrast, the operating units making the biggest contribution to total output will probably receive preferential treatment – and this will be generally accepted (even if it isn't much liked) by the other units. The military maxim – in attack, reinforce success; in defence, reinforce failure – provides an analogy. Most integrative organisations, given the choice, would rather prevent a catastrophe than achieve a stunning success, whereas a purposive organisation, operating in “attack” mode, will tend to close down under-performing units and reallocate resources to successful ones. There are of course many examples of universities doing just this, but it is noticeable that it usually becomes a big story when it happens – precisely because it is so unexpected.

- Devolved budgeting, and other devolved responsibilities, may be used to prevent central decision-making stalling as it attempts to reconcile the irreconcilable. Although devolved budgeting has operational benefits, it is also an admission of the limitations of management in integrative organisations.

Conclusions

Effective governance and management are fundamental to creating the kinds of universities envisaged in the 2011 Communication, but the changes they will have to devise and implement will create new tensions. The difficulties inherent in operating market-based systems, in making decisions in a more entrepreneurial framework, with new power relationships involved, will require governing boards and senior professional managers who understand the unique character of universities and yet are able to persuade them to change.

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Chapter 10

The “Global Strategy” 2007 – 2011: The External Attractiveness of the EHEA and Its Internal Uneasiness

Pavel Zgaga

International “attractiveness” and “competitiveness” have been high on the list of European higher education priorities for a long time. After years of discussion, the London summit of the Bologna Process adopted the strategy “The European Higher Education Area in a Global Setting” (*Global Strategy 2007*) on the issue. The aim of this chapter is to investigate its implementation during the first few years. It has only been four years; there has certainly not been enough time for substantial developments in this area. Furthermore, there is not much sound data yet. The most important data sources are reviews and reports prepared for the Leuven / Louvain-la-Neuve (2009) and Budapest-Vienna (2010) conferences, or in parallel with them, but there has not been much other research on the topic. We will employ a combined approach using both the reviews prepared within the Bologna Process as well as the external (or “independent”) ones to draw some conclusions. The chapter has been accomplished in November 2011 and does not take into account outcomes of the Bucharest (2012) conference.

The “global dimension” and the Bologna Process self-reflected

Since 2005, “Bologna stocktaking reports” have been regularly prepared by the Bologna Follow-up Group (BFUG) for the biannual ministerial conferences. These reports provide analyses of developments in the priority areas between two conferences; and end with individual “scorecards” for each country as well as with a “summary scorecard” for all. They are based on data from questionnaires designed by the BFUG and filled in by the European Higher Education Area (EHEA) countries (i.e. liaison staff at ministries) with a recommendation to consult all stakeholders about the contents of their responses. Therefore, these stocktaking reports cannot be taken as “independent”; they are largely based on internal self-assessment.

Among the 22 clusters, including questions from the BFUG template for the 2009 national stocktaking report, countries also had to respond to one cluster related to the “attractiveness of the EHEA and cooperation with other parts of the world”. It contained four questions: on the implementation of the *Strategy*, on concrete action to respond to its five core policy areas, and on measures tak-

en to apply the OECD and UNESCO *Guidelines for Quality Provision in Cross-border Higher Education* (2005). Countries had to respond by 1 November 2008. This deadline made it possible to reflect on the situation up to one and a half years after the London Conference; though some responses were delayed.

The *Stocktaking Report 2009* only contains a short chapter on “the EHEA in a global context” (Rauhvargers *et al.* 2009, 93-95). It is the shortest chapter in the report and quite descriptive. It points out that “a number of countries mentioned in their reports that the implementation of the Bologna reforms has made the EHEA more attractive as a higher education destination and provider” (*ibid.* 94) but, in conclusion, an inherent (self-)critique was also given: “However, while considerable progress has been made in the fields of information and promotion, most countries seem to promote their own higher education systems internationally and very few promote the EHEA” (*ibid.* 95). This cluster of questions did not appear in the scorecard.

A more detailed progress report – with some recommendations – was prepared by the BFUG Working Group “European Higher Education in a Global Setting” (2007-2009). It reflects implementation of the Strategy during the first year and a half after its adoption in the EHEA member states as well as among the Bologna consultative members, i.e. organisations and associations with a clear mission in higher education at the European level. The five core policy areas of the *Strategy* are elaborated in a descriptive way on the basis of responses gathered from the same national reports, but they go into greater detail than the Stocktaking Report. With regard to the *first area*, there is a lot of evidence for improved information about the EHEA (websites, brochures, monographs etc.). However, “the national reports show, [that] most of the 46 EHEA countries [...] provide in-depth information on their national higher education systems” (*EHEA in a global context* 2009, 5). The Working Group recommended that each country “should provide information for international students and staff in a common format” and create “an EHEA-wide online information system on scholarships” (*ibid.* 6).

In relation to the *second policy area* (i.e., promoting EHEA) higher education institutions are supposed to be the key actors in international promotion. Besides them, their networks are important as are, in some cases, regional entities, national agencies as well as international organisations. The EU in particular (e.g. the Global Promotion Project, 2007) together with the Council of Europe and UNESCO play important roles in this area. However, the report complains that “no systematic overview of these activities exists” (*EHEA in a global context* 2009, 7). As was planned in the *Strategy*, specialised organisations (“internationalisation agencies”) have started to appear at the national level in some countries, in parallel to those countries which had already established them be-

fore. Yet, the smaller a country is and the further to the East it is located the less this is the case. Some countries which highly prioritised this area have established information offices abroad and “countries with a very advanced promotion campaign” have also provided “further promotion activities” (ibid. 9). Countries – now also including smaller ones as well as those to the East – participate at higher education fairs abroad and provide media campaigns much more often. Most frequently, countries report that national websites have been developed or renewed so as to offer better information to non-EHEA customers. Still, “very few countries in the EHEA make use of all of the above instruments” (ibid.). The Working Group recommended, among other items, that in the future each “country should designate a contact point for information and promotion activities” (ibid. 12).

The *third* and *fourth policy areas* – strengthening cooperation based on partnership and intensifying policy dialogue – are presented extensively (ibid. 12-18) but draw quite a mixed picture: on one hand it is obvious that relatively strong relationships have been established with some countries and regions worldwide while, on the other, these two areas are not immune to tensions between *cooperation* and *competition* in higher education today. A number of countries refer here mainly to strengthening their bilateral activities. Again, a really strong actor in this regard is the European Commission which has developed several inter-regional dialogue and partnership initiatives (e.g. EU-LAC, ASEM, EU-ASEAN, the Euro Mediterranean partnership etc.). Many activities have also been launched or sustained by the Bologna consultative members, both among international organisations (e.g. the Council of Europe; UNESCO) and associations (e.g. the EUA Internationalisation Strategy; the EI and ESU Let’s Go campaign, etc.). A recommendation is made at the end of this chapter to further enhance and intensify all such balanced bilateral and multilateral cooperation based on partnership (ibid. 18).

Related to the *fifth policy area*, the report focuses mainly on the implementation of the *Lisbon Recognition Convention* and the activities of the ENIC and NARIC Networks which now have national offices in all EHEA countries. The EHEA countries and the BFUG consultative members have obviously been active in this area, which has traditionally been among the top BFUG priorities. To date, all EHEA countries but one (i.e. Greece; due to legal problems) have ratified the *Convention*. It is clear that the Bologna Process has contributed much to the increased transparency in quality assurance as well as to enhancing trust and confidence in European higher education, in particular by launching the *European Quality Assurance Register for Higher Education* (EQAR) in March 2008. At this point the Working Group suggested in its recommendations that the ENIC and NARIC Networks should “establish dialogues on recognition policy

with other regions” in the future and “explore the implications on recognition” of the structural changes in European countries achieved within the Bologna Process. In addition, it recommended launching “a mapping study of TNE [trans-national education] provision to better understand the different kinds of provision involved” and stressed that “TNE is subject to the same principles of public good and public responsibility that constitute the basis for all higher education” (ibid. 21).¹

Some highlights found in this report as well as in the *2009 Stocktaking Report* can be found in the *Leuven/Louvain-la-Neuve Communiqué* (2009) and the *Budapest-Vienna Declaration* (2010). Thus ministers ask the BFUG in the 2009 *Communiqué* “to set up a network [...] for better information on and promotion of the Bologna Process outside the EHEA” for the 2012 ministerial conference in Bucharest. In the *Declaration*, they note the “considerable interest in other parts of the world”, welcome it again “and look forward to intensifying our policy dialogue and cooperation with partners across the world”. The Policy Forum with non-EHEA partners, organised in 2009 and 2010, is illustrative of this point.

The “global dimension” in the 2009 national reports in detail

Data from the 2009 national reports to the BFUG give an insight into this issue which cannot be replicated by any other source; therefore, we have decided to analyse most of them² again for the purposes of this review. The archives are relatively rich though several details in the national reports were not elaborated by the BFUG and its working groups. We compiled the main findings to create two tables; the aim was to gain a more detailed and systemic insight into the implementation process of the *Strategy* during its first year and a half (see *Table 1*) as well as into the application process of the OECD/UNESCO *Guidelines for Quality Provision in Cross-border HE* (2005) at a national level (see *Table 2*).

Table 1 has been compiled on the basis of responses to the question “what has your country done?” to implement the five core policy areas of the *Global Strategy*. In the table these five areas are checked against various types of activity which were most frequently mentioned in the national reports. For our purposes, *the EHEA countries are classified into four groups*: the “old” EU member states

1 At this point, the Working Group followed a recommendation from the Bologna Seminar “Quality Assurance in Transnational Higher Education: From Words to Action”; London, 1-2 December 2008.

2 The archives which were used consist of 40 national reports; the six missing countries are Bosnia and Herzegovina, Bulgaria, Luxembourg, France, Moldova and Portugal. These countries are relatively evenly spread across the four EHEA regions classified here; the lack of data most probably does not affect the general trends.

(OEU: 12); the “new” EU member states (NEU: 11); Western European non-EU countries (WEu: 6) and Eastern European non-EU countries (EEu: 11). As mentioned, six countries are unfortunately missing in our archive files but this should not cause any real perturbation when interpreting the results and identifying general trends. In extracting the data from the national reports, all vague responses (e.g. too general, declarative, unclear, irrelevant to the topic etc.) were omitted. In two specific cases, the responses from two national reports (Belgium from the Flemish and French Communities and the UK with England-Wales-Northern Ireland and Scotland) were synthesised into one. The quality of the reports differs: some are systematic and detailed, others were obviously written in a hurry and are (too) short. In some cases one or more questions were left unanswered.

The findings in *Table 1* are presented in different ways to emphasise the frequency of responses. Boxes with a high frequency (more than 20 countries; i.e. one-half of the reports) are surrounded by a double bold line; an average frequency (10 to 20 countries) by a bold line; and a low frequency (7 to 8 countries) by a bold dotted line. In addition, all these boxes are coloured light grey. When a certain type of activity is reported by six countries or less, the boxes in the table are surrounded by a normal line and not coloured; those types of activity where only “no” responses were given are coloured dark grey.

The BFUG encouraged the national representatives who filled in the template to consult national stakeholders about the contents, yet most of reports mainly contain data and descriptions which can be directly attributed to the Ministry responsible for higher education or the national bodies and agencies closely cooperating with it. Therefore, the “picture” that emerges should be seen more as a “Ministerial View” than a real synthesis made after consulting stakeholders and obtaining other relevant information from them. Taking these limitations into account, we can see *two really pronounced types of activities* (boxes with a double bold line): first, publishing brochures and setting up special websites (policy area 1: improving information); second, bilateral and multilateral contacts and agreements between the EHEA and non-EHEA countries (policy area 4: policy dialogue). However, even in those two cases which have the highest frequency *only about one-half of the EHEA countries* (23 and 21 respectively) are involved.

Besides producing brochures and web pages there is no other really frequent type of “improvement” activity identified in the *first policy area*. Higher education fairs, focused events (e.g. conferences) and support from specialised national agencies are all low-frequency types of activity, while other types classified in the table appear in national reports only very sporadically (perhaps also due to the lack of consultation with stakeholders?). The situation is similar in the *fourth policy area*; apart from multilateral contacts and agreements, no other type of activity is mentioned by more than four countries.

A somewhat more “colourful” picture appears in the other three core policy areas. In the *second area* (i.e. promotion, attractiveness and competitiveness), higher education fairs and a variety of special actions are specified at a moderate frequency; while EU initiatives and programmes – surprisingly – represent a low frequency. In the *third area* (cooperation based on partnership), bilateral and multilateral contacts and agreements are again in the forefront, but this time together with activities by higher education institutions. Finally, in the *fifth area* (recognition), it could be expected that bilateral and multilateral contacts and agreements and specialised agencies (ENIC and NARIC offices) would be strongly highlighted – but they are only denoted by a moderate level of frequency.

Thus, by far *the most frequent type of activity* in implementing the Strategy during its first two years seems to be *bilateral and multilateral contacts and agreements*. In fact, this is a relatively routine activity at ministries in general, not only with regard to the EHEA *Global Strategy*. We have guessed that “the view of the Ministry” seems to have prevailed in the national reports and, therefore, this finding should not be a surprise. The frequency of this type of activity is most probably overestimated in the national reports (it is not only typical for this purpose) in a similar way as e.g. the frequency of activities of higher education institutions seems to be underestimated (they are not seen well enough “from afar”; the institutions could give a better insight). By contrast, *EU initiatives and programmes* as a type of activity were mentioned by only a few EU countries and only by one non-EU country. It seems that national reporters focused on reporting “from inside the Ministry” – not taking great account of activities where “other actors” play the main role (e.g. the European Commission at the macro level, higher education institutions at the micro level). Certainly, Ministries operate under constant public and media pressure and should present their “positive” actions so; yet this usually produces a “professionally deformed picture” as we can note here.

All these points also clarify why more independent research is needed about the Bologna Process. Considering these problematic aspects it should be recommended that the BFUG organise the next “stocktaking exercise” with a stricter methodology and procedures.

Special actions also appear as a relatively frequent type of activity; individual national reports mention them in all five policy areas but most often in the second (promotion). They require more financial support: most often countries report about launching their own programmes for promoting cooperation or increasing mobility (either incoming or outgoing, in a few cases both) etc. Special actions are mainly reported from the “old” EU countries, while there was only one response registered by an Eastern European non-EU country.

Table 1: Activities at the country level on implementing the Global Strategy (2007–2008)

What has your country done to:	brochures, Internet etc.	HE fairs, conferences etc.	special activities, activities	bi/multilateral contacts & agreements	EU initiatives, programmes	International fora	HEIs action & cooperation	university networks	specialised agencies, institutes
(1) improve information on the EHEA outside Europe?	OEu = 10 NEu = 8 WEu = 2 EEu = 3	OEu = 4 NEu = 2 WEu = 1 EEu = --	OEu = 1 NEu = 2 WEu = -- EEu = 1	OEu = 2 NEu = 1 WEu = -- EEu = 1	OEu = 1 NEu = -- WEu = -- EEu = --	OEu = 1 NEu = 1 WEu = -- EEu = --	OEu = 1 NEu = 1 WEu = -- EEu = --	OEu = -- NEu = -- WEu = 1 EEu = 1	OEu = 3 NEu = 4 WEu = 1 EEu = --
(2) promote and enhance its attractiveness & competitiveness?	OEu = 2 NEu = 2 WEu = -- EEu = --	OEu = 4 NEu = 7 WEu = 1 EEu = --	OEu = 8 NEu = 2 WEu = 1 EEu = --	OEu = -- NEu = 2 WEu = 1 EEu = 3	OEu = 5 NEu = 2 WEu = -- EEu = 1	OEu = -- NEu = 1 WEu = -- EEu = --	OEu = 2 NEu = 2 WEu = 1 EEu = 1	OEu = -- NEu = -- WEu = -- EEu = --	OEu = 3 NEu = 2 WEu = -- EEu = --
(3) strengthen cooperation based on partnership in HE?	OEu = -- NEu = -- WEu = -- EEu = --	OEu = -- NEu = -- WEu = -- EEu = --	OEu = 6 NEu = -- WEu = 1 EEu = --	OEu = 4 NEu = 5 WEu = 1 EEu = 4	OEu = 2 NEu = 3 WEu = -- EEu = --	OEu = 1 NEu = -- WEu = -- EEu = 1	OEu = 6 NEu = 3 WEu = 3 EEu = 6	OEu = 2 NEu = 2 WEu = 1 EEu = 1	OEu = 1 NEu = 1 WEu = 2 EEu = --
(4) intensify policy dialogue with partners from other world regions?	OEu = -- NEu = -- WEu = -- EEu = --	OEu = -- NEu = -- WEu = -- EEu = --	OEu = 3 NEu = 1 WEu = -- EEu = 1	OEu = 7 NEu = 5 WEu = 3 EEu = 6	OEu = 2 NEu = 1 WEu = -- EEu = --	OEu = 4 NEu = -- WEu = -- EEu = --	OEu = 1 NEu = 1 WEu = 1 EEu = --	OEu = 1 NEu = 1 WEu = -- EEu = --	OEu = 1 NEu = -- WEu = 1 EEu = --
(5) improve recognition of qualifications with other world regions?	OEu = -- NEu = 1 WEu = -- EEu = --	OEu = -- NEu = -- WEu = -- EEu = --	OEu = 1 NEu = 1 WEu = -- EEu = --	OEu = 2 NEu = 5 WEu = 1 EEu = 4	OEu = -- NEu = -- WEu = -- EEu = --	OEu = -- NEu = -- WEu = -- EEu = --	OEu = -- NEu = -- WEu = -- EEu = 1	OEu = -- NEu = -- WEu = -- EEu = --	OEu = 7 NEu = 3 WEu = 2 EEu = 4

OEu (“old” EU) = AT, BE, DK, DE, EL, FI, IE, IT, NL, ES, SE, UK (12)
 NEu (“new” EU) = CY, CZ, EE, HU, LV, LT, MT, PL, RO, SK, SI (11)
 WEu (Western Europe; non-EU) = AD, CH, IS, LI, NO, VA (6)
 EEu (Eastern Europe; non-EU) = AL, AM, AZ, HR, GE, MK, ME, RU, RS, TR, UA (11)
 Missing data = BA, BG, LU, FR, MD, PT (6)

Source: National Bologna Reports, 2009

It is interesting to observe how our *four EHEA “regions”* performed in respect of the five policy areas as well as regarding the types of activity. In general, non-EU countries, both to the West and East, appear less frequently in the table than EU member states. The latter are perhaps more familiar with responding to questionnaires and reporting to Brussels – and they can also use their experience as an advantage in responding to the BFUG questionnaires. However, a few cases differ from this pattern: e.g. the shares of the four regions are quite equal in the third policy area (cooperation) in respect of the activities of higher education institutions. Bilateral and multilateral contacts seem to be more frequent among Eastern non-EU countries though these countries do not report attending fairs much and do not report on specialised agencies.

What do “non-Bologna” reports say?

Implementation of the OECD/UNESCO *Guidelines for Quality Provision in Cross-border Higher Education* (2005) is another issue tackled in the national reports that is important in this context. The template for the national reports asked about the application of the *Guidelines* to both the cross-border provision of domestic programmes and incoming programme provision. A compilation of the responses in the reports is presented in *Table 2*.

Table 2: The OECD/UNESCO Guidelines for Quality Provision in Cross-border HE

Applied to:	YES	NO	No answer	Not applicable
(1) cross-border provision of your education programmes	OEU = 8 NEU = 5 WEu = 2 19 EEU = 4	OEU = 2 NEU = 4 WEu = 1 12 EEU = 5	OEU = 2 NEU = - WEu = 1 5 EEU = 2	OEU = 1 NEU = 1 WEu = - 2 EEU = -
(2) incoming higher education provision	OEU = 6 NEU = 9 WEu = 1 19 EEU = 3	OEU = 4 NEU = 1 WEu = 2 11 EEU = 4	OEU = 2 NEU = - WEu = 1 6 EEU = 3	OEU = 1 NEU = - WEu = 1 2 EEU = -

OEU (“old” EU) = AT, BE, DK, DE, FI, EL, IE, IT, NL, ES, SE, UK (12)

NEU (“new” EU) = CY, CZ, EE, HU, LV, LT, MT, PL, RO, SK, SI (11)

WEu (Western Europe; non-EU) = AD, CH, IS, LI, NO, VA (6)

EEu (Eastern Europe ; non-EU) = AL, AM, AZ, HR, GE, MK, ME, RU, RS, TR, UA (11)

Missing data = BA, BG, LU, FR, MD, PT (6)

Source: National Bologna Reports, 2007-2009

As can be seen, the majority of countries reported they applied the *Guidelines* in both directions; however, the *majority* is again represented here *by only about one-half of the EHEA countries*. Either for legal or country size reasons the

question was not applicable in a few cases, while some countries simply did not respond. Three years after its adoption, the application of the *Guidelines* was obviously not (yet) a settled issue in the EHEA.

The number of countries which responded positively to both questions is the same but they are not exactly the same countries. On one hand, eight “old” EU countries applied the *Guidelines* to *their cross-border provision*, but only six of them did the same to *incoming higher education*; on the other hand, for the “new” EU countries this ratio is reversed (i.e. 5 versus 9). Countries which responded positively to one or other question usually report that they applied the *Guidelines* through their accreditation and quality assurance systems and/or bodies. There were some responses by smaller countries saying that they do not offer their education programmes abroad and, therefore, they do not regulate this issue; however, they do regulate incoming educational provision. In a few cases, the issue is left to higher education institutions to decide on.

Very recently, the OECD also published a survey monitoring the current level of compliance with the OECD/UNESCO *Guidelines* (OECD 2011). Here, the countries involved do not match the “Bologna Club” and the methodology is different from the BFUG one;³ nevertheless, some highlights from this document are very informative in our context. According to their survey, “countries report a high level of compliance” with the *Guidelines*’ recommendations but “the degree of implementation [...] varies strongly between countries”; i.e. from 45% to 95% (ibid. 6). The report identified the major remaining gaps “in the establishment of a system of registration or licensing for incoming cross-border higher education providers [...], more consultation and collaboration between the various different national or international stakeholders [...], and most notably improvement in the capacity for quality assurance and accreditation of cross-border education in its various modes, i.e. incoming and outgoing institutions and programmes, and distance education” (ibid. 9).

Let us return to the BFUG 2009 survey. Here also, countries report a lot of activity and some developments are truly encouraging; yet, the general picture regarding the implementation of the *Global Strategy* as well as the OECD/UNESCO *Guidelines* still seems to be far below expectations. There are a few leading players and there are those acting with some delay but – what is of more concern – there are also those which did not respond or responded only in a very brief and formal way. This is a difficulty which not only characterises the *Global Strategy*’s implementation; similar problems have also been reported

3 “Instead of asking what countries have done to ‘implement and disseminate’ the *Guidelines*, the survey assesses the degree of compliance of stakeholder practices with the recommendations made by the *Guidelines*” (ibid. 5).

with regard to other “Bologna action lines”. Yet, any conclusion that the *Global Strategy* implementation efforts failed at the threshold of 2010 would be an exaggeration – a simplification and wrong – as equally wrong as an uncritical cheering. Firstly, less than two years is not enough time to expect decisive changes in such a complex area; at this stage only certain trends can be identified, some conclusions drawn and some recommendations formulated. Secondly, the existing data are relatively modest and gathered according to a weak methodology. Finally, the issue requires more rigorous coordination and deserves an independent, methodologically well-designed research project.

In fact, an “independent assessment of the Bologna Process” was already prepared by a consortium of three distinguished research institutes for the Budapest-Vienna Conference (Westerheijden *et al.* 2010a) and it gives hope that this practice will continue in the future. Yet, similarly as in the *Stocktaking Report 2009*, the independent assessment report did not focus much on this particular issue (“a full assessment will have to wait several years”; *ibid.* 76). Within the Bologna Process at the end of its first decade the “structural” and “social” dimensions obviously prevailed over the “external” or “global” ones – and they were given the primary positions in the report.

With regard to the strategic goal of promoting “the European system of higher education world-wide” the assessment report presents the following key findings and conclusions:

The growing ‘market share’ of the EHEA in worldwide student mobility proves that European higher education has become more attractive since the Bologna Declaration.

The growth of mobility is concentrated in some Western European countries. [...]

International observers and students do not perceive the EHEA as an area providing a uniform level of higher education degrees.

Cooperation between higher education institutions from EHEA countries and counterparts abroad has increased.

The Bologna Process has become a major focus of attention for regional and sometimes also national higher education policy-making around the world (*ibid.* 39-40).

The “external dimension”: the attractiveness of the EHEA and its internal uneasiness

Yet these findings and conclusions open an even broader set of questions which we will try to briefly address now. Yet, first we have to remember again the words from the *Stocktaking Report 2009*: the EHEA countries “promote their own higher education systems internationally and very few promote the EHEA”. Our findings fully match this conclusion. The question of why this is so leads on to another question: *what is actually meant by the EHEA and its “attractive-*

ness”? Is it a new higher education structure or just a new metaphor? What should 47 countries promote *beyond* promoting their own national systems?

There have been several attempts to define the EHEA more clearly and to establish its own identity, and thus contribute to increasing its “attractiveness”. There were long and sometimes radical discussions within the BFUG bodies (in particular before the Bergen Conference) but the definitions in official documents have remained general and quite vague. One of the key dilemmas from the outset has been the potential collision between “the national” and “the European” dimensions of higher education. European higher education remains organised and financed at a national level; and there are no signs that changes might be expected in this field.

Over a decade, the EHEA has been gradually building via a series of more or less coordinated national reforms “a unique Partnership between public authorities, higher education institutions, students and staff, together with employers, quality assurance agencies, international organisations and European institutions” that is “based on trust, cooperation and respect for the diversity of cultures, languages, and higher education systems” (*Budapest-Vienna Declaration* 2010). Yet, the EHEA is based on *voluntary cooperation* between countries with only a very “light structure” (i.e. the BFUG), and so is without any powerful “central body”. This has been both the strength and the weakness of the Bologna Process: a characteristic which has also been transmitted to the EHEA, as declared in March 2010.

There has been a long and oscillating discussion on the *attractiveness* of the emerging EHEA in the last decade. A triangle composed of the terms *attractiveness*, *competition* and *cooperation* was already recognised as a central issue for the “external dimension” debate during the preparation phase for adoption of the *Strategy* (Zgaga 2006, 121-122). This should be reconsidered from a post-2010 perspective as well.

Attractiveness is a complicated term when applied to higher education. Namely, an “attractive” *research theme*, e.g. from the perspective of a doctoral candidate, or an “attractive” *professor* from the perspective of students might contain quite different semantics when compared to an “attractive” *institution* which is today “highly ranked”. Similar complications appear when *competition* and *cooperation* are discussed. Traditional “academic competition” aimed at ground-breaking research achievements and individual fame does not have much in common with contemporary “market competition” in higher education. In addition, competition and cooperation have often been perceived as contradictory concepts.

There is some evidence of the growing attractiveness of European higher education systems and institutions; this mainly rests on the basis of mobility statistics and momentary “competition results”, e.g. rankings, impact factors, etc.

Yet, is it possible to construct a clear concept of “the attractiveness of the EHEA” on the basis of such evidence? There is an on-going discussion which seriously questions such an approach. Further, the EHEA is (still) very diverse and it is at least problematic to draw general (i.e. “continental”) conclusions on the basis of national data.

The problem with the EHEA’s attractiveness has another side. As in people’s private lives, also here, “to be attractive to somebody” should not be confused with “a desire to attract somebody”. Yet, in both cases, to achieve our aims we need to cooperate with other people but also to compete with them. It depends on the context; just as in higher education. Let us look again at the data provided by the recent Bologna reports, along with some important additional information provided by EURYDICE between the end of August 2009 and February 2010 in a report produced for the Budapest-Vienna Conference. On this basis we can draw a picture of “who the EHEA would like to attract” (see *Table 3*), but we should stress that this picture still does not tell us “who the EHEA actually did attract”.

When surveying student mobility and mobility policy issues EURYDICE, in its questionnaire, asked the EHEA countries about their “priority regions for attracting students”. This particular question was not further elaborated on by the EURYDICE report but those countries’ responses which were published (EURYDICE 2010, 50-147) allowed us to compile *Table 3*. We can see that the most frequent response from countries was that *all countries and regions are of equal priority*; but it should again be noted that this was a response from 16 countries only, or 35% of the total. We most often find the “old” EU countries in this group, but this type of a response is also visible in the other three “EHEA regions”.

Table 3: Priority regions for attracting students

1. All are of equal priority	2. EU Europe	3. Non-EU Europe	4. Middle East	5. Asia	6. USA, Canada	7. Africa	8. Latin America	9. Australia, New Zealand
T = 16	T = 16	T = 16	T = 13	T = 14	T = 11	T = 7	T = 6	T = 2
OEu = 9	OEu = 5	OEu = 3	OEu = 5	OEu = 7	OEu = 6	OEu = 3	OEu = 4	OEu = 1
NEu = 2	NEu = 5	NEu = 6	NEu = 4	NEu = 4	NEu = 1	NEu = 3	NEu = 1	NEu = 1
WEu = 3	WEu = 1	WEu = 0	WEu = 0	WEu = 0	WEu = 0	WEu = 0	WEu = 0	WEu = 0
EEu = 2	EEu = 5	EEu = 7	EEu = 4	EEu = 3	EEu = 4	EEu = 1	EEu = 1	EEu = 0

T (total) = 46 EHEA countries (as of pre-March 2010)

OEu (“old” EU) = AT, BE, DK, DE, FI, FR, EL, IE, IT, LU, NL, PT, ES, SE, UK (15)

NEu (“new” EU) = BU, CY, CZ, EE, HU, LV, LT, MT, PL, RO, SK, SI (12)

WEu (Western Europe; non-EU) = AD, CH, IS, LI, NO, VA (6)

EEu (Eastern Europe; non-EU) = AL, AM, AZ, BA, HR, GE, MD, MK, ME, RU, RS, TR, UA (13)

Source: EURYDICE, 2010

It perhaps looks a little extraordinary but the same number of responses (16 countries; 35%) are indicated in responses which identify either *EU countries* or *non-EU countries* as *priority regions* for attracting students. Does this finding speak in favour of “intra-European attractiveness”? We will come back to this issue later; here we only note that EURYDICE’s question was not limited to non-European countries only and that multiple answers were also possible. Another interesting feature at this point is that the internal distribution of responses between the “four EHEA regions” looks quite even. The EU countries are a priority region of the same intensity for attracting students to the “old” and the “new” EU countries but also to the Eastern European non-EU countries. Conversely, the “new” EU countries would like to attract students from non-EU Eastern Europe while the non-EU Eastern European countries would like to attract students from their own “region”, most probably due to their links in the past, their economic, linguistic and cultural characteristics, etc.

Therefore, at the top of the list we have three types of responses, each with 16 responses in total: the first one sees all countries as being of equal priority while the other two focus on the EHEA countries. According to the EURYDICE data, the next two priority regions (positions 4 and 5) are Asia and the Middle East. Here, both “old” as well as “new” EU countries have a major share, but non-EU Eastern Europe does not lag much behind. With 11 responses (24%), the USA and Canada follow these five groups (position 6). It is interesting that there is not much interest among “new” EU and Western non-EU countries here. Much fewer responses refer to Africa and Latin America (15% or less). Australia and New Zealand look really “very far away” from Europe.

Another report was also presented at the Budapest-Vienna Conference which might be helpful here: the *Trends Report 2010*. The EUA Trends Reports have been published biannually since 1999, and have presented highly relevant information on developments at the level of higher education institutions across Europe. They have followed the “attractiveness issue” in their questionnaires since 2003 and thus we can draw a relatively clear picture of changing trends for the interest in internationalising higher education from the point of view of European institutions (see *Table 4*).

Table 4: *International regions of interest to European HEIs*

<i>Q: "In which areas would your institution most like to enhance its attractiveness?"</i>				
Regions	Trends 3 (2003)	Trends 5 (2007)	Trends 2010	+ vs. –
EU	92	86	86	–
Eastern Europe	62	62	65	+
Asia	40	59	60	+
USA/Canada	57	50	53	–
Latin America	32	31	32	o
Africa	24	26	25	o
Arab world	16	21	22	+
Australia	23	20	14	–

Source: Trends 2010 (EUA)

In this table we can again identify the trend we found before in the EURYDICE data: European higher education institutions are primarily interested in other European higher education institutions and would like to “enhance their attractiveness” – first of all – *within* Europe. True, their interest in institutions from the EU dropped a little between 2003 and 2007 but it still remains very high (over four-fifths). In contrast, the interest in Eastern European institutions was lower (at about two-thirds) but increased somewhat after 2007. In both cases, the interest expressed could in one way or another be influenced by the Bologna Process: either strengthened by it or governed by the same factors that inspired the Process.

The findings made on basis of the EURYDICE data are reconfirmed in the cases of Asia and the Arab world (a term used by Trends 2010; EURYDICE refers to the “Middle East”): in both cases “a wish to attract” had been increasing from 2003 to 2010. The interest expressed in Asia is now the third strongest on this table – almost as high as in the case of Eastern European institutions – while interest in the Arab world “only” reached the level of one-fifth though it is on a slow and steady increase.

The third favourite region outside Europe is the USA/Canada: about one-half of European institutions would like to enhance their attractiveness in this region. Interest decreased between 2003 and 2007 (most probably due to other reasons like 9/11) but again rose somewhat during the last period of observation. Similar positions as in the picture painted by the EURYDICE data are also taken by Latin America and Africa (one-third versus one-quarter); these positions looking relatively stable throughout the decade. Australia (New Zealand is not mentioned directly in the Trends Reports) is at the bottom.

Another recent survey of 745 higher education institutions worldwide – the 2009 IAU *Global Survey Report* – asked a similar question. It also reports “a very strong pattern of intra-regional priority, with half of the world’s regions –

Africa, Asia & Pacific and Europe – citing their own regions as the top geographic priority for internationalization activities”. Also, according to this report, “North America was not seen as the highest priority region [...] for institutions in any region”. It is also interesting that the report finds that “[n]o geographic priority was chosen with relatively high frequency” (similar to *all are of equal priority* in our Table 3). Finally, the IAU Survey underlines “the low priority given to Africa, Latin America and the Caribbean and the Middle East by HEIs outside of these regions” (Egroun-Polak and Hudson 2010, 94). Despite their different methodologies, the surveys we are discussing here draw similar trends and come to more or less similar conclusions.

Attractiveness is a sterile category if it is not a mutual relationship. The question “In which geographical areas would the EHEA countries and institutions most like to enhance their attractiveness?” should therefore be complemented with another one: “Which geographical areas do the EHEA countries and institutions find attractive?” An excellent review of this was conducted six years ago (ACA 2005). By today, the picture has perhaps changed a little but a similar survey, at least to our knowledge, has not yet been performed. With regard to our discussion we quote a few characteristic findings from the report,⁴ for example: “the results reveal a clear regional pattern: Europe has a better standing in Russia and Latin America, while the US and Australia are at the top in the Asian target countries” (ibid. 221). Similarly, “classic European assets like diversity of cultures and languages, a cooperative mentality or free tuition are more attractive to Brazilian, Mexican and Russian respondents than to students from the Asian target countries” (ibid. 224) etc. Therefore, the growing interest of Europe in Asia, as we noted above, seems not to be receiving a response of equal intensity from Asia; on the other hand, the affection displayed by Latin America seems not to have an equally strong response on the side of Europe (however, it would definitely be different if we were only observing Spain and Portugal). Let us also leave to one side the fact that “Russia” is differentiated from “Europe” in this terminology.

When attractiveness is examined, a relative *neighbourhood*, geographic and/or cultural *closeness* (e.g. language) as well as *cooperative traditions* – not necessarily only educational but also political, economic etc. – usually prevail. Within the emerging EHEA, *individual countries predominantly search for partners and establish relationships depending on their feeling of closeness and common tradition* which they would like to preserve and enhance; other reasons

4 It should be noted that “world regions” in this report are again classified differently than in previous reports; respondents came from Brazil, China, India, Mexico, Russia and Thailand and expressed their opinion on studying in the EU, the USA and Australia.

only come later and at a lower intensity. Therefore, it is not (yet) the EHEA and its *Global Strategy* but histories and geographies which predominantly influence an individual country's or institution's interest in attracting somebody as well as in competing or cooperating with somebody. We should again note that within the EHEA there are relatively huge differences when we approach this issue in detail, but that would exceed our intentions in this chapter.

This conclusion is not typically "European"; on the contrary, it is global. At this point we should refer to an important finding from the last IAU Global Survey Report: "Viewed from the regional perspective there is a very strong pattern of an intra-regional internationalization focus, with all regions, except North America, noting their own region as being either the first or the second highest priority region" (Egron-Polak and Hudson 2010, 25). It seems that the internationalisation and globalisation of higher education cannot be reduced to a single logic and a single set of policy recommendations. Some institutions compete and/or cooperate at the global level while others find their focus at a regional (or even national or local) level. Pressuring good regional (national or local) institutions to compete with "the top 100" institutions globally would be a terrible mistake.

The ACA report posed a question which might sound unpleasant to many European ears: *Does "Europe" exist in the perception of international students?* The results of the survey provided the following conclusion: "There is a perception of Europe as an 'entity' in general terms and as an economic union. However, when it comes to cultural aspects and higher education, most students rather see Europe as a range of very different countries." Further, "Respondents perceive only 'a reduced Europe': almost half of them only have considerable knowledge of the UK, Germany and France. Knowledge about the UK and the US was above any other destination" (ACA 2005, 219-220).

Indeed, "a reduced Europe" has continued to attract the interest of students around the world. This growth has indeed been immense but it has also been immense in competing world regions. According to the OECD (2008 data), "3.3 million tertiary students were enrolled outside their country of citizenship" worldwide, "of whom 2.7 million (79.1%) studied in the OECD area" – a 10.7% increase in total foreign enrolments worldwide since 2007 while in the OECD area the increase was smaller at 4.9%. "Since 2000, the number of foreign tertiary students enrolled worldwide increased by 85% [...] and by 67% in the OECD area [...]. Since 2005 the rate of growth in non-OECD destinations is higher than in OECD member countries, this reflects the increasing preference to study in emerging countries" (OECD 2010, 312).

The best performing European countries are really not doing badly: "The United States received the most (in absolute terms) with almost 19% of all for-

eign students worldwide, followed by the United Kingdom (10%), Germany (7%), France (7%) and Australia (7%)”. The share of these five leading countries totals one-half (50%), although their scores are somewhat lower than in previous years as “some new players on the international education market have emerged” (p. 314). It seems that they are not predominantly European. Between 2000 and 2006, “on average, the number of foreign students has grown faster in the OECD area than in the EU19 countries, by 163 and 20%, respectively” (OECD 2010, 313).

It seems that the key findings of the ACA report of 2005 are still valid: “Europe’s share of non-European students is not bad” but its “relative disadvantage with regard to its competitors is predominantly with Asian students” and foreign students in Europe “are far from evenly spread” (ACA 2005, 9 and 56). On the other hand, the United States seem to be “attractive per se”. One of conclusions in the ACA report was: “the challenge is to create a more ‘complete’ perception” of Europe (ibid. 236).

But what could a more “complete” perception of “Europe” mean? How to create it? Is there a sound mobility policy in the EHEA countries? The EURYDICE *Focus on Higher Education in Europe 2010* asked this question and received a relatively negative answer: “Despite its importance in the European Higher Education Area, student mobility is rarely a topic that is addressed comprehensively at national level, and information on the reality of student mobility is rarely complete” (EURYDICE 2010, 38). The study finds it “surprisingly rare for a country to express clear objectives related to student mobility, and it is more common to find general expressions of desires for more mobility” (ibid. 40).

The ACA report of 2005 was commissioned by the European Commission and “Europe” has to be associated in this case with the EU and not the EHEA. Nevertheless, a picture drawn on this basis can also be important when considering the EHEA “global dimension”. As we read in the external assessment of the Bologna Process, the EHEA as such “has become a major focus of attention for regional and sometimes also national higher education policy-making around the world” (Westerheijden *et al.* 2010a, 40); however, it has not (so far?) convinced students from other world regions to change their perception of “a reduced EHEA”. At this point, the Bologna assessment report of 2010 reconfirms the findings of the ACA 2005 survey: “International students opt for certain countries rather than for ‘the EHEA’. In their choice of higher education institutions and countries, national traditions and institutional reputations play an important role [...]. Global rankings of higher education institutions have become instruments for establishing or reinforcing institutional reputations” (Westerheijden *et al.* 2010b, 80). Global rankings refer to institutions and countries, not to “areas”.

A decade after launching the Bologna Process, the dichotomy of “the national” and “the European” dimensions in higher education obviously still persists; it seems this is deepening today. Within the EHEA, as we have seen, a feeling of closeness and common tradition provide broad bases for both cooperation and competition. In this regard, the EHEA has been, first of all, a *European response* to European higher education challenges: it has been a result of an endeavour “to consolidate the European area of higher education” pursuing “the ways of intergovernmental co-operation, together with those of non-governmental European organisations with competence on higher education” (*Bologna Declaration 1999*). The real “global dimension” only expands beyond this aim and affects different actors within the EHEA differently.

Conclusion

In March 2010, the creation of the EHEA, now encompassing 47 countries, was officially declared at a celebration of the occasion in Budapest and Vienna. This was accompanied by mixed feelings. The European higher education landscape has changed immensely over the last decade yet the broader European context has also changed a lot. The enthusiasm of the post-1989 era disappeared long ago and the “European idea” itself has been challenged in several new ways, in particular with the on-going economic crisis which seems to have also provoked a political crisis or at least some loss of “European” momentum.

European higher education remains a collection of national higher education systems. In principle, this should not be seen as a deficiency. These systems are today incomparably better connected and mutually coordinated than those from 10 or 20 – not to mention 30 – years ago. However, the EHEA is not a new transnational entity. It is only a very loose entity based on the voluntary cooperation of national higher education systems. These systems are legally regulated and financed at the national level.

It would be wrong to expect the EHEA in 2011 to be a fully-fledged “Bologna Kingdom” and to act as a strong single entity against other higher education areas in the world. Last but not least, this has never been the purpose – not within the Bologna Process. Therefore, the EHEA *Global Strategy* should not be confused with national higher education global strategies (it seems that this mistake has not only been theoretical). Within the EHEA, there are countries with strong global strategies, countries with emerging strategies and countries without them.

The EHEA is not – or should not be understood as – a ranking system: if all 47 countries were to aim for “top-level attractiveness” in a race for students from other world regions then this would undermine the idea of a “common

higher education area”. Therefore, strengthening and cultivating their “common area” – which at least now formally exists – remains the main challenge in the forthcoming years. This process includes a division of labour in the field of higher education and research and the differentiation of systems and institutions.

The EHEA offers an opportunity for enhanced cooperation and competitiveness between the systems and institutions involved. It also presents opportunities for an *emerging new academic community* – an international community with a bigger critical mass. A European academic community – visible in a number of consortia and joint projects of the last decade and proven by thousands of students and teachers with a genuine experience of European higher education – seems to be emerging as perhaps the most productive outcome of the Europeanization and internationalisation processes of the last two decades. This is a community which is entering global cooperation and competition more easily than ever; it is already largely global. It can make important contributions to the EHEA regaining its momentum as well as its “global dimension” in the new decade we have just entered.

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Chapter 11

The European Debate on the Modernisation Agenda for Universities. What Has Happened Since 2000?

Georg Winckler

1. The modernisation debate

In democracies, new policy directions are rarely introduced smoothly. Quite often, even when there are pressing problems and new policies need to be developed, no political consensus on what to do can be reached. Yet, on rare occasions, especially when new governments start working, the speed with which new policies can be identified and implemented is astonishing. Much depends on the right personalities proposing the right policies at the right time.

The problem of modernising European universities has been a pressing one since the Second World War. Where are the right people, what are the right policies and when is the right time in order to get this problem solved? What should be the role of European institutions in pushing forward the modernisation agenda for universities?

Since the emergence of knowledge societies in the 1950s, with mass higher education and with intensified research, especially in the business sector, the debate on the modernisation of universities has been gaining momentum. In many countries, the modernisation issue – is an important policy item at the national – level. In this debate, it became clear that the higher education sector needs reform efforts from within the institutions as well as by governments in order to better meet the challenges of a knowledge society. However, it took until the beginning of the Bologna Process in 1999 and until the adoption of the Lisbon Agenda in 2000 that the debate on this issue took shape at the European level. Until then, only national discussions drove reforms of the higher education sector and of the research system.

Quite recently, on September 20, 2011, the EU Commission launched a communication on “An agenda for the modernisation of Europe’s higher education system” (COM (2011) 567 final, 20 September, 2011). When preparing the document, the Commission could already build on an extensive European debate since 2000. Nonetheless, this recent communication mentions the EU Commission’s first communication on this issue, “Delivering on the modernisation agenda for universities: education, research and innovation” (COM (2006) 208 final, 10 May, 2006), only once. Of course, there may be good reasons to start a modernisation debate anew. Concentrating on old arguments is not an appropriate method when pushing for modernisation. The interesting question, however,

is to what extent the 2011 communication is in line with previous communications by the Commission. Which arguments of the previous modernisation debate were taken up and which changes were made?

This contribution aims at evaluating the 2011 communication, henceforth quoted as the “Modernisation Agenda 2011”, in the light of the debate since 2000, and at exploring why old statements were dropped and new statements on the modernisation agenda were included. In a concluding section on “Lesson to be learned”, I suggest some points which seem to be vital for promoting the modernisation agenda better and more effectively at the European level in the future.

2. The Hampton Court debate 2005-2007

Although the Bologna Process started in 1999 and the Lisbon strategy in 2000 it was only around 2005 that it became evident that the Lisbon strategy especially, needed a revival. The first half of the 2000-2010 decade had passed, but not much progress was made on establishing research based global competitiveness for Europe. On the contrary, European firms were increasingly searching for new research results outside of Europe and the intensified battle for brains demonstrated the clear advantage of US, Canadian and Australian universities. Moreover, (Continental) European universities were not well placed either in the Shanghai list of excellent universities, or in the Times Higher Education league tables. In both rankings, top US universities were clearly leading the pack.

The modern growth theory, as described in Aghion and Howitt (2006), suggests that human capital formation at higher education institutions plays an especially crucial role in implementing the Lisbon strategy. The closer an economy is to the technological frontier, the more its growth rate depends on the stock of highly skilled workers. In moving towards this frontier, research based innovations, especially product innovations, become more crucial than imitating the leading economies by adopting their technologies. Obviously, when moving to this frontier, the input of European universities would be vital. Their educational outcomes, their research, would be key in enabling Europe to move towards the frontier.

However, according to important sections of the media, see *The Economist* of September 8, 2005 on the “Brains business” or on “How Europe fails its young. The state of Europe’s higher education is a long-term threat to its competitiveness”, European universities are regarded as not being up to the job of becoming leading global institutions. They were not helping the European economy to be sufficiently innovative. The Economist even stressed: “Europe hopes to become the world’s pre-eminent knowledge-based economy”. Yet, this is “not

likely”, since universities in Europe follow a “pattern of complacency and decline” (p.10), with only Britain as a marked exception (quotes from *The Economist*, September 8, 2005).

At the same time the EU Commission has been trying to fight against this “complacency and decline”. It pushed forward the concept of modern, globally competitive universities in Europe in its communication “Mobilising the brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy” (COM/2005 152 final, 20 April 2005). Just three weeks earlier, the then newly appointed President of the EU Commission, José Barroso, gave a speech at the general assembly of the European University Association (EUA) in Glasgow, in which he advanced the idea of establishing an “EIT/European Institute of Technology”, modelled after the American MIT in Cambridge/Massachusetts. He presented his idea to several hundreds of university presidents/rectors who, of course, remained sceptical about establishing a world-class, highly competitive sister, funded by EU money. They rather wanted to get their own institutions transformed into world-class universities.

During the autumn of 2005, during the EU presidency of the UK, some further steps were taken. To the surprise of his colleagues, the UK Prime Minister, Tony Blair, suggested at the EU informal summit of Heads of State and Government at Hampton Court on 27 October 2005 that measures should be quickly taken in six key areas to prepare the EU for the forthcoming global challenges. These areas concerned the following: (1) research and development for reinvigorating research performance, (2) universities to promote more excellence, (3) demographics for widening labour market participation, (4) the energy sector for starting new initiatives, (5) controls for better regulating migration to the EU, and (6) security for better countering terrorism. The Commission was asked to pursue work on all these issues over the coming months (“Hampton Court follow up”) and to report “in a comprehensive manner” to the two European Councils under the EU Presidency of Austria in the first half of 2006 (see the Information Note of President Barroso to the Commission SEC (2005) 1464, 9 Nov 2005, p.5).

The explicit reference to universities was especially surprising for the heads of state and government at Hampton Court. Nonetheless, the initiative of the UK was quickly taken up by the Education Council on 15 November 2005. During a lunchtime discussion, ministers tackled the following questions: What should be done to increase the number of world-class universities? How to build better higher education and business links? How to encourage more post-graduate studies?

In the wake of these discussions, as the then president of the EUA and as rector of the University of Vienna, I was asked by the Austrian Chancellor

Schüssel to write a memorandum of a few pages on the university modernisation debate. He wanted to prepare himself for the upcoming EU presidency by Austria during the first half of 2006. Obviously, these issues were new on the agenda of the European Council.

According to the Hampton Court request, the EU Commission immediately started work on these six topics and reported to the December 2005 European Council on the progress made so far. When preparing the document on universities, the Commission consulted eight people, mostly from universities (I was one of the eight). They all commented on the forthcoming communication and supported its new directions. This communication “Delivering on the modernisation agenda”, as already mentioned, was published on 10 May 2006.

While stressing the enormous potential of European universities, the Commission concentrated on the changes required. Some of these changes had already been communicated before, such as an increase in the geographical and inter-sectoral mobility of staff and students, more incentives for structured partnerships with business, providing the right mix of skills and competencies for a highly skilled labour market, along with more inter- and trans-disciplinarity and more interactions with society. However, the scope of the communication transcended these traditional requests by the EU Commission with some new suggestions. For example, the communication stated that member states should not “micro-manage” universities, but instead should ensure “real autonomy and accountability for universities” (p. 5) or by postulating that “at least 2% of GDP (including both public and private funding)” should be devoted “to a modernised higher education sector” (p. 7). Finally, and this was new too, the communication advocated that excellence at the highest level should be rewarded (p. 9). According to the communication, the competition for excellence should be intensified at the European level, in particular by the proposal for creating a European Institute for Technology (EIT) and a European Research Council (ERC).

The Communication of the Commission of 10 May 2006 on universities was set to be discussed under the EU presidency of Austria during the June 2006 meeting of the European Council. Which conclusions should be drawn by the Heads of State and Government? Austria, at that time politically proud of a major university reform between 2002 and 2004 and looking forward to a general election during the autumn of 2006, was ready to come up with some strong conclusions, hoping that such conclusions might legitimise its own past efforts in transforming Austrian universities into autonomous institutions with modern governance structures.

In the text, proposed by the Austrian government to the European Council, it reads: “... notes the significance the Commission’s communication on the challenges ahead for universities and encourages the Member States to foster mod-

ernisation restructuring and innovation in the higher education sector in order to unlock its potential and to underpin Europe's drive for more growth and jobs; in particular the European Council encourages Member States to enhance autonomy and accountability of universities, to promote excellence by enhancing inter- and trans-disciplinarity and by building on existing networks. Member States should include progress achieved in these areas in their national interim reports in the framework of Education and Training 2010".

Despite this proposal, the final text of the conclusions only picked up the first part of the first sentence. The second part of the first sentence, starting with "in particular" and stressing the importance of autonomy and accountability for universities, as well as the complete second sentence, positing new reporting obligations for Member States, got cancelled.

The information given to me by the EU Presidency of Austria was that the newly appointed Federal Chancellor of Germany, being politically close to the Austrian Federal Chancellor, wanted to see these sentences omitted. In Germany, just some months before, it was decided, that all federal responsibilities for universities should be handed over to the provinces ("Länder"). This initiative ("Verländerung der Kompetenzen") came from the Christian Democrats, in power following the general election in Germany during the autumn of 2005. The German Federal Chancellor, allegedly, did not want to accept any obligations for Germany at the European level, at a time when the federal responsibilities for higher education were being completely shifted downward to the provinces.

Clearly, due to the vague conclusions of the EU Council in June 2006, the momentum built up during the EU Presidency of the UK, got lost. It was not regained during the Finnish, German, Portuguese troika of EU presidencies which lasted from July 2006 until the end of 2007. In fact, during the EU Presidency of Portugal in the second half of 2007, after the German Presidency of the first half of 2007, the Portuguese Presidency organised a high level meeting on "Modernising Universities in Europe" in Lisbon on 6 November 2007. During this meeting, the then Portuguese minister in charge of universities underlined that the issue of modernising universities is a concern at the level of member states only.

The original communication of the EU Commission merely played a marginal role at the meeting; in addition the role of the people who participated in the elaboration of this document by the Commission was marginalised too. The Portuguese government wanted to demonstrate by this event that the debate on the modernisation agenda for universities at the European level should be closed. According to Portugal, this agenda can only be pursued within member states.

3. Why not a European modernisation debate?

After centuries of having a common history during the Middle Ages, with cross-border mobility for students and staff, the university system in Europe split up, especially in the late 18th and in the 19th century. New higher education institutions, such as the Ecole Polytechnique, were established, especially to train the necessary technocratic state cadres. Many others were transformed into state run universities with (some) academic, but no operational freedom.

In any case, universities became a means to build nation states. Universities acted as national universities, somehow following Fichte's idea that a nation is defined by its common language and culture and that each nation needs to have its own statehood and its own national institutions. Universities as state institutions should serve national interests and foster the language and the culture which define a nation. The university had to be an important part of the nation state. As a consequence, in many European countries, the state not only nationalised, but even started to micro-manage its universities. British universities, that for so long had remained rather medieval, kept their traditional autonomy and were a rare exception to this European development.

The problem with "national universities" is that their existence presupposes the relevance and the strength of the nation state. With the nation state in decline and with the emergence of a European economy and knowledge society, the role of universities in Continental Europe should be redefined. The emergence of a European society and, especially, of a European economy requires the emergence of a European university system, as the creation and the diffusion of knowledge within Europe is an increasingly joint task. The cross-border mobility of non-degree seeking students (horizontal mobility), as in the ERASMUS programme, already introduced in 1987, is not sufficient. Europe needs more vertical mobility with students obtaining degrees in different countries, greater staff mobility and more cross-border funding of research.

The case of the US is of interest here. It is not surprising that all the communications of the EU Commission, from "Mobilising the brainpower of Europe" (2005) to the Modernisation Agenda 2011, refer to this country. In the US, the main responsibilities for higher education institutions are placed at the state level. Federal regulations with respect to higher education are rare and contain no detailed planning. Federal authorities do not interfere in the overall management of universities, so the present university system of the US has grown from the bottom-up.

This system now serves a society of more than 300 million inhabitants and is highly diversified in order to meet the educational demands of a knowledge economy. As David Ward, the former president of the American Council on Ed-

ucation, put it, the US system is “excellent at the top” with 200-300 highly research intensive, PhD granting universities and is, by providing a varied education at more than 4000 higher education institutions, including community colleges, “democratic at the base” (speech at a EUA conference at the ETH Zürich on 12 October 2002). The US-wide mobility of students and staff as well as federal funding institutions (NSF, NIH) created this excellence at the top, but kept the freedom of the various institutions to cater to the manifold demands of the 15 to 20 million students by appropriately choosing their educational profile, being either a local, national or even a global one.

Various communications of the EU Commission from 2005 to 2011, hint at the US case as an example to follow. For example, in the communication of 2005 (Mobilisation of Brainpower), the human capital gap of the EU is mentioned with only 21% of young people in the EU having completed tertiary education whereas in the US it then stood at 38%. In the “Modernisation Agenda 2011” the only goal stated is “that, by 2020, 40% of young people should successfully complete higher education or equivalent studies”, a number close to that of the US (p.3). In nearly all communications of the EU commission it is stated that the EU lags behind with respect to the share of researchers in the total labour force, 6 per 1000¹ compared to 9 in the US. Furthermore, in 2005 the communication points out that no university from Europe (apart from the UK) is listed in the top range of the Shanghai Jiao Tong Survey. In 2011, the communication says there are “only 3 in the top 20” (from the UK) and “only around 200 of Europe’s 4000 higher education institutions are included in the top 500. The communication on “Mobilising the brainpower of Europe” of 2005 says the same: “... apart from a handful in Britain, there are no EU universities in the top 20 in the world and relatively few in the top 50” (p.3).

In all cases, the US is used as a good reference country. Obviously, within the six years from 2005 to 2011 the arguments were developed in various forms, but their substance remained the same.

Evidently, the emergence of a European knowledge society is lagging behind the emergence of its US counterpart. Mass higher education as well as the number of researchers and the worldwide excellence of research institutions, or to put it differently, the stock of human capital is not as developed in Europe as it is in the US. This difference with respect to the stock of human capital per capita can be explained by differences in economic performance, e.g., by the different levels of GDP per capita in Europe and the US respectively. The richer

1 The Communication of 20 Sept. 2011 states 6 per 100 (see p.2), an obvious misprint, as it must be 6 per 1000, otherwise Europe would be leading by far!

a country the higher its stock of human capital per capita is. Yet there exist other factors which favour the US and increase the gap from Europe.

These factors are well listed in the 2005 and 2006 communications of the EU Commission, but hardly mentioned in the 2011 communication for modernising the higher education sector. In 2005 and 2006 the EU commission, again and again, criticises the tendency to uniformity and egalitarianism among European universities, their insularity and their national fragmentation, their overregulation by the state, and their lack of autonomy. The top is not sufficiently excellent. In the 2011 communication, however, it merely says (p.3): “The main responsibility for delivering reforms in higher education rests with member states and education institutions themselves”. The European dimension of reforms is only mentioned vaguely: “policy responses (should) transcend national borders” (p.3), especially when it comes to increasing the quantity, quality and relevance of human capital developments in higher education. It seems as if the Commission now takes the critique by the EU presidency of Portugal seriously and wants to avoid any criticism of member states, thereby accepting that the co-existence of national systems of universities continues to dominate the European development of universities.

The Commission’s communication of 2011 dropped the idea of overcoming the national fragmentation of the European university sector by stimulating the European orientation of universities more. For example, through granting more autonomy to universities and through inviting them to participate in European programmes (e.g. EU Framework programmes, ERASMUS, joint degree programmes), universities might gain new, non-national identities.

The “Modernisation Agenda 2011” leaves out the crucial funding issue too. In 2005, the Commission complains that only 1.1% of GDP is spent on tertiary education. There, it is stated that 150 billion Euros of additional spending on higher education would be needed in Europe. The Communication of 2006 (“Modernisation agenda 2006”) is even blunter on these issues: there is a funding gap of 10 000 Euros per student. With 17 million students in the EU this would amount to a funding gap of 170 billion Euros. Moreover, “The Modernisation Agenda 2006” sets an explicit norm: 2% of GDP should be spent on higher education. In 2011, the Commission retreated from this goal. It only mentioned the funding gap between Europe and the US: 1.3% of GDP in Europe, 2.7% of GDP in the US, but it drew no conclusions from this. Accordingly it continues: “The current pressure for fiscal consolidation has inevitably led Member states to assess the cost-effectiveness of their public investments in higher education and research ... the scale of funding required to sustain and expand high-quality higher education systems is likely to necessitate additional sources of funding ...” (p.8). The communication acknowledges that more mon-

ey is needed, but in 2011 the Commission refrains from saying how high the funding of universities should be. No norm is mentioned (such as the 2% goal). What a contrast to 2005 or 2006!

All in all, the Commission still pursues the European debate on the modernisation of universities. However, the Commission has given in and limited the scope of the debate. Issues of autonomy, governance, or funding are almost completely left out, as if all these issues should be addressed by the member states only. This limitation to the European debate accepts the continued dominance of national university systems. It no longer speaks about developing a European university area. For the commission, only (1) improvements to the quality skills of students, (2) more university to business links, and (3) contributions to regional development now really matter at the European level.

4. What has changed since 2000

In 2011, the Commission returned to the view that the co-existence of national university systems is the reality and norm in Europe. By doing so, it does not take into account that since the 1990s several factors have already contributed to the – partial – dissolution of national systems and to the building of a European university space. Three main developments drive this dissolution of national systems: (1) reform pressures from within national systems, (2) the Bologna Process, and (3) the emergence of the European Research Area, strengthened by various initiatives from the European Union.

The reform pressures from within the national systems vary, of course, from country to country. Many states, e.g. France and Spain, were spurred by the disappointing performance of their universities in the Shanghai or Times Higher Education rankings of world universities. However, in many countries the main push for reforms came from the need to better manage the massification of higher education: a massification that resulted in unexpected increases in the numbers of students, unacceptable student-staff-ratios and unwanted high drop-out rates, as well as requiring that universities be transformed into more effectively led, service-oriented institutions, capable of solving staff and budgetary problems on the spot and quickly. Hence, the power to make staffing and financial decisions was transferred more and more from the national ministries to the universities. Both the Netherlands and Denmark were leading examples in Europe for granting “real” autonomy to universities. At first, this happened as *de facto*, later also as *de jure*. As a consequence, universities built up administrative structures in order to be able to make autonomous decisions and to be more service-oriented towards students. The new relationship between, respectively, the state ministry on the one hand, and the university on the other hand, has been increas-

ingly defined by performance agreements as postulated by the so called “New Public Management”. Performance agreements with autonomous institutions substituted the micro-management of universities by ministerial bureaucracies.

Yet, this massification trend not only exerted pressures to decentralise decision making powers to the universities within the national system, it also changed the way universities perceived themselves. In many countries, up until these reforms, highly centralised decision making by the ministry existed alongside fragmented universities, fragmented in faculties or in departments. The university was just an accumulation of strong faculties, headed by powerful deans, not much interested in strengthening the university as a unified institution.

As the transferral of decision making powers directly to the faculties would most likely have created inefficient units, with too provincial, too mono-disciplinary views, it was the whole university which received this power from the ministries. Hence, as a result of the massification of higher education, the decentralisation of power from the ministry to the universities was accompanied by a centralisation of power within the university.

Strengthening universities as institutions, in order for them to better handle the many educational demands of an increasing number of students, had an interesting side-effect: the universities could now engage in European programmes more easily, they could look to other financial sources more effectively, and could better cater for the requests of society at large. Through institutional autonomy, universities learned to act coherently and to set goals. They became strategic institutions. All this created a more outward looking dynamic for universities. Of course, the dynamics of US, Canadian and Australian universities served as best practice.

The Bologna Process contributed another factor for diluting the strictures of national university systems in Continental Europe. When the education ministers from 29 European countries signed the Bologna Declaration in June 1999, aimed at making academic degree structures and quality assurance standards more comparable and more transparent, the Bologna process was only an intergovernmental process. The universities were expected “to respond promptly and positively and to contribute actively to the success of our endeavour” (Bologna Declaration by the 29 education ministers, 19 June 1999, p.4). However, in Bologna 1999, neither the universities nor the student organisations were invited to actively participate in getting the Bologna process started.

Due to political pressure from the universities, students and other groups, the Bologna Process is now no longer only an intergovernmental process. More and more, the stakeholders, especially the universities and the students, drive the process. The inclusion of doctoral programmes as the third cycle (2003), the adoption of common principles for doctoral programmes (“Salzburg Principles”

2005), the definition of quality standards (2005), the creation of a European Quality Assurance Register for Higher Education (founded in March 2008), or the various progress reports (e.g. “Trends Report”) demonstrate the fact as to how much the Bologna Process is now shaped by the stakeholders.

At first, states wanted to better control the intergovernmental process by only allowing light administrative structures at the European level. Only a small secretariat was set up. The idea was that the Bologna Process should not have an uncontrolled dynamic determined by a European bureaucracy. Yet, already starting at the ministerial meeting in Prague 2001, the awakened stakeholders began to fill the administrative gap at the European level. They channelled their detailed knowledge and their agenda into the Bologna Process. As a consequence, their actions started to direct the further development of the process. Thus the strength of the European stakeholders began to open up closed national systems via the Bologna reforms.

The creation of the European Research Area constituted a third factor for the erosion of national university systems. Already the ERASMUS scheme for the mobility of students let the European universities engage in networking and collaboration among themselves. The various Framework Programmes of the European Union had a similar effect. By enhancing the cross-border mobility of students and staff, by rewarding research excellence through grants by European institutions, e.g. by the European Research Council, the European Research Area is positioned to overcome the national fragmentation of university systems. Ultimately, more excellence and more diversity should result. National systems, left alone, tend to be too mediocre and too provincial. European competition is needed to get more excellence at the top, better services for students and more funding, even from member states. Today, only in a large, competitive area will universities be able to exploit their full potential.

Many European nation states still want to be the main drivers of “their” universities in the triangle of education, research and innovation. Many national parliaments still think that they “own” the universities of their country. However the trend towards more autonomous institutions and the emergence of common values and shared concepts among European universities, both triggered by the on-going Bologna Process and by the creation of the European Research Area, may generate a strong counter-force to the efforts of some states to keep their universities within their national control.

Given all these changes, surely any “Modernisation agenda for universities” launched by the EU Commission should try to strengthen such Pan-European factors? Why should the Commission not challenge the existence of isolated national systems? The Commission should go for a European space for universities!

5. Lesson to be learned

As the example of the US demonstrates, a transfer of responsibilities for universities from the state level to the federal level is not needed in order to get a wider space for universities to better exploit their potential. It suffices to establish a potentially high degree of mobility for staff and students, e.g. via student loans. In addition, for enhancing research competition and creating excellence at the top, federal funding of basic research (bottom up, e.g. through the NSF) and a federal innovation demand (targeted research) are required. Of course, all these federal measures could work because universities were autonomous, looked for additional funding and acted strategically. As an economy thrives with autonomous firms, so does a knowledge society thrive with autonomous universities (of course, some regulations are here and there necessary). Hence, the lesson to be learned at the European level is that Europe does not need to worry about national university systems as long as universities are sufficiently autonomous, cross-border mobility for staff and students exists, and as long as there is enough European funding for students and research.

In this respect, the “loan guarantee scheme for Masters” (Modernisation Agenda 2011) points in the right direction, because this scheme finances vertical mobility, complementing the ERASMUS scheme for horizontal mobility. The planned increase in the funding of the ERC for 2014-2020 (+70%), the creation of a European innovation demand, at least in the area of the Grand Challenges (e.g., climate change), as well as the “Lisbonisation” for the structural funds of the EU should all be welcomed. They all strengthen the European dimension of universities. However, questions remain as to whether universities will have a sufficient degree of autonomy as well as strategic thinking concerning Europe, and whether funding at the EU level will be adequate.

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Chapter 12

Communication From the Commission: Supporting Growth and Jobs – an Agenda for the Modernisation of Europe's Higher Education Systems

Introduction

The **Europe 2020 strategy, its Flagship Initiatives and the new Integrated Guidelines** put knowledge at the heart of the Union's efforts for achieving **smart, sustainable and inclusive growth**; the Commission's proposal for the Multiannual Financial Framework 2014-2020 supports this strategy with a significant increase in the budget devoted to investment in education, research and innovation. This is because education, and in particular higher education and its links with research and innovation, plays a crucial role in individual and societal advancement, and in providing the highly skilled human capital and the articulate citizens that Europe needs to create jobs, economic growth and prosperity. Higher education institutions¹ are thus crucial partners in delivering the European Union's strategy to drive forward and maintain growth.

Despite a challenging employment climate in the wake of the economic crisis, higher education represents a sound choice². Yet, **the potential of European higher education institutions to fulfil 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 education³. While 35% of all jobs in the EU will require high-level qualifications by 2020⁴, **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.⁵ 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

1 This term is used to encompass all tertiary education institutions including universities, universities of applied science, institutes of technology, 'grandes écoles', business schools, engineering schools, IUT, colleges of higher education, professional schools, polytechnics, academies, etc. This is to take account of linguistic diversity and national traditions and practices.

2 See Staff Working Document, Section 2.

3 See Staff Working Document, Section 7.2.

4 See COM(2010) 682 final.

5 MORE study on the mobility patterns and career paths of EU researchers (EC 2010).

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, higher education institutions too often seek to compete in too many areas, while comparatively few have the capacity to excel across the board. As a consequence, too few European higher education institutions are recognised as world class in the current, research-oriented global university rankings. For instance, only around 200 of Europe's 4000 higher education institutions are included in the top 500, and only 3 in the top 20, according to the latest Academic Ranking of World Universities. And there has been no real improvement over the past years. There is no single excellence model: **Europe needs a wide diversity of higher education institutions**, and each must pursue excellence in line with its mission and strategic priorities. With more transparent information about the specific profile and performance of individual institutions, policy-makers will be in a better position to develop effective higher education strategies and institutions will find it easier to build on their strengths.

The main responsibility for delivering reforms in higher education rests with Member States and education institutions themselves. However, the Bologna Process, the EU Agenda for the modernisation of universities⁶ and the creation of the European Research Area show that the challenges and policy responses transcend national borders. 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.

Section 2 of this Communication identifies **key policy issues for Member States and higher education institutions** seeking to maximise their contribution to Europe's growth and jobs. The **specific actions that the EU will take**, bringing its added value to support the modernisation efforts of public authorities and institutions are presented in Section 3. The Staff Working Document accompanying this Communication discusses the analytical evidence underpinning these policy issues and actions.

6 COM(2006) 208 final.

Key issues for member states and for higher education institutions

Increasing attainment levels to provide the graduates and researchers Europe needs

The Europe 2020 education headline target stipulates that, **by 2020, 40% of young people should successfully complete higher education or equivalent studies**⁷. Attainment levels have grown significantly across much of Europe in the last decade, but they are still largely insufficient to meet the projected growth in knowledge-intensive jobs, reinforce Europe's capacity to benefit from globalisation, and sustain the European social model. Increasing higher education attainment must also be a catalyst for systemic change, to enhance quality and develop new ways to deliver education. Furthermore, while the impact of demographic ageing varies across Member States⁸, the group of school leavers from which higher education traditionally recruits is shrinking.

Therefore, Europe needs to **attract a broader cross-section of society into higher education**, including disadvantaged and vulnerable groups, and deploy the resources to meet this challenge; in several Member States, reducing higher education drop-out rates is also crucial. This increase in aspirations and achievement cannot be addressed at the tertiary level alone: success also depends upon **policies to improve earlier educational outcomes and reduce school drop-out**, in line with the Europe 2020 target⁹ and the recent Council Recommendation on early school leaving¹⁰.

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 jobs¹¹, 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 reaching the highest levels in post-graduate education and research

7 By 2020, 40% of 30-34 year olds in the EU should have completed tertiary or equivalent education.

8 See Staff Working Paper, Section 3.4.

9 To reduce the proportion of 18-24 years olds without upper secondary education and not in further education and training to 10% at most.

10 See Council Recommendation on policies to reduce early school leaving (adopted 7 June 2011).

11 COM (2010) 546 final, p.9.

– especially in certain disciplines and in leadership positions – can liberate untapped talent.

Key policy issues for Member States and higher education institutions:

- Develop **clear progression routes** from vocational and other education types into higher education. An effective way to achieve this is through **national qualification frameworks** linked to the European Qualifications Framework and based on learning outcomes, and through clear procedures for recognising learning and experience gained outside formal education and training.
- Encourage **outreach** to school students from underrepresented groups and to 'non-traditional' learners, including adults; provide more transparent information on educational opportunities and outcomes, and tailored guidance to **inform study choices** and reduce drop-out.
- Ensure that **financial support** reaches potential students from lower income backgrounds through a better targeting of resources.
- Design and implement national strategies to train and re-train enough researchers in line with the Union's R&D targets.

Improving the quality and relevance of higher education

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 studies¹².

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.

There is a strong need for flexible, innovative learning approaches and delivery methods: to improve quality and relevance while expanding student numbers, to widen participation to diverse groups of learners, and to combat drop-out. One key way of achieving this, in line with the EU Digital Agenda¹³, is to **exploit the transformational benefits of ICTs and other new**

12 See Staff Working Document, Section 4.1.

13 COM (2010) 245 final.

technologies to enrich teaching, improve learning experiences, support personalised learning, facilitate access through distance learning, and virtual mobility, streamline administration and create new opportunities for research¹⁴.

In meeting the increased demand for knowledge workers, **researcher training** in higher education must be better aligned with the needs of the knowledge-intensive labour market and in particular with the requirements of SMEs. High quality, industry-relevant doctoral training is instrumental in meeting this demand for expert human capital. Linking funding to the implementation of the EU **Principles on Innovative Doctoral Training**¹⁵ will allow Europe to train more researchers better and faster.

The reform and modernisation of Europe's higher education depends on the competence and motivation of teachers and researchers. Yet teaching and research staffing has often not kept pace with expanding student numbers which puts pressure on already strained capacities. Better working conditions including transparent and fair recruitment procedures¹⁶, better initial and continuing professional development, and better recognition and reward of teaching and research excellence are essential to ensure that Europe produces, attracts and retains the high quality academic staff it needs.

Key policy issues for Member States and higher education institutions:

- Encourage the use of **skills and growth projections** and **graduate employment data** (including tracking graduate employment outcomes) in course design, delivery and evaluation, adapting **quality assurance** and **funding mechanisms** to reward success in equipping students for the labour market.
- **Encourage a greater variety of study modes** (e.g. part-time, distance and modular learning, continuing education for adult returners and others already in the labour market), by adapting funding mechanisms where necessary.
- **Better exploit the potential of ICTs** to enable more effective and personalised learning experiences, teaching and research methods (eg. eLearning and blended learning) and increase the use of virtual learning platforms.

14 See Staff Working Document, Section 4.3.

15 These principles, prepared with the support of the ERA Steering Group Human Resources and Mobility, call for research excellence and creativity, an attractive institutional environment with critical mass and respect for the Charter and Code for attractive working conditions for researchers, interdisciplinary research options, exposure to industry and other relevant work sectors, international networking and mobility, transferable skills training and quality assurance.

16 Including in line with the 'European Charter for Researchers and Code of Conduct for their Recruitment'.

- Enhance the capacity of labour market institutions (including public employment services) and regulations to match skills and jobs, and develop **active labour market policies** to promote graduate employment and enhance career guidance.
- Introduce **incentives** for higher education institutions to invest in continuous **professional development** for their staff, recruit sufficient staff to develop emerging disciplines and **reward excellence** in teaching.
- Link funding for doctoral programmes to the **Principles for Innovative Doctoral Training**.

Strengthening quality through mobility and cross-border co-operation

Learning mobility helps individuals increase their professional, social and intercultural skills and employability. The ministers of the European Higher Education Area (EHEA) have agreed to double the proportion of **students completing a study or training period abroad to 20% by 2020**¹⁷. The EHEA has brought about far-reaching changes: the bachelor-master-doctorate structure and advances in quality assurance have facilitated individual mobility and strengthened institutions and systems. In parallel, the development of the **European Research Area (ERA)** is increasing complementarity between national systems to enhance the cost effectiveness of research investment and intensify exchanges and cooperation between institutions.

However, the recognition of academic qualifications gained abroad is still too difficult; the portability of grants and loans is restricted; “vertical” mobility¹⁸ remains limited; and obstacles hinder the free movement of researchers within the EU. The implementation of the Council Recommendation on promoting learning mobility¹⁹, and the use of European quality assurance tools such as the European Quality Assurance Register, would facilitate mutual trust, academic recognition and mobility.

Attracting the **best students, academics and researchers from outside the EU** and developing **new forms of cross-border cooperation** are key drivers of quality. They can also be important sources of income for institutions. Although some Member States are a very attractive study destination²⁰, the EU *as a whole* needs to attract the best students and researchers if it is to compete with the US²¹. Europe’s attractiveness can be enhanced if a number of concerns are

17 See SEC(2011) 670 final.

18 Changing countries between bachelor, master and doctoral levels.

19 Council Recommendation on promoting the learning mobility of young people, 28 June 2011.

20 See Staff Working Document, Section 7.1.

21 Ibid.

urgently addressed: increasing cost and uneven quality; difficult academic recognition; non-transparent recruitment and unattractive working conditions for researchers; and problems in obtaining visas to study and work, including for intra-EU mobility.

Key policy issues for Member States and higher education institutions:

- Encourage institutions to **build learning mobility more systematically into curricula**, and **eliminate unnecessary barriers** to switching institutions between bachelor and master levels and to cross-border co-operation and exchanges.
- Ensure the **efficient recognition of credits gained abroad** through effective quality assurance, comparable and consistent use of ECTS and the Diploma Supplement, and by linking qualifications to the European Qualifications Framework.
- Improve access, employment conditions and progression opportunities for students, researchers and teachers from other countries, including by fully implementing the **Directives on students and researchers**²² and the **EU Visa Code** to facilitate the issuing of Schengen visas to students and researchers undertaking short stays²³.

Making the knowledge triangle work: Linking higher education, research and business for excellence and regional development

The contribution of higher education to jobs and growth, and its international attractiveness, can be enhanced through **close, effective links between education, research and business** – the three sides of the “knowledge triangle”. 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 weak²⁴.

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

22 Council Directive 2004/114/EC and Council Directive 2005/71/EC.

23 Stays of no more than three months within a six-month period.

24 Council Conclusions on the knowledge triangle - 20 October 2009.

the market more effectively. Improved management of intellectual property will facilitate this process²⁵.

As centres of knowledge, expertise and learning, **higher education institutions can drive economic development** in the territories where they are located; they can bring talented people into innovative environments and harness regional strengths on a global scale; they can foster an open exchange of knowledge, staff and expertise. They can also act as the centre of a knowledge network or cluster serving the local economy and society, if local and regional authorities implement smart specialisation strategies to concentrate resources on key priorities and maximise impact.

Key policy issues for Member States and higher education institutions:

- 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.

Improving governance and funding

Higher education systems require adequate funding, and the Europe 2020 strategy highlights the need to protect the growth-enhancing areas of education and research when prioritising public spending. Yet, while spending levels vary substantially between Member States²⁶, total **investment in higher education in Europe is too low**: 1.3% of GDP on average, compared with 2.7% in the US and 1.5% in Japan. The current pressure for fiscal consolidation has inevitably led Member States to assess the cost-effectiveness of their public investments in higher education and

25 See Recommendation on the management of intellectual property C(2008) 1329 final, 10.04.2008.

26 See Staff Working Document, Section 6.1.

research: while some have reduced spending, others have increased budgets in recognition of the growth potential of spending in these areas.

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, be they public or private. Member States are increasingly striving to maximise the value of resources invested, including through targeted performance agreements with institutions, competitive funding arrangements, and channelling finance directly to individuals. They are looking to **diversify funding sources**, using public investment to lever funds from elsewhere and drawing to a larger extent on private funding; tuition fees are becoming more widespread, particularly at masters level and above. It will be important to monitor and assess the effectiveness and impact of these new developments, including on students from poorer backgrounds, and on equity and mobility.

The challenges faced by higher education require **more flexible governance and funding systems** which balance greater autonomy for education institutions with accountability to all stakeholders. Autonomous institutions can specialise more easily, promoting educational and research performance²⁷ and fostering diversification within higher education systems. But legal, financial and administrative restrictions continue to limit institutional freedom to define strategies and structures and to differentiate themselves from their competitors. The efficiency of higher education institutions and so the effectiveness of public investment can be enhanced by **reducing restrictions**: on raising private revenue, on capital investment, on the ownership of infrastructure, on the freedom to recruit staff, on accreditation. Investment in **professional management** can provide strategic vision and leadership while allowing teachers and researchers the necessary academic freedom to concentrate on their core tasks.

Key policy issues for Member States and higher education institutions:

- Encourage a better identification of the real costs of higher education and research and the careful targeting of spending, including through funding mechanisms linked to performance which introduce an element of competition.
- Target funding mechanisms to the needs of different institutional profiles, to encourage institutions to focus efforts on their individual strengths, and develop **incentives to support a diversity of strategic choices** and to develop **centres of excellence**.

27 See Staff Working Document, Section 6.2.

- Facilitate access to **alternative sources of funding**, including using public funds to leverage private and other public investment (through match-funding, for example).
- Support the development of strategic and professional higher education leaders, and ensure that higher education institutions have the **autonomy to set strategic direction**, manage income streams, reward performance to attract the best teaching and research staff, set admissions policies and introduce new curricula
- Encourage institutions to modernise their **human resource management** and obtain the HR Excellence in Research logo and to implement the recommendations of the Helsinki Group on Women in Science²⁸.

The eu contribution: incentives for transparency, diversification, mobility and cooperation

The key policy issues outlined in Section 2 must be addressed in the first place by national authorities and institutions. But the EU can significantly support their efforts to reform higher education systems through the different EU policy and budgetary instruments.

As concerns policy, the governance and reporting mechanisms of Europe 2020 provide the main instrument to monitor developments and support Member States' reform efforts, including through country-specific recommendations linked to the Integrated Guidelines.

At the same time, the EU should make better use of the policy tools available in the field of higher education, in particular the European cooperation framework in education and training 'ET2020'. The Commission can support transparency and excellence through **evidence-based policy analysis**. It can support **mobility of learners, teachers and researchers**. It can support **strategic cooperation** between European institutions, and, in a context of increasing global competition for talent, provide a common framework to support the **interaction of European higher education with the rest of the world**.

As concerns funding, the Multiannual Financial Framework 2014-2020 will offer an opportunity to ensure that EU instruments and policies – particularly education, research, employment, entrepreneurship, migration and Cohesion – work together effectively to support the modernisation of higher education. The Commission, in focussing EU spending closely on the priorities of the Europe 2020 Strategy and on the key drivers of growth and jobs, has proposed a substantial increase in the budgets for education programmes and for research.

28 See Staff Working Document, Section 6.3.

Supporting reform through policy evidence, analysis and transparency

The Commission will focus on improving the evidence base for policy-making in key areas. The available information on the performance of higher education institutions focuses mainly on research-intensive universities, and thus covers only a very small proportion of Europe's higher education institutions²⁹: **it is essential to develop a wider range of analysis and information, covering all aspects of performance** - to help students make informed study choices, to enable institutions to identify and develop their strengths, and to support policy-makers in their strategic choices on the reform of higher education systems. Evidence shows that **a multi-dimensional ranking and information tool is feasible and widely supported by education stakeholders.**³⁰

In addition, **better labour market intelligence on current and future skills requirements** would help identify growth employment areas and allow for a better match between education and labour market needs. As stated in the New Skills and Jobs flagship initiative, the Commission will set up the "EU Skills Panorama" to improve intelligence on current and future skills needs. Improving conditions for graduates to gain practical experience, for example through high quality traineeships, can further facilitate their integration in the labour market.

The European Commission will:

- **Launch U-Multirank: a new performance-based ranking and information tool for profiling higher education institutions**, aiming to radically improve the transparency of the higher education sector, with first results in 2013. By moving beyond the research focus of current rankings and performance indicators, and by allowing users to create individualised multidimensional rankings, this independently run tool will inform choice and decision-making by all higher education stakeholders.
- In co-operation with Eurostat, **improve data on European higher education learning mobility and employment outcomes**, and work towards a **European Tertiary Education Register**.
- Provide specific guidance and recommendations on raising basic and transversal skills and overcoming skill mismatches.

29 The question of excellence of institutions pertaining to the EU research targets will be the subject of further analysis.

30 See Staff Working Document, chapter 1.1. A "U-Multirank" tool would enable users to profile institutions based on data on the quality of teaching (e.g. employability outcomes), research performance, the capacity for knowledge transfer and for supporting regional development and the degree of internationalisation.

- In cooperation with Member States and stakeholders, analyse the impact of different funding approaches on the diversification, efficiency and equity of higher education systems, as well as on student mobility.

Promoting mobility

With the launch of the **European Higher Education Area**, the Bologna Process will reinforce mobility and cooperation. However, some mobility flows can be a challenge for those education systems which receive substantial inflows of students, or threaten 'brain drain' in countries where many talented people choose to study and then remain abroad. At the same time there are concerns about the quality of cross-border education, including in the case of so-called "franchised" provision.

EU mobility programmes such as Erasmus and Erasmus Mundus have achieved far-reaching positive effects for individuals and institutions. **Three million students will have benefited from the current Erasmus programme** by 2013, and mobility opportunities for higher education teachers and staff are also increasing. In parallel, the Commission is developing a '**mobility scoreboard**' to assess progress in removing obstacles to learning mobility³¹ within the EU. The Single Market Act³², a focused action plan to unlock the internal market's potential for growth, jobs and citizens' confidence, includes the revision of the Professional Qualification Directive to reduce barriers to mobility in the regulated professions. Mobility for researchers will be facilitated by the **European Framework for Research Careers**, a new transparency tool to be applied in the EURAXESS Jobs Portal.

Masters degrees allow students to acquire the kind of advanced skills that are particularly valuable for knowledge-intensive jobs and research. Cooperation and mobility at Masters level can be instrumental in strengthening centres of excellence across Europe, making this an area where the EU has clear potential to add value. However, current EU funding instruments do not currently support full degree mobility at Masters level, which generally requires financial support for 12 months or more³³. Moreover, restrictions on the portability of national loans limit their application for taking a full degree abroad, while commercial loans are typically inaccessible for students from lower income backgrounds. The European Commission has identified a need for further financial support for this group of students.

31 Agreed in Council Recommendation on the learning mobility of young people, 28 June 2011.

32 See COM(2010)206, 13.04.2011.

33 Erasmus supports credit mobility, rather than full degree mobility, while Erasmus Mundus supports mobile students attending specific Erasmus Mundus Masters programmes only.

The European Commission will:

- Improve the recognition of studies abroad, by strengthening the **European Credit Transfer and Accumulation System (ECTS)**, proposing incentives in EU programmes to improve implementation, and working through the Bologna Process.
- Propose an **Erasmus Masters Degree Mobility Scheme** (through a European-level **student loan guarantee facility**), operational from 2014, to promote mobility, excellence and access to affordable finance for students taking their Masters degree in another Member State regardless of their social background.
- In the context of the **EHEA**, contribute to strengthening synergies between the EU and intergovernmental processes.
- Support the **analysis of the potential of student mobility flows**, including within the Bologna process, to take into account the judgements of the European Court of Justice,³⁴ and of Quality Assurance standards to support the quality of franchise education.
- Promote the **European Framework for Research Careers** to foster cross-border researcher mobility, helping researchers to identify job offers and employers to find suitable candidates, profiling research posts according to four levels of competence³⁵.

Putting Higher Education at the centre of Innovation, job creation and employability

Europe's future capacity for innovation will depend upon higher education institutions fully embracing their role within the knowledge triangle, alongside business and non-university research organisations.

The **European Institute of Innovation and Technology (EIT)** provides a genuine model of integrating higher education in the knowledge triangle. Through educational programmes of high academic standing, the EIT and its Knowledge and Innovation Communities (KICs) promote knowledge-intensive entrepreneurship building on multi-disciplinary, innovative research. The EIT will increasingly focus on disseminating the lessons learned, thus providing examples of integrated partnerships, new governance and funding models to increase the innovation potential of higher education institutions in cooperation with business. The Commission intends to propose further steps to develop the

34 Case C-73/08 Nicolas Bressol and Céline Chaverot and Others v. Gouvernement de la Communauté française.

35 Common profiles (first stage/recognized/established/leading researcher) for all sectors and participating countries, as called for in the Innovation Union (2010). Report adopted by the ERA Steering Group on Human Resources and Mobility, May 2011.

knowledge triangle in its proposal regarding the Strategic Innovation Agenda, foreseen by the end of the year.

There is further scope to support the interaction between higher education and the wider economy at EU level, to support the flow of knowledge. Recent European pilot projects to foster the development of structured partnerships – "**knowledge alliances**" - bringing together businesses with higher education institutions to design and deliver new courses have already produced promising results and should be developed further.

The **Marie Curie Actions** are also an effective tool for stimulating knowledge transfer, while the **new European Research Area framework** to be presented in 2012, will support measures to remove obstacles to researcher mobility and cross-border cooperation³⁶. The Commission is also developing **European Industrial Doctorates** and **Doctoral Schools** to foster innovation in training for the researchers of tomorrow.

The success of the Erasmus placements, introduced into the Erasmus programme from 2007, illustrates the demand for opportunities to gain practical, work-relevant experience as part of higher education study programmes. Traineeships are an important mechanism for matching graduate skills with labour markets needs, as well as for the personal development of students. However, internships and placements today do not always provide the right conditions for students to develop their skills and receive appropriate recognition for experience gained. More needs to be done to **improve the quality and relevance of traineeships**.

The European Commission will:

- Adopt by the end of 2011 a **Strategic Innovation Agenda** designing the future of the EIT, its priorities, and proposal for new KICs to be launched.
- Build on the pilot project recently launch to strengthen the interaction between universities and business through **the knowledge alliances**
- Strengthen within the Marie Curie actions a **European Industrial PhD Scheme** in order to support applied research
- Propose a **quality framework for traineeships** to help students and graduates get the practical knowledge needed for the workplace and obtain more and better quality placements. It will also create a single and centralised platform for traineeship offers in Europe

36 In line with the Code of Conduct for the Recruitment of Researchers and European Charter for Researchers.

Supporting the internationalisation of European higher education

Future co-operation in higher education within the EU should be part of a wider strategy to engage with partner countries across the world, to promote the EU's values and expertise, and support higher education in developing countries as an integral part of the EU's development policy and of a comprehensive approach to education sector development. The Commission will promote consistency between EU and national actions for research through the Strategic Forum for International Scientific and Technological Cooperation.

The internationalisation and openness of higher education systems requires a joint approach from a wide range of policy areas and stakeholders, to attract the best students, staff and researchers from around the world, to increase international outreach and visibility, and to foster international networks for excellence. The Commission will explore the possibility to design a *specific strategy for the internationalisation of higher education*³⁷:

The European Commission will:

- Promote the EU as a study and research destination for top talent from around the world, by supporting the establishment and development of internationalisation strategies by Europe's higher education institutions.
- Develop **relations** on higher education with partners beyond the Union, aiming to strengthen national education systems, policy dialogue, mobility and academic recognition, including via the Enlargement strategy, the European Neighbourhood Policy, the Global Approach to Migration, and the Bologna Policy Forum.
- Make use of existing **Mobility Partnerships** to enhance and facilitate exchanges of students and researchers.
- Consider proposing amendments to the **students and researchers Directives**³⁸, to make the EU even more attractive to talent from non-EU countries, and examine whether the processes and the accompanying rights should be facilitated and/or strengthened. .
- Strengthen the tracking of non-EU doctoral students as a percentage of all doctoral students, as indicated in the **Performance Scorecard for Research and Innovation** to measure the attractiveness of EU research and doctoral training to the rest of the world.

37 As called for in Council Conclusions on the internationalisation of higher education, 11 May 2010.

38 As well as Recommendation 2005/761/EC to facilitate the issue by the Member States of uniform short-stay visas for researchers from third countries travelling within the Union to carry out scientific research.

Strengthening the long-term impact and complementarity of EU funding

EU investment in higher education is proposed to be channelled through three main funding mechanisms of the 2014-2020 MFF:

1. Education Europe: the single programme for education training and youth

To contribute to the Europe 2020 goals, the Commission will propose a single **programme for education, training and youth**, with simplified entry points and management. The programme will focus spending on priorities such as quality and innovation in teaching, enhanced links with the world of work, and better recognition of skills gained through mobility. It will contribute to the Bologna 20% mobility target, focussing resources on: mobility opportunities based on quality and excellence (including through Erasmus Masters Degree Mobility); intensive cooperation and capacity-building partnerships across Member States and with global partners; specific initiatives to recognise and reward excellence in teaching, and encourage student entrepreneurs and innovative university-business cooperation.

2. Horizon 2020: the Framework Programme for Research and Innovation

The new Horizon 2020 programme will cover all relevant EU research and innovation funding currently provided through the Seventh Research Framework Programme, the Competitiveness and Innovation Programme and other EU innovation initiatives, such as the EIT. Horizon 2020 aims to make EU funding more attractive and easier to access. It will ensure a high degree of policy coordination and maximise synergies between initiatives, and will enable simpler, more efficient streamlined funding instruments covering the full innovation cycle.

3. Cohesion Policy instruments

In the 2007-2013 funding period, around €72.5 billion EU cohesion funding will be spent on education and training, and €60 billion on research and innovation. A strategic use of the EU's **Cohesion Policy** can significantly enhance the social, economic and territorial contribution of higher education. The **European Regional Development Fund** can invest in building or renovating higher education institutions, providing equipment and promoting digitalisation, and support incubators, spin-offs and other forms of university-business partnerships. The **European Social Fund** (ESF) can finance modernisation processes, increase participation and attainment particularly for students from

under-represented backgrounds, enhance educational content and the match between programmes and labour market demand. The MFF proposal for 2014-2020 allocates a minimum of €84 billion to the ESF, of which over €40 billion could be expected, based upon past experience, to be made available for education and training.

Next steps towards smart, sustainable and inclusive European Higher Education

In setting out this Communication, the Commission has consulted widely: with higher education institutions' leaders, teachers, researchers and students, with businesses and social partners, with governments and with international bodies. It will **continue to engage with these stakeholders** along with the European Parliament, the Committee of the Regions and the Economic and Social Committee, the European Investment Bank and Eurostat, to take forward this agenda for action.³⁹

The Commission will also draw upon external expertise to develop progressive policies and identify innovative practices. As a first step, in 2012, it will establish **a high-level group with a rolling mandate to analyse key topics for the modernisation of higher education**, starting with the promotion of excellence in teaching and reporting in 2013.

Modern and effective higher education systems are the foundation of an open, confident and sustainable society; of a creative, innovative and entrepreneurial knowledge-based economy. The shared efforts of Member State authorities, higher education institutions, stakeholders and the European Union will be crucial for achieving the goals set out in this Communication and underpinning Europe's wider success.

39 For example, work with the EIB on a European Student Loan Guarantee, with the Committee of the Regions on the role of higher education in regional development, and with Member States through the Thematic Working Group on the Modernisation of Higher Education.

Chapter 13

European Commission Staff Working Document: Supporting Growth and Jobs: an Agenda for the Modernisation of Europe's Higher Education Systems

Introduction

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.

Against this backdrop, the Commission's Communication on Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems presents an updated reform agenda for higher education in Europe to help focus European support, as well as action at national and institutional level.

This Staff Working Paper provides background information and evidence to underpin the messages of the Communication, covering the following issues:

1. The key characteristics of higher education in today's Europe;
2. Evidence on the economic and social contribution of higher education
3. The changing student population;
4. The evolving skills requirements to which higher education needs to respond;
5. The ways higher education institutions contribute to innovation;
6. Funding and governance of higher education – at system and institutional level
7. The internationalisation of higher education.

The changing face of European higher education

European higher education: a diverse institutional landscape

Europe's higher education landscape is made up of more than four thousand higher education institutions, all operating within the legal and administrative

frameworks of their national or regional higher education systems. Considerable diversity remains in European higher education, *between systems*, which retain their own characteristics, *between institutions*, which vary in size, mission and profile and even, *within institutions*¹.

Institutional diversity is one of the key strengths of higher education in Europe. From large, research-intensive universities, to small, specialised teaching colleges, different institutional forms all have their role to play. Experience from across the world has shown that diversity in higher education systems has a positive impact on performance². In comparison to more homogenous systems, diversified higher education systems are argued to:

1. *Meet a wider range of student needs*: a more diversified system is better able to offer access to higher education to students with different educational backgrounds, with a positive influence on overall levels of access and on social mobility;
2. *Respond better to labour market needs*: institutional diversity makes it easier to meet the requirements of a changing labour market, with an increasing variety of specialisations;
3. *Be more effective*: diversity favours institutional specialisation, which allows higher education institutions to focus their attention and energy on what they do best;
4. *Be more innovative*: diversity offers greater possibilities for exploring new approaches, without the need for all institutions to implement changes at the same time, reducing risks and favouring mutual learning.

Differences between higher education *systems* are also important. National and regional systems serve the needs of their own populations, societies and economies. There can be no "one size fits all" for the most appropriate mix of institutional types and forms. Those responsible for defining the legal and administrative frameworks for higher education across Europe face the challenge of creating the conditions for the most appropriate institutional mix for their specific requirements. But to do this, it is first important to understand the existing diversity that exists within and between individual systems.

Whereas the US has long had the Carnegie Classifications³ as a tool to help understand the American higher education landscape and facilitate the task of taking a system-wide perspective, no such consistent overview currently exists in Europe, where the diversity of national systems makes such classification

1 Reichert, S (2009).

2 See van Vught, F.A. *et al.* (2010).

3 <http://classifications.carnegiefoundation.org/>

even more challenging. The EU-sponsored U-Map and U-Multirank projects have sought to address this gap in knowledge.

Box 1–1: Improving understanding of higher education systems: U-Map and U-Multirank

U-Map⁴

Started in 2005 and finalised in 2010, the U-Map project developed a classification model to categorise the rich diversity of higher education institutions, taking inspiration from the well-established Carnegie Classification used in the US. The project developed a categorisation of the different missions of higher education institutions, involving five dimensions: teaching and learning; research; innovation and knowledge transfer; regional engagement and internationalisation. A web-based tool was used to allow higher education institutions to categorise themselves according to their activities within the different dimensions. The development of the U-map classification model is ongoing, with four European countries currently testing the approach.

U-Multirank⁵

Launched in May 2009, the U-Multirank feasibility study builds on the experience of the U-Map project. The core objective of the work has been to develop and test a tool to provide comparable and accurate information on higher education programmes and institutions, going beyond the research focus found in most existing comparisons and rankings. This has involved defining indicators and collecting data directly from 150 higher education institutions within and outside the EU on their activities and performance in the five areas used in the U-Map classification. The test phase has initially focused on the fields of engineering and business studies.

The data tool developed has been designed to allow users to generate personalised rankings, making it possible to compare institutions using a wider range of variables than used in existing university rankings. The results of the study, presented at a final conference on 9 June 2011, show that this multidimensional ranking concept is workable in practice, although further work will be needed to refine the indicators used in certain dimensions. As the Multirank concept relies on the new data and the voluntary participation of institutions, gaining the buy-in of institutions will be crucial. The European Commission is now working on proposals to further develop the information tool.

Convergence in European higher education systems

Although diversity remains a dominant characteristic of the higher education landscape in Europe, intensive cooperation between European countries over the last decade has also brought about a significant degree of convergence. Efforts have been focused on creating the European Higher Education and Research Ar-

4 See <http://www.u-map.eu/>

5 See <http://www.u-multirank.eu/>

eas, in which national higher education and research systems become more compatible and comparable, thus facilitating increased interaction and mobility of students, graduates and staff across borders.

The development of the European Higher Education Area

With the 1999 Bologna Declaration, the governments of 29 European countries agreed to establish a coherent and attractive European Higher Education Area (EHEA). Since extended to 47 countries⁶, the core focus of the Bologna Process has been on structural reforms aimed at making European higher education systems more coherent and effective by establishing a set of common features:

1. A three-cycle degree structure (with bachelor, master and doctoral qualifications);
2. The generalisation of the European Credit Transfer and Accumulation System (ECTS)⁷ and the Diploma Supplement (DS)⁸;
3. National Qualification Frameworks (NQF) to describe clearly the different cycles and qualifications in national education systems, based on learning outcomes achieved, thus allowing comparison with the Qualifications Framework for the European Higher Education Area (QF-EHEA)⁹;
4. Recognised national quality assurance systems, consistent with European Standards and Guidelines (ESG) for quality assurance adopted in 2005 and articulated at European level¹⁰.
5. Mutual recognition of qualifications and learning credits (supported by the elements above), in line with the Lisbon Recognition Convention¹¹.
6. In addition to these structural reforms, the initial scope of the Bologna Process was swiftly expanded to encompass the social dimension¹² of higher

6 EU 27 + Iceland, Norway, Switzerland, Croatia, Liechtenstein, Turkey, Albania, Andorra, Bosnia and Herzegovina, The Holy See, Russia, Serbia, Macedonia, Armenia, Azerbaijan, Georgia, Moldova, Ukraine, Montenegro and Kazakhstan.

7 A student-centred credit system based on the student workload required to achieve specified learning outcomes.

8 A standardised template containing a description of the nature, level, context, content and status of studies completed by an individual student.

9 Which has subsequently been linked to the wider European Qualifications Framework (EQF), launched by the EU and covering all levels of education and training.

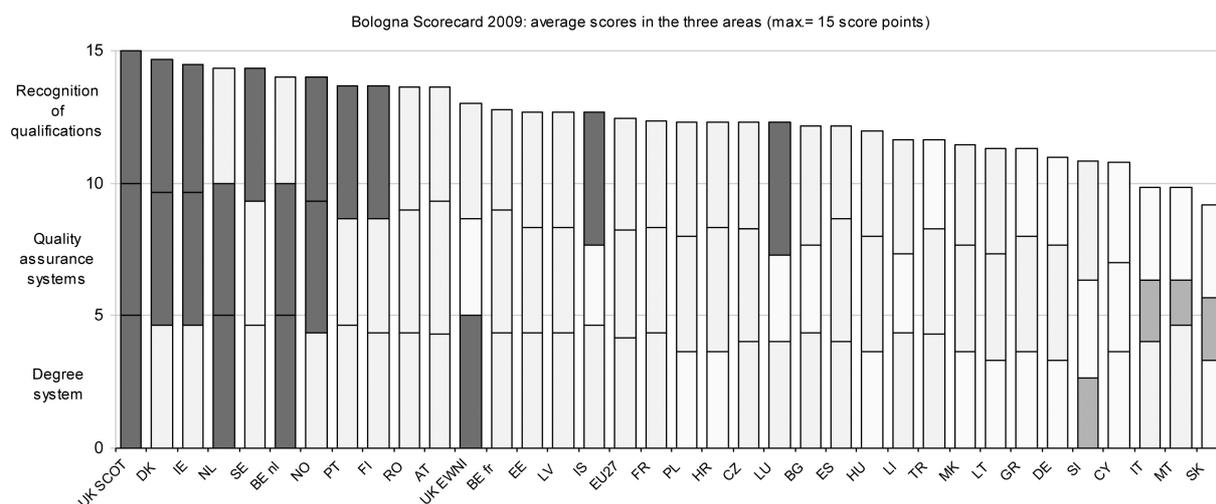
10 Notably through the European Quality Assurance Register for Higher Education (EQAR).

11 Council of Europe and UNESCO Convention on the Recognition of Qualifications concerning Higher Education in the European Region, April 1997.

education - in particular widening access to under-represented groups - and measures to embed higher education into wider systems of lifelong learning. The Bologna Process has provided the EU's own higher education modernisation agenda with additional momentum. The European Commission has supported the work of the Bologna Follow-up Group (BFUG) and funded Bologna-related initiatives, notably under the centralised actions of the Erasmus strand of the Lifelong Learning Programme¹³.

Implementation of the Bologna Process has been monitored closely by the main stakeholder groups¹⁴. While the different assessments of progress start from different perspectives, there is a broad consensus that Bologna has led to greater convergence in the architecture of national higher education systems and has achieved real impact in higher education institutions and systems across the EU.

Figure 1–1: Bologna "Scorecards" degree structure, quality assurance, recognition, 2009



Source: Bologna Stocktaking Report 2009

(UK SCOT: Scotland, UK E/W/N/I: England, Wales and Northern Ireland)

As shown in Figure 1–1, based on the stock-taking exercise undertaken for the 2009 meeting of Bologna ministers in Leuven and Louvain-la-Neuve, nearly all EU Member States have made considerable progress in the core Bologna areas of degree structure reform, establishment of quality systems for higher education

12 The London Communiqué of 2007 defines the social dimension as the "societal aspiration that the student body entering, participating in and completing higher education at all levels should reflect the diversity of our populations".

13 See European Commission (2010a).

14 See, for example, Rauhvargers, Deane and Pauwels (2009), ESU (2009), EUA (2010), Eurydice (2010).

and recognition of learning outcomes gained abroad. This is a pattern confirmed by the European University Association's most recent *Trends* review, which found 95% of higher education institutions in Europe had implemented the Bologna degree structure¹⁵. However, the same review highlights ongoing variation between Member States in the implementation of structural reforms at system level. In particular, the Bologna Process reforms have not been applied consistently to all types of higher education programmes, with courses in specific professional fields, including medicine, veterinary science, architecture and law, have more frequently retained distinct degree structures. Moreover, as the Bologna Process focused on course structure, rather than the substance of what is taught, there has been limited convergence in the content education programmes in professional fields. This creates particular challenges for authorities at national level dealing with academic or professional recognition of diplomas obtained in other Member States.

The evidence from the range of reviews of the Bologna Process indicates a number of areas where further progress is required to fully achieve the objectives of the European Higher Education Area. In particular:

- Further progress is needed to achieve the comparable and consistent implementation of ECTS and the Diploma Supplement, including in relation to the content of specific professional fields, such as medicine, and the consistent allocation of credits to student workload and learning outcomes: a 2010 study¹⁶ found that full implementation had been achieved in only 12 countries in the EHEA.
- The development of National Qualifications Frameworks has proved to be challenging, leading to an extension of the deadline for implementation until 2012: the existence of NQFs, linked to the overarching Qualifications Framework for the European Higher Education Area¹⁷ and the European Qualifications Framework (EQF)¹⁸, is an important pre-requisite for smooth recognition of learning outcomes across borders;
- There is evidence of students and graduates still facing considerable difficulties in achieving recognition for qualifications and credits gained abroad¹⁹;
- Quality assurance systems frequently focus on the accreditation of specific programmes based on minimum quality thresholds, rather than actively seeking to stimulate continuous improvement in the programmes that meet the

15 EUA (2010).

16 CHEPS 2010a.

17 Agreed by European Ministers of Higher Education at their meeting in Bergen 2005.

18 Adopted for all strands of education and training by the EU Council and Parliament.

19 See, for example, ESU (2009).

minimum standards. Studies have highlighted an ongoing perception of variation in the quality of higher education between countries, which undermines the effective functioning of the EHEA²⁰;

- Progression routes into higher education from other parts of the education system and well developed procedures for Recognition of Prior Learning (RPL) are absent or in need of improvement in many Member States²¹;
- Considerable differences exist in Member States' interpretation of the social dimension of the Bologna Process and there are comparatively few examples of significant policy reform in this area (see below²²);
- While the place of higher education in lifelong learning systems is recognised as a relevant policy issue in most Member States, this remains a peripheral concern in many countries²³.

The contribution of higher education to smart, sustainable and inclusive growth

Higher education's contribution to the EU growth agenda

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 fulfilment 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.

20 CHEPS 2010a.

21 Eurydice (2010).

22 Also refer to Eurydice (2011).

23 Eurydice (2010).

As stressed in the Europe 2020 Strategy, the availability of highly skilled human capital and well-functioning innovation systems are crucial prerequisites for Europe's future well-being.

As discussed in more depth in Section 4 a significant body of evidence underlines the importance of a skilled workforce in underpinning the type of knowledge-based economy that will allow the EU to compete effectively with other world regions. Highly skilled, creative individuals with critical mindsets are needed to create the businesses of the future and more generally to help business and the public sector to innovate. Within this context, higher education staff play a crucial role in transmitting knowledge through well-designed and structured programmes of education and research. At the same time, programmes need to be based on scientific excellence and can benefit from insights from business and other organisations external to higher education. As discussed in more detail below, higher education increases the employment and earnings potential of individuals, which, in turn, has positive impacts on social inclusion.

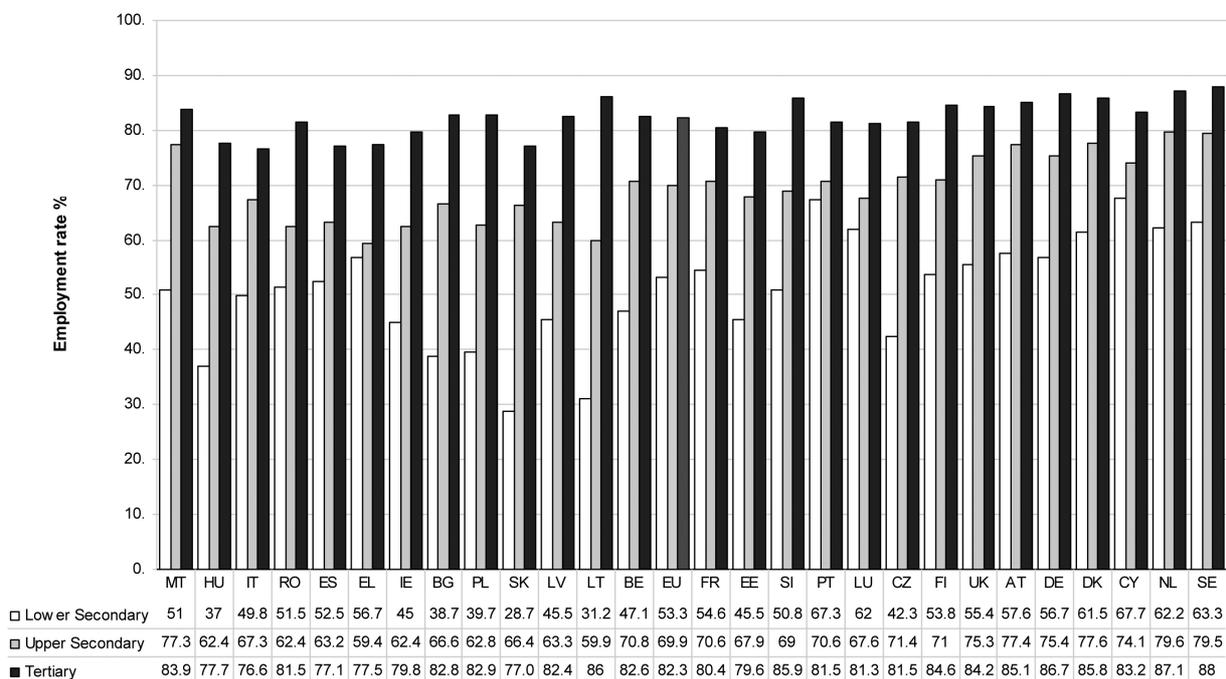
Better exploitation of the expertise and knowledge found in higher education institutions can strengthen innovation potential and, thus, economic performance at regional, national and European level. Research and development work in higher education institutions also makes a decisive contribution to Europe's response to environmental challenges and the EU's long-term environmental sustainability.

Higher education and employment

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 (see Section 4.1) 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. Nevertheless, the positive employment outcomes for higher education graduates illustrate the clear demand for such highly qualified individuals in the European economy.

As shown in Figure 2–1, based on the latest quarterly employment figures, the employment rate of those aged 20-64 with tertiary education qualifications is higher than the overall employment rate and the rate for individuals with only upper secondary qualifications in all EU Member States. Furthermore, the EU average employment rate for tertiary graduates stands at over 82% and is above 75% (the Europe 2020 employment target) in all Member States.

Figure 2–1: Employment rates by level of educational attainment - 20-64 years (2010 Q4)



Source: Eurostat, EU Labour Force Survey

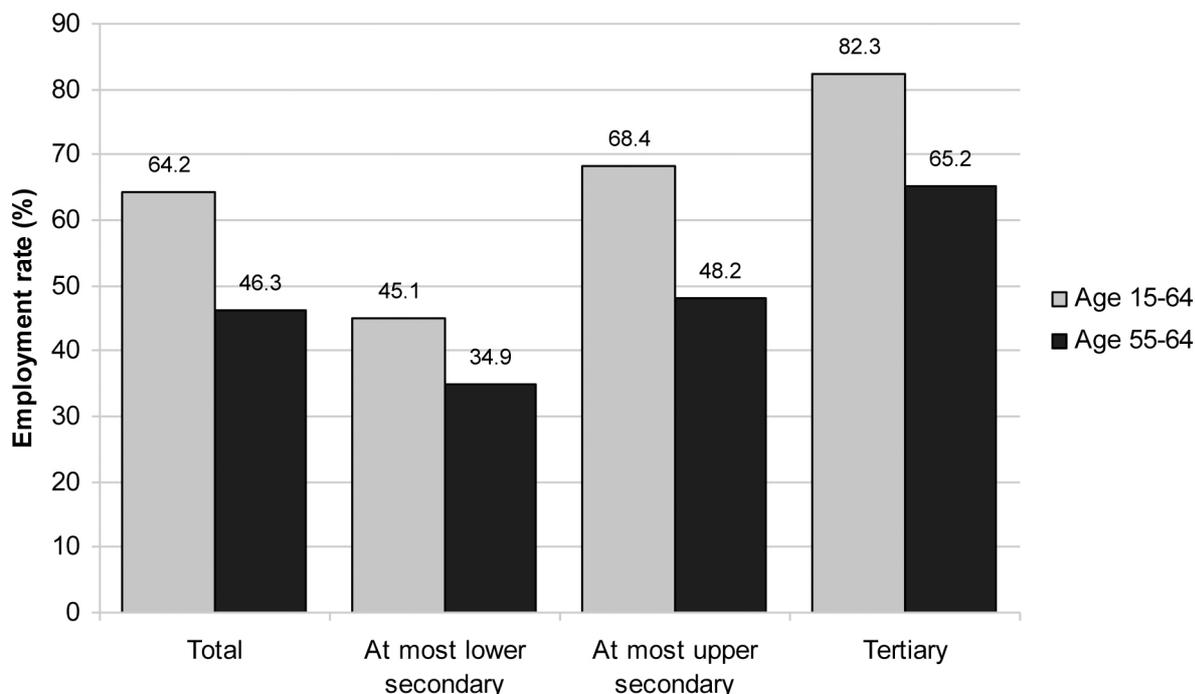
The "employment advantage" of tertiary graduates over those with only upper secondary qualifications is highest in central and eastern European Member States²⁴, along with Greece and Ireland, where employment rates for tertiary education graduates remain near the EU average, but rates for the less qualified population are comparatively low. Even in countries such as Austria, the Netherlands, Denmark and Sweden where the labour market participation differences between qualification groups are lowest, employment rates among tertiary graduates still exceed those among upper secondary graduates by at least 7.5 percentage points.

The difference in labour force participation between those with high and lower qualification levels is especially marked in older age groups. Those with a tertiary level qualification are almost twice as likely to be economically active beyond the age of 55 as those who did not complete upper secondary school: over 65% of 55-64 year olds with higher education are employed, compared to less than 35% of the same age group without upper secondary qualifications. These patterns to some extent reflect a tendency for lower qualified populations to work in more physically demanding jobs, in which it is more difficult to con-

24 Employment rates for tertiary graduates are over 15 percentage points higher than rates among upper secondary graduates in LT, PL, LV, RO, SI, BU and HU.

tinue working to the age of 65, although the relative decline in manual occupations is likely to have decreased this difference between qualification groups.

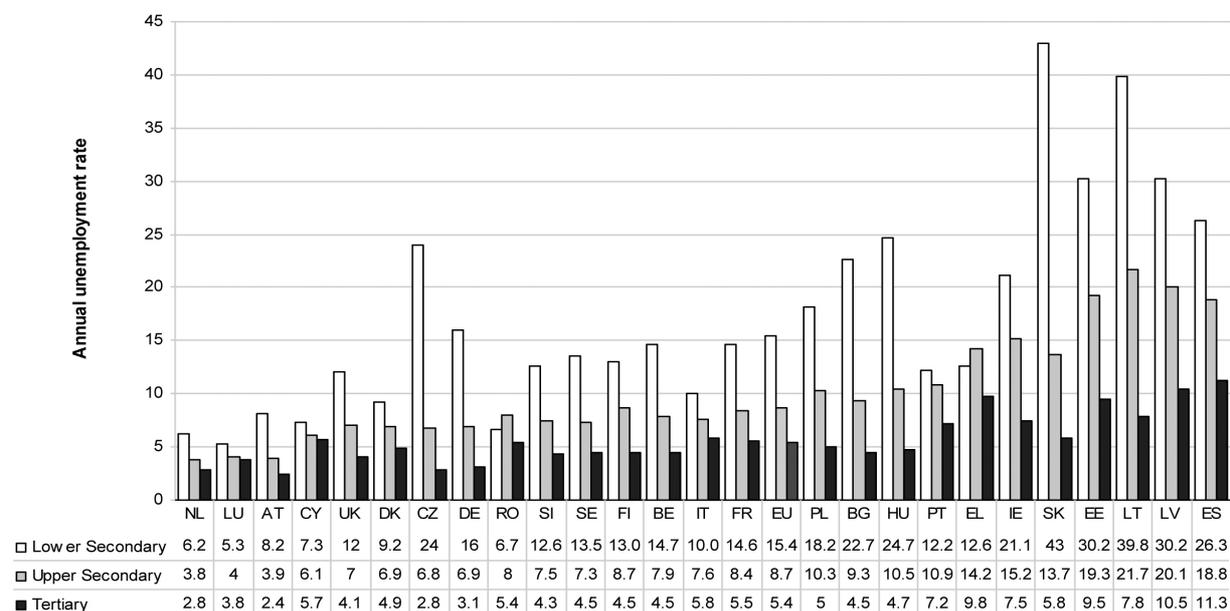
Figure 2–2: Employment rates by age group (2010 Q4)



Source: Eurostat, EU Labour Force Survey

While the effects of the recent economic crisis on employment in the EU have been severe, the impact on tertiary education graduates has been less dramatic than on those with lower levels of qualification. At the end of 2010, the average unemployment rate among graduates in the EU was 5.4%, compared to an overall unemployment rate of 9.3%. Moreover, as shown in Figure 2–3, graduate unemployment remains significantly below that experienced by those with lower levels of qualification in all Member States. This said, (tertiary) graduate unemployment is around or above 6% in eight Member States (Greece, Estonia, Lithuania, Ireland, Portugal and Slovakia) and is running at over 10% in two (Spain and Latvia).

Figure 2–3: Annual unemployment rates by highest level of education attained 2010



Source: Eurostat, EU Labour Force Survey

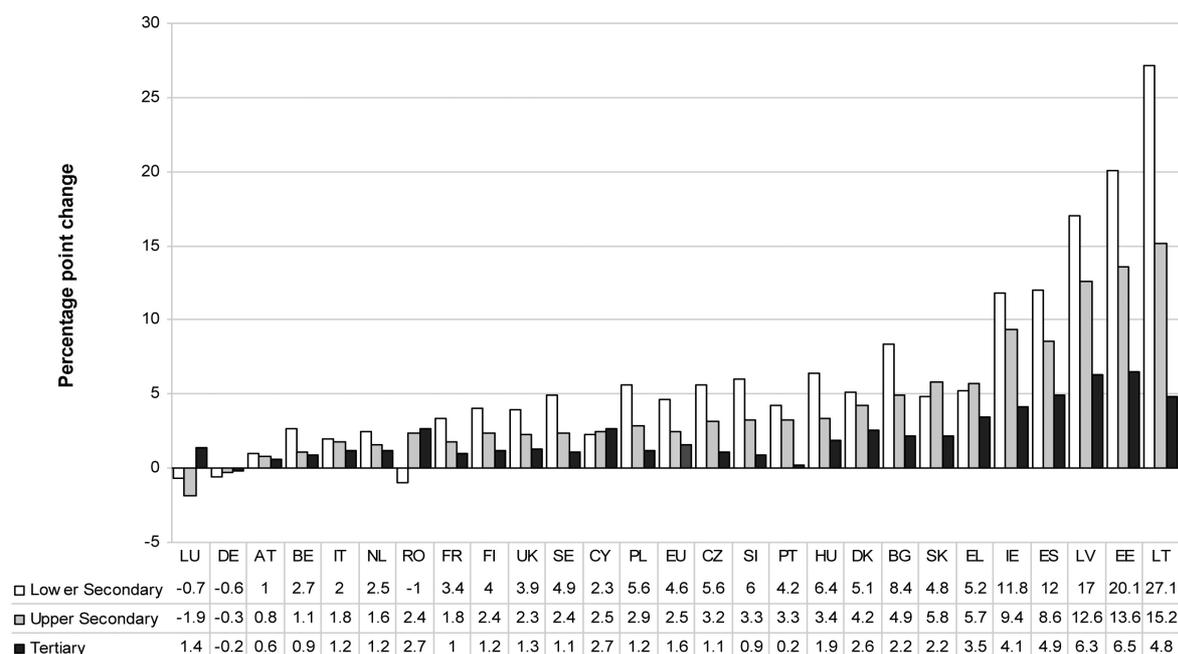
Comparing unemployment rates among the different qualification groups before and after the height of the economic crisis (average rates for the years 2008 and 2010 – See Figure 2–4), serves to confirm the general pattern that higher education graduates have been comparatively protected from unemployment. However, two main caveats should be highlighted. Firstly, although unemployment among graduates has increased far less dramatically than among lower qualified groups in most Member States, there have been increases in 26 EU countries and the rate has more than doubled in six (the three Baltic States, Ireland, Romania and Denmark), with the attendant social consequences. Secondly, in a small number of Member States graduate unemployment rates have bucked the general trend, with either increases higher than for other qualification groups (Romania and Cyprus) or lower rates of decline (Germany and Luxembourg).

A complex range of factors have affected changes in graduate unemployment rates. National economic structures and the extent to which different sectors of the economy have been affected by the economic downturn have undoubtedly played an important role. For example, the financial services industry, which traditionally recruits a relatively higher proportion of its staff among higher education graduates, has been particularly hard hit by the economic crisis, with consequent impacts on employment and new recruitment²⁵. In some

25 The most recent job vacancy data shows an increase in recruitment in the finance sector – see, for example, European Commission (2011d).

cases, graduate unemployment may be explained by mismatches between the number of graduates in particular disciplines and the relevance of their qualifications and skills and current labour market requirements. More detailed analysis of labour market trends – including through tools such as the new European Vacancy Monitor²⁶ – as well as future skills requirements is required to fully understand the extent of such mismatches.

Figure 2–4: Percentage point change in unemployment rates by educational attainment - 2008 to 2010



Source: Eurostat, EU Labour Force Survey

Notwithstanding the more negative graduate employment trends observed recently in certain Member States, the private returns for higher education graduates in terms of earnings potential remain good. Table 2–1, showing the median net income in EU Member States for the population aged 18-64, with different levels of qualification. It highlights that those with higher educational attainment earn more in all Member States (despite very large variation in average earnings between countries). 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

26 See <http://ec.europa.eu/social/main.jsp?catId=955&langId=en>

achieve higher earnings than someone with a lower level of qualification, this is naturally not always the case.

Table 2–1: Annual median equivalised net income for the population aged 18-64 by educational attainment (2009)

Figures in Euro	Below upper secondary education	Upper secondary education	Tertiary education
EU 27	12,700	14,800	21,500
Belgium	15,400	19,800	25,000
Bulgaria	1,900	3,100	4,100
Czech Republic	5,900	7,400	9,700
Denmark	21,000	25,400	30,600
Germany	15,500	18,300	23,200
Estonia	4,500	6,000	8,100
Ireland	17,700	23,800	32,100
Greece	9,700	11,900	17,600
Spain	11,500	14,800	19,500
France	17,600	20,200	25,900
Italy	13,800	18,200	24,500
Cyprus	13,100	17,700	23,600
Latvia	3,700	5,600	8,200
Lithuania	3,500	4,700	7,400
Luxembourg	27,100	32,800	46,400
Hungary	4,000	4,900	6,800
Malta	9,100	12,200	15,500
Netherlands	17,400	20,500	26,200
Austria	16,100	20,900	25,300
Poland	4,000	5,100	8,100
Portugal	7,900	10,700	17,900
Romania	1,600	2,500	4,400
Slovenia	9,900	11,900	16,500
Slovakia	4,500	5,700	7,500
Finland	16,700	20,600	26,900
Sweden	17,100	21,500	25,100
United Kingdom	12,800	16,300	22,900

Source: Eurostat, EU-SILC, 2009 (dataset: ilc_di08).

Comparing the average income levels of graduates with those of individuals who did not pursue higher education is a key component in assessing the private returns to higher education. However, the other side of the equation – the private costs of pursuing higher education resulting from living expenses and, increasingly, tuition or registration fees – also plays an important role in calculating rates of return and affects individual decisions on whether or not to continue studying²⁷.

There is a compelling body of evidence to show that the average private returns on pursuing higher education are positive and substantial across the developed world²⁸. CEGES (2007), calculated private rates of return to higher education of between 4.3% and 14.8% in a selection of EU countries and the US.

Higher education, social returns and economic performance

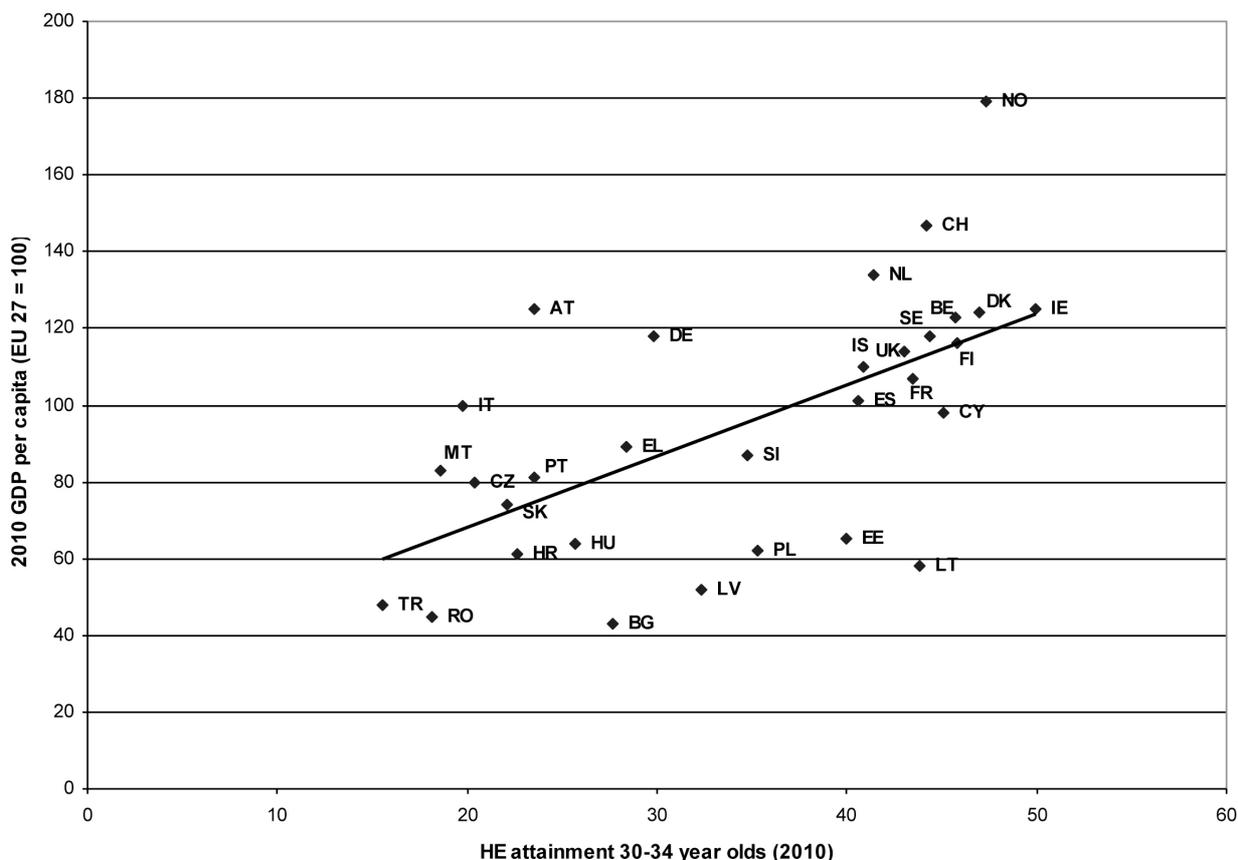
Importantly for those making public spending decisions, investment in higher education has also been shown to deliver positive returns for the wider society and economy, even though accurate estimation of the scale of such social returns is far more complex than for individuals. In the narrowest sense, social rates of return to investment in the teaching function of higher education focus on the productivity of graduates compared to those with lower levels of qualification. Ideally, estimation of social returns should also include a wider set of external benefits that higher education graduates bring to society (social externalities). Research into the effect of investment in higher education on productivity has revealed a clear positive correlation and overall positive rates of "social return": in other words, investment in higher education is "profitable", once the costs of investment and social opportunity costs have been factored in. Further progress is required in order to be able to assess the wider social impacts of higher education, which are inherently more difficult to measure.

The positive impact of higher education attainment on productivity is an important explanatory factor in the relatively strong correlation between levels of higher education attainment and overall economic output (GDP) per capita, as illustrated in Figure 2–5.

27 These costs are examined in more detail in Section 7 on higher education funding.

28 See, for example CEGES (2007), OECD (2010a).

Figure 2–5: Higher education attainment (30-34 year olds) and GDP per capita in 2010



Source: Eurostat (Data for EU-27 + Norway, Switzerland, Croatia and Turkey)

While the relationship between educational attainment and GDP per capita is clear, two main groups of "outlier" states can be observed in Europe. Firstly, there are countries (notably Italy, Austria and Germany) where economic output per capita is comparatively high in relation to the level of higher education attainment. In Germany and Austria in particular, this is partly explained by the existence of a strong high-level vocational educational offer, which is not categorised as tertiary education but provides comparatively high-level skills for the economy (ISCED 4²⁹). A second group includes EU Member States where higher education attainment rates are comparatively high in relation to current levels of GDP per capita. These are all Central and Eastern European Member States (notably the three Baltic States and Poland) which have seen a transition from centrally planned to market-based economies in the last two decades. The ongoing process of economic restructuring means the economic benefits of a highly qualified workforce are not yet fully reflected in output levels.

29 Post secondary, non-tertiary education.

3. The changing demographics of higher education

Having examined the influence of higher education and related research activities on employment and economic performance at a "macro" level, it is useful to examine different aspects of Europe's higher education systems in more depth. This section focuses on human capital development and, more specifically Europe's population of students and graduates.

3.1. The massification of higher education

Between 2000 and 2009, the number of higher education students in the EU increased by 22.3% to reach over 19.4 million. This trend – corresponding to an average annual growth rate of 2.3% - occurred against the backdrop of a slowly decreasing population of 20-24 year olds in the EU (the typical student age cohort) and is explained by significant growth in higher education participation rates in the EU population and an increase in the number of students from outside Europe studying in the EU³⁰.

Table 3–1: Tertiary students by country (2000–2009)

	Number of tertiary students (in 1000)			Growth per year
	2000	2008	2009	2000-09
EU-27	15921	19040	19473	2.3
Belgium	356	402	425	2.0
Bulgaria	261	264	274	0.5
Czech Republic	254	393	417	5.7
Denmark	189	231	235	2.4
Germany	2055	2245	2439	1.9
Estonia	54	68	68	2.7
Ireland	161	179	183	1.4
Greece	422	638	:	:
Spain	1829	1781	1801	-0.2
France	2015	2165	2173	0.8
Italy	1770	2014	2012	1.4
Cyprus	10	26	31	12.9
Latvia	91	128	125	3.6

30 In 2008, almost 1 million of the 19 million students in the EU (5.2%) were nationals of non-EU countries.

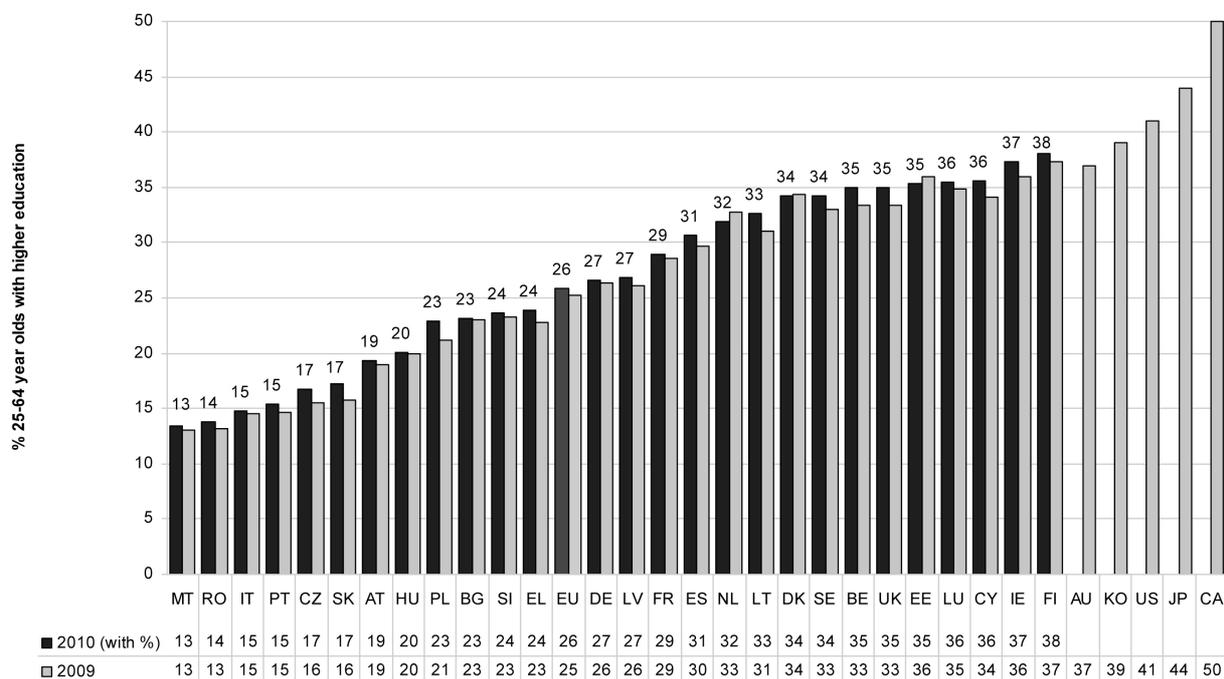
Lithuania	122	205	211	6.3
Luxembourg	2	:	:	:
Hungary	307	414	398	2.9
Malta	6	9	10	5.6
Netherlands	488	602	619	2.7
Austria	261	285	308	1.9
Poland	1580	2166	2150	3.5
Portugal	374	377	373	0.0
Romania	453	1057	1098	10.3
Slovenia	84	115	114	3.5
Slovakia	136	229	235	6.3
Finland	270	310	297	1.0
Sweden	347	407	423	2.2
United Kingdom	2024	2329	2415	2.0

Source: Eurostat, UOE

As shown in Table 3–1, the highest rates of increase in student numbers have been seen in the newer EU Member States (EU-12), which, with the exception of Bulgaria, have all seen growth rates in enrolment figures in excess of the EU-27 average. Romania and Cyprus have both seen annual increases in student numbers of over 10%, reflecting the large-scale expansion of higher education provision in both countries from 2000 onwards. In contrast, countries in Northern, Western and Southern Europe – most of which already had higher rates of higher education participation – saw lower levels of growth. Spain was the only country to register a small decrease in student numbers over the same period.

Despite the large-scale expansion of higher education in the last decade, the EU as a whole still lags behind many of its competitors in terms of the proportion of the active population with a tertiary education qualification. As shown in Figure 3–1, despite increases in recent years³¹, only 26% of the population aged between 25 and 64 in the EU has a tertiary education qualification, compared with 37% of the equivalent Australian population, over 40% of US and Japanese residents and 50% of those living in Canada. Although the best performing EU Member States have higher or similar levels of higher education attainment to the US, attainment levels in Central and Eastern European Member States (except Estonia and Lithuania), Italy, Malta and Greece remain below 25% (less than half the 2008 Canadian rate).

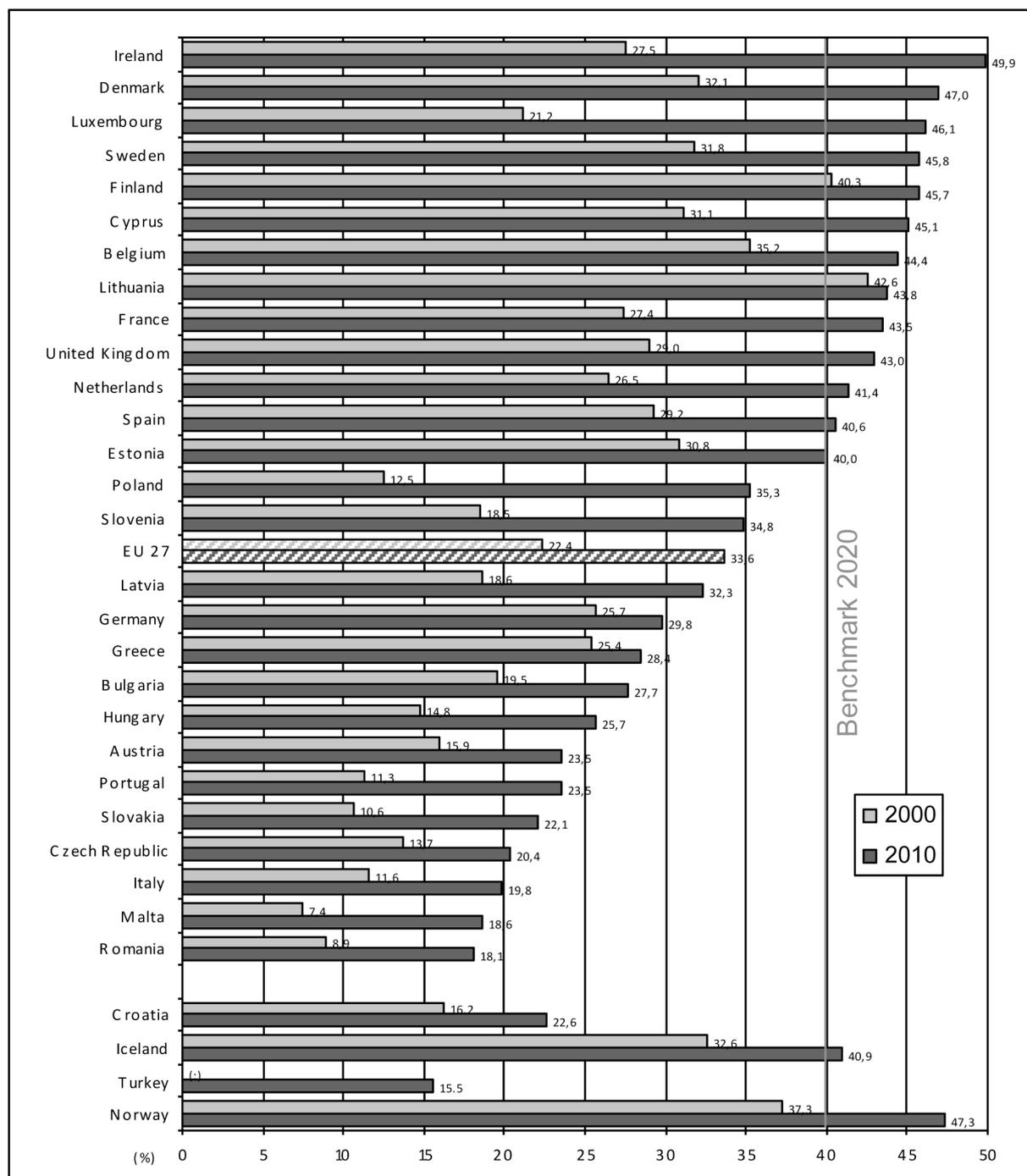
31 With the exception of Lithuania, which historically had very high levels of tertiary attainment.

Figure 3–1: Tertiary graduates as a share of the working age population (25-64)³²

Source: Eurostat (EU-27) OECD 2011b (US, Australia [AU], Korea [KO], Japan [JP], Canada [CA])

As part of the Europe 2020 Strategy, EU governments have agreed an attainment target for higher education among those aged 30-34 of 40% by 2020. This more specific age range was chosen to make it easier to chart progress, by focusing on the typical age cohort for recent graduates. As shown in Figure 3–2, there has been a sharp increase in higher education attainment rates among this age cohort across the EU, with the EU average for the Europe 2020 benchmark rising from 22.4% in 2000 to 33.6% in 2010.

32 Tertiary educational attainment measured with reference to ISCED 5 and 6.

Figure 3–2: Tertiary educational attainment among those aged 30–34 (2000–2010)³³

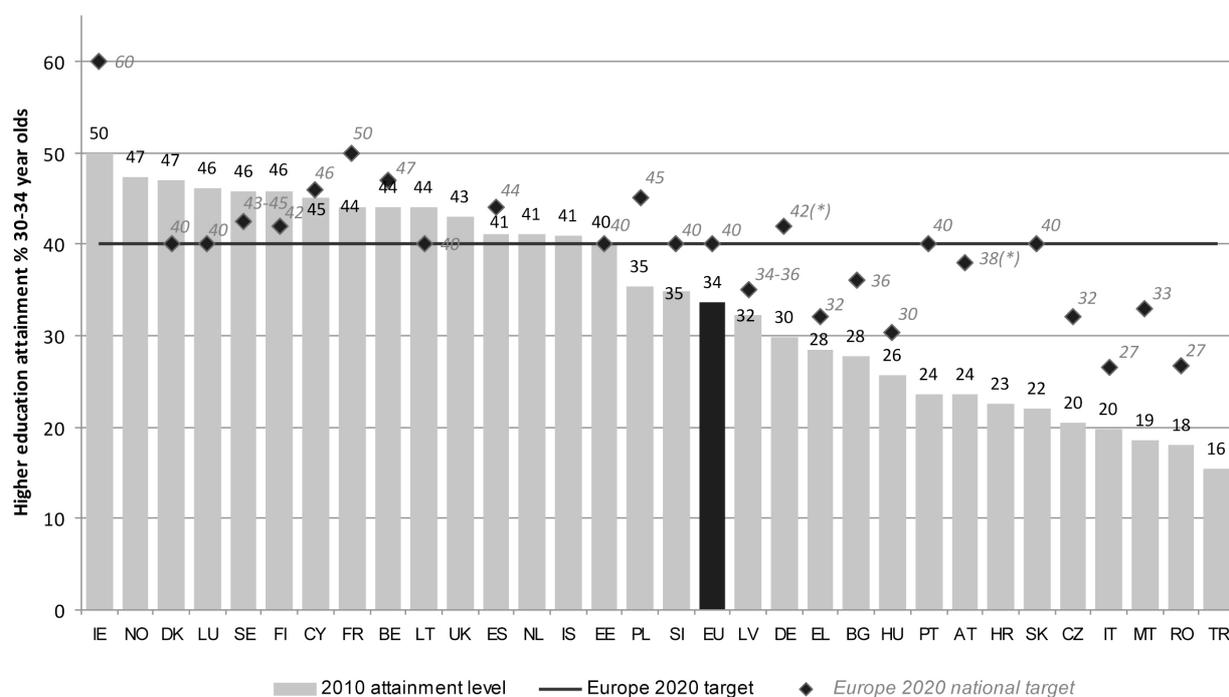
Source: Eurostat, EU Labour Force Survey

13 Member States have now reached or exceeded the 40% attainment level and on current trends. As part of the National Reform Programmes prepared as part of the implementation of Europe 2020, Member States have established national

33 Tertiary educational attainment measured with reference to ISCED 5 and 6.

targets for higher education attainment, some of which go exceed the 40% level, as shown in Figure 3–3.

Figure 3–3: Tertiary education attainment: 2010 levels and national targets³⁴



Source: Eurostat, EU Labour Force Survey

Nine Member States³⁵ have set national targets at levels above the 40% EU target; seven³⁶ have set national targets at the level of the EU target, while nine Member States³⁷ have targets below 40%. The Netherlands and the UK have not set national targets. On the basis of the 2010 figures, six Member States (DK, EE, FI, LT, LU, SE) have already reached their national target and the EU as a whole is on course to meet the Europe 2020 target by 2020³⁸. Nevertheless, particular efforts will be required to increase higher education participation and graduation levels in the other Member States, and in particular the 11 countries where attainment rates currently remain below 30% of the relevant age cohort.

34 Note that AT and DE define attainment by referring, respectively, to ISCED level 4a (AT) and ISCED level 4 (DE), which they consider equivalent to tertiary degrees (see below).

35 BE, CY, DE, ES, FI, FR, IE, PL, SE.

36 DK, LU, LT, EE, SI, PT, SK.

37 AT, BG, CZ, EL, HU, IT, LV, MT, RO.

38 See European Commission (2011c).

Although in the context of Europe 2020 higher education is defined - in line with standard classifications - as ISCED³⁹ level 5 and 6, some Member States have argued that qualifications at ISCED level 4 – post-secondary, non-tertiary studies – should be viewed as equivalent to higher education. Both Germany and Austria have included ISCED level 4 graduates in their national targets for higher education attainment⁴⁰.

Figure 3–4 shows, in addition to the higher education attainment indicator presented above, the proportion of 30-34 year olds with different forms of post secondary, non tertiary education (ISCED 4) qualifications in the Member States. This distinguishes between attainment of qualifications classed as ISCED 4a or 4b, which typically give access to higher education studies (and can often count as credits towards a higher education qualification) and other types of post secondary, non tertiary qualification, which generally do not give access to higher education. Figure 3–3 illustrates the scale of the particular ISCED 4a and 4b qualification systems in Germany and Austria (reflected in national Europe 2020 targets⁴¹), but also highlights the prevalence of similar qualification types in the Baltic States, Sweden, Romania and Hungary. For a number of other Member States⁴² it is not possible to make a clear distinction between types of ISCED 4 education. Other Member States, including Ireland, Poland and Greece have substantial ISCED 4 sectors, the qualifications from which do not generally give direct access to ISCED 5.

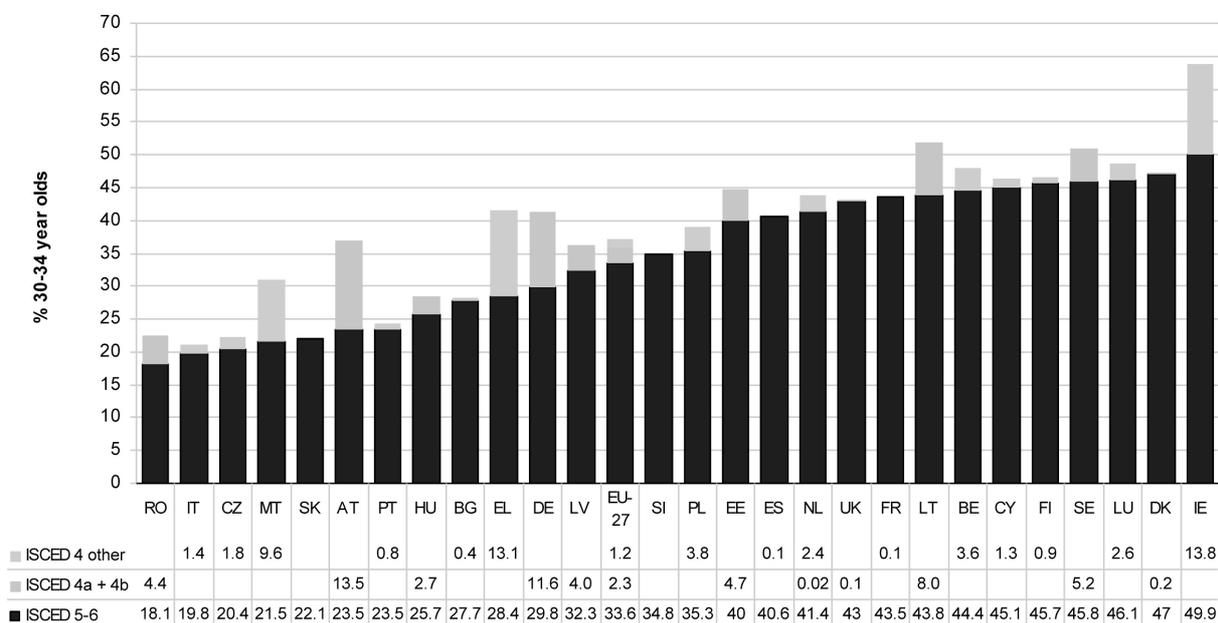
39 International Standard Classification of Education.

40 Austria has set a higher education attainment target of 38% by 2020, including ISCED 4a, while Germany has established a target of 42% including ISCED 4a and 4b. See European Commission (2011c).

41 ISCED 4a and 4b in Germany and ISCED 4a in Austria.

42 BE, CZ, FR, CY, LU, MT and PT.

Figure 3–4: Tertiary and "post secondary, non tertiary" attainment levels for 30-34 year olds in 2010⁴³



Source: Eurostat, EU Labour Force Survey

The social dimension of higher education: who are today's students?

Alongside an increased focus on absolute levels of higher education participation and attainment in society, the last decade has seen far greater attention paid to the social composition of the populations entering and graduating from European higher education institutions. 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"⁴⁴. The underlying rationale for this commitment was broadly twofold. Firstly, there is what can be termed the "social justice argument"⁴⁵, which emphasises 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.

43 Note that ISCED 4 data for MT, BG, ES, NL, UK, FR, CY, FI, LU and DK lack reliability due to the small sample size in these countries.

44 London Communiqué of 2007.

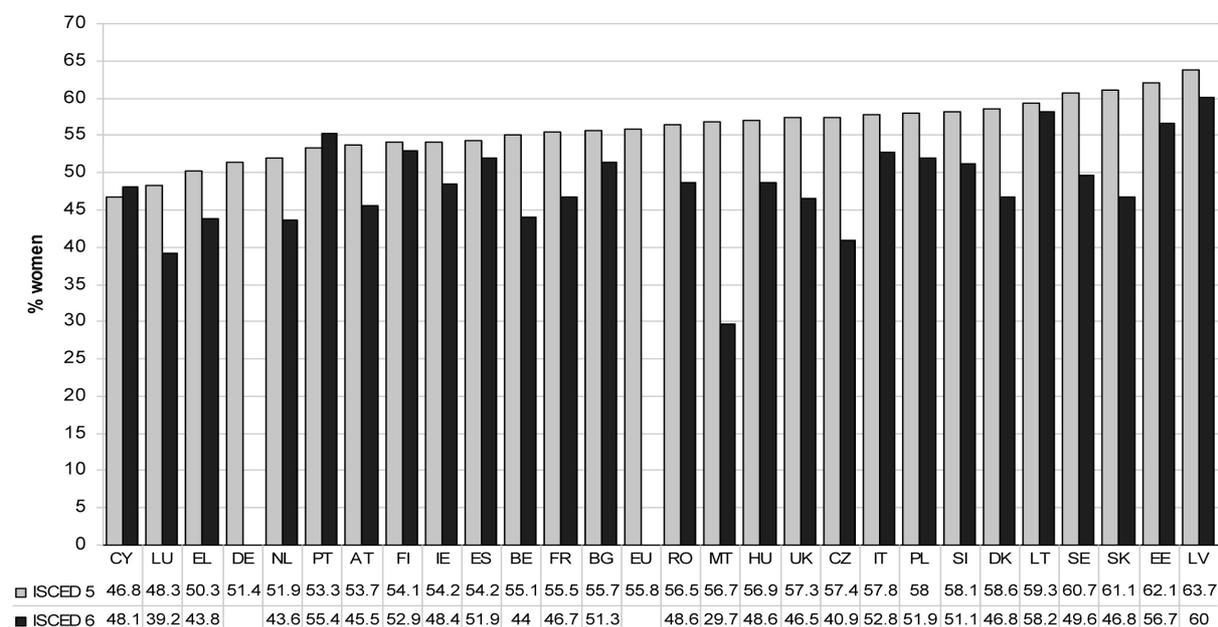
45 Eurostudent (2011).

From a policy perspective, realising the goal of a socially representative student cohort requires both a good understanding of the current make-up of the student population in Europe and well-tailored action to increase higher education participation among currently under-represented groups. Policy across the EU has tended to focus on three main areas: a) gender, b) socio-economically disadvantaged groups (including minority ethnic groups and the disabled) and c) older age cohorts wishing to enter (or return to) higher education.

The gender balance within the student population

The most recent data on the student population in EU Member States confirms the well established pattern that women are proportionally more likely than men to enter higher education. Women account for more than half the student cohort at pre-doctoral level (ISCED 5) in all but two Member States (Cyprus and Luxembourg). This pattern is reflected in the higher education attainment figures, which show that female graduates outnumber male graduates the 25-35 age cohort in all Member States⁴⁶ and in the overall working age population (25-64) in 22 of the 27 Member States⁴⁷.

Figure 3–5: Proportion of female students at ISCED 5 and ISCED 6 in 2009



Source: Eurostat. Data for GR and LU are for 2008. No ISCED 6 data for DE

46 The average higher education attainment rate in the EU-27 for those aged 30-34 is 37.2% for women and 30% for men.

47 The exceptions (where male graduates outnumber female graduates in the population 25-64) are LU, DE, AT, NL and CZ.

The overall pattern of higher education participation at ISCED 5 level shown in Figure 3–5 conceals considerable differences in the gender balance within specific disciplines and study fields. Thus, on an EU level, women are over-represented to an even greater extent than in the general student population in both the humanities and law⁴⁸, while men account for a majority of students in the fields of "science, maths and computing" and "engineering, manufacturing and construction"⁴⁹. Furthermore, although women outnumber men in the pre-doctoral levels of higher education, the reverse is true for doctoral students in 16 of the 26 Member States for which relevant data are available. Given the importance of doctoral-level education as a pre-requisite for research careers, this comparative under-representation of women in the highest levels of study has an impact on the numbers of women in university faculty and in research professions.

The social background of students

Increasing the numbers of students and graduates from "under-represented" social groups is a core objective of the "social dimension" of the Bologna Process and a well-established policy goal in many EU Member States. However, different national population profiles and traditions mean that national definitions of under-represented societal groups vary from country to country, which complicates cross-country comparison of higher education participation rates and policy responses. Research by Eurydice⁵⁰ highlights the diversity of national student classification and monitoring systems. For example, while Austria, Germany and the United Kingdom routinely use more than five distinct categories for monitoring student participation, France, Luxembourg and Sweden focus only on students from low income backgrounds.

Across the EU, under-representation in higher education is most often linked to socio-economic background or parents' educational attainment, or to minority status or disability. The latest report of the Eurostudent project⁵¹, based on surveys of students in a majority of EU Member States and other European countries⁵², examines a number of measures of the social background of students, including the educational and occupational profile of their parents.

48 Respectively 68% and 58% female students in 2009.

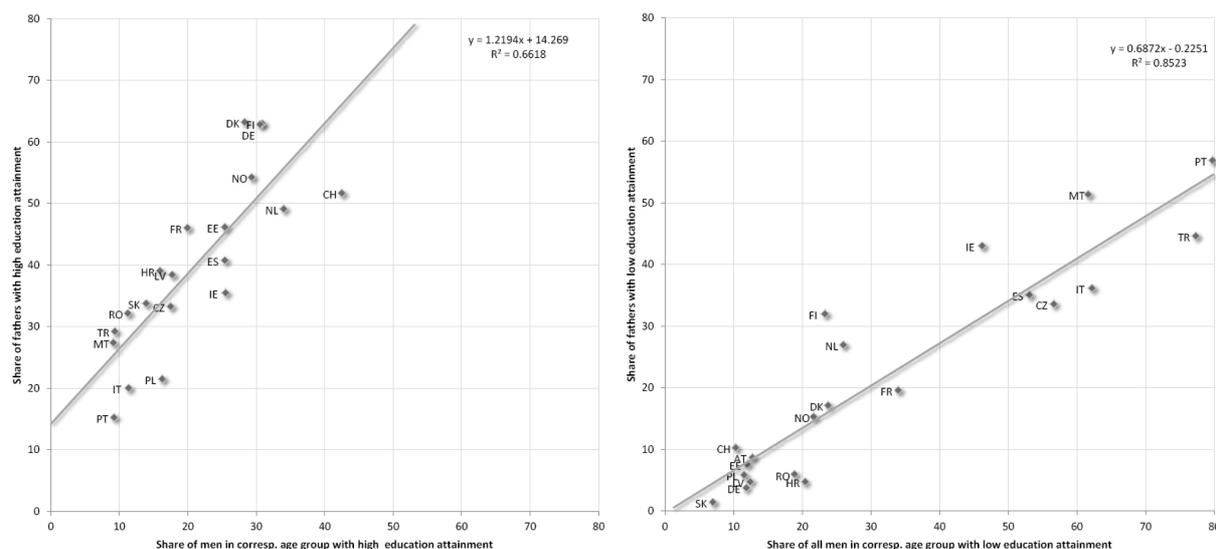
49 Respectively 62% and 75% male students in 2009.

50 Eurydice (2011).

51 Eurostudent (2011).

52 Does not cover BE, HU, BU, GR and Scotland (Observers) or Cyprus and Northern Ireland (non Members).

Figure 3–6: Educational profile of students' fathers



Source: Eurostudent (2011), p.50 No data for England and Wales, SI, SE, LT

The educational attainment of students' parents is often viewed as a useful proxy indicator of students' socio-economic background⁵³. Figure 3-6 plots the share of students whose fathers have a) higher education qualifications and b) at most lower secondary school qualifications against the equivalent shares for all men in the national populations aged 40-60. This shows that individuals whose fathers have higher education qualifications are proportionally over-represented in the student cohort in all countries surveyed. In the Netherlands, for example, 50% of students surveyed have a father with a degree, while only 34% of Dutch men in the age group 40-60 have a similar level of qualification.

At the same time, individuals whose fathers have a low level of qualification are proportionally under-represented in higher education in most countries, although to differing degrees and with some exceptions. Thus, in Finland, the Eurostudent results suggest individuals with fathers with low levels of qualification are proportionally over-represented in higher education, while in the Netherlands and Ireland the proportion of students with such fathers is almost exactly in line with the pattern in the national population as a whole. The higher education systems in these countries could thus be seen to be relatively inclusive and to have a high potential to influence social mobility. In contrast, while over 60% of the Italian and 35% of the French male populations aged 40-60 have no more than lower secondary qualifications, fewer than 40% of Italian students and un-

53 In particular because educational attainment levels are closely correlated to occupational status and, to a lesser extent, income and educational attainment levels are objective and easily comparable across countries.

der 20% of French students report having a father with this level of qualification. Such patterns suggest a greater level of inter-generational reproduction in terms of educational attainment and a lower potential impact on social mobility.

The relative under-representation of students from disadvantaged socio-economic backgrounds in higher education is related to a complex set of factors of which lower levels of attainment in secondary education and more limited educational aspirations are the most frequently cited. Lower levels of the educational system have an important influence on the likelihood of individuals from different backgrounds to enter higher education. Evidence shows⁵⁴ that in systems that tend towards early educational streaming and selection, students from lower socio-economic status backgrounds are statistically more likely to 'opt for' (or have no option but to opt for) a vocational training route, from where it is more difficult to continue to higher education. As a consequence, some countries (for example Finland, Ireland and Sweden) have sought to introduce more flexibility in progression routes, making it easier to move from forms of education and training that do not traditionally lead to higher education⁵⁵. This is also an important element in attracting older learners to higher education (see below).

A 2010 Eurydice survey showed that most EU Member States have expressed an intention in their policies to promote the "social dimension" of higher education in line with the broad objectives of the Bologna Process. However, very few appear to have translated this into formal commitments to raising the participation of under-represented groups to the point where the higher education population mirrors the overall societal distribution of such groups. Indeed, it is more common for countries to take measures to increase overall participation in higher education and to hope that in so doing the numbers of students from under-represented groups will also rise. Targets, where they do exist, tend to relate to increasing participation of individuals with lower socio-economic status and/or students whose parents have relatively low educational attainment levels. Eurydice found that Belgium (Flemish Community) France, Ireland and the United Kingdom (Scotland) have implemented measures in this respect.

The age profile of higher education students

The twin objectives of social equity and increasing the overall stock of human capital also underpin measures to increase higher education participation among older

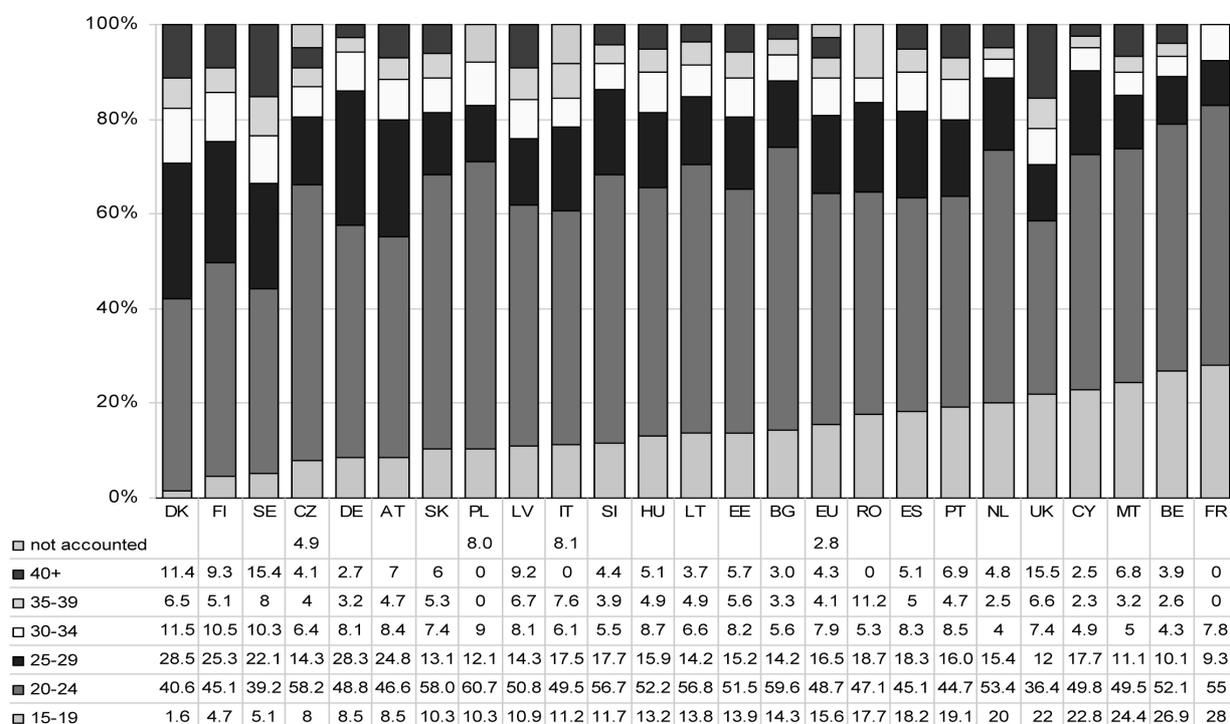
54 For example, OECD (2010a) Eurydice (2010).

55 This is also a key objective of the Copenhagen Process in the field of Vocational Educational and Training, which aims to create flexible learning pathways, which allow permeability between the different parts of the education and training system. See Copenhagen Process 2010.

age groups, who did not benefit from higher education as part of their initial educational pathway or who wish to *return* to higher education to upgrade their skills. In addition to encouraging such older learners to undertake mainstream higher education programmes, there is a related, but distinct, trend in strategic policy and at institutional level to develop the role of higher education institutions as providers of shorter continuing education programmes to those already in the labour market.

Figure 3–7 shows the age profile of the student populations in mainstream pre-doctoral programmes (ISCED 5a and 5b) in the EU Member States. This serves to illustrate two main patterns. Firstly – and less directly relevant here – those countries where students typically enter (and complete) higher education at a comparatively young age⁵⁶. Secondly, as reflected in the order of the countries in the figure, the proportion of older learners (those over 35) in the overall student population at undergraduate or masters level. In this context, Sweden and the UK stand out as particularly successful systems in attracting older learners, with over 20% of their ISCED 5 students over 35. The same age cohort makes up over 14% of the student populations in Denmark, Latvia and Finland and accounts for over 10% of students in a further eight Member States.

Figure 3–7: Age profile of higher education students (ISCED 5a and 5b) – 2009



Source: Eurostat, UOE. No data for Ireland, Greece or Luxembourg

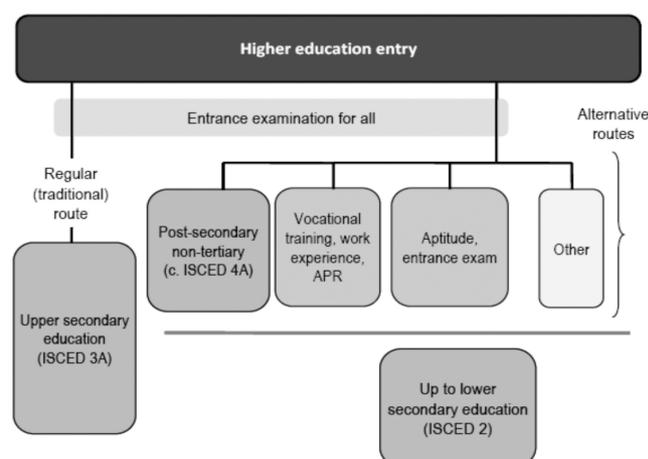
56 In particular FR, BE, MT, CY, UK and NL, where over 20% of students in 2009 were 19 or younger.

Entry routes to higher education

Across the EU, the most widespread pathway to higher education has traditionally been to follow a general or academic route through secondary education (ISCED 3A), to pass final exams at upper secondary level (and in some cases higher education entry exams) and to move directly to higher education after high school. The expansion of higher education in recent decades often introduced more vocationally oriented pathways to university, while the increasing preoccupation with widening access and ensuring social equity has ensured the issue of "progression routes" remains high on the policy agenda⁵⁷. There is a growing recognition that secondary education systems tend to reinforce existing socio-economic differences between pupils and work against equal access to higher education⁵⁸. In recognition of the importance of up-skilling the labour force and to encourage lifelong learning, national and EU policy has sought to prevent "dead-ends" in educational systems, which prevent individuals from progressing to higher levels.

As illustrated in Figure 3–8 – a conceptual framework for entry routes to higher education developed as part of the Eurostudent project – alongside the traditional route from academic upper secondary (ISCED 3A) level to higher education (ISCED 5), a range of alternative routes may exist. These include more vocational streams, including foundation courses or similar programmes at post-secondary, non-tertiary level (ISCED 4a or b) as well as mechanisms to assess and validate prior learning gained in other settings, including work experience and education and training options that do not traditionally lead to higher education.

Figure 3–8: Eurostudent framework for routes to higher education



Source Eurostudent IV, p25

57 See also Eurydice (2011), Section 1.3.

58 See OECD 2010a.

The latest Eurostudent survey found that the vast majority of students in the EU enter higher education through the traditional route described above. However, in the Nordic countries, Ireland and the United Kingdom, over 20% of the students surveyed reported having followed alternative routes to higher education, from vocational courses or through accreditation of prior learning and experience⁵⁹. The students in this group were more likely than average to come from low educational backgrounds, to be older and to have delayed entry to higher education. This suggests the use of alternative progression routes can support the goal of widening access to higher education to under-represented target groups, including those from lower income backgrounds and older learners.

The latest EUA Trends report⁶⁰, surveying 821 higher education institutions in Europe, found an increasing number of institutions were introducing policies on widening access, but also notes that national authorities and institutions need to do more (and be allowed to do more) to collect relevant data on the social background of students and their attainment.

The impact of demographic aging

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%⁶¹. 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. As shown in Figure 3–9, while the

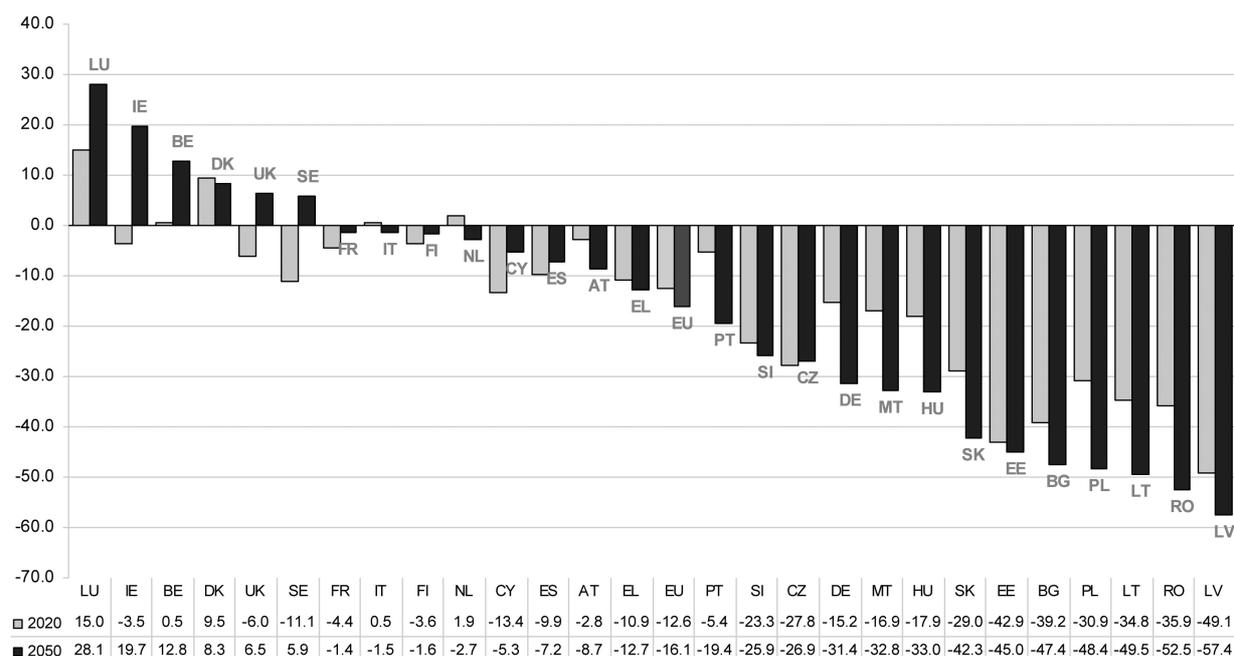
59 Eurostudent (2011). 26-28.

60 EUA (2010).

61 Eurostat calculations.

student age cohort is projected to increase or remain broadly stable in the coming decades in 10 Member States, the remaining 17 countries will see the 20-24 age group shrink compared to 2010 levels. Declines range from 5% in Cyprus to over 50% in Romania and Latvia, with the greatest demographic contraction seen in Central and Eastern Europe.

Figure 3–9: Evolution in population aged 20-24 in the EU - 2020 and 2050



Source: Eurostat

From a socio-economic development perspective, the decline in the student age cohort provides an increased incentive to increase higher education participation and attainment levels in the population as a whole. This is necessary not only to meet future predicted skills requirements (see next section), but also to maintain the supply of graduates at current levels.

Responding to the skills challenge

Europe's changing skills requirements

The requirements of the European economy in terms of human capital are changing. As the EU recovers from the worst economic crisis for decades, the latest analysis points to a number of trends in Europe's economic structure with important implications for employment patterns and skills needs.

An ongoing decline in employment in primary sectors and basic manufacturing sectors, with increased employment in services. This trend has been accelerated by increased competition from Asia, which has seen many manufacturing and processing jobs move to the east during the last 10 years.

1. A focus within the EU on "high-end", knowledge-intensive activities, such as research and development, marketing and sales, value chain management and financial services, which generate high added value – and require highly skilled labour.
2. An increasing need for skills related to the development and implementation of climate and environmentally friendly solutions, technology and services.
3. Some degree of polarisation in employment types at sector level, particularly in areas such as distribution and transport, with increased employment in both high-skill posts and in low-skilled positions which cannot easily be transferred to other locations in the world⁶². At the same time, there is likely to be an overall decline in demand for skilled manual workers, as improvements in productivity reduce employment needs and competition intensifies from workers in this skill category in other world regions⁶³.

In the context of a complex, interdependent global economy, Europe is thus increasingly specialising in services and high value added production sectors. This shift will generate an increasing number of knowledge and skills intensive jobs for managers, professionals and technicians. As a result, demand for highly-qualified people is projected to rise by almost 16 million in the period up to 2020. The share of highly-qualified jobs in the labour market as a whole will thus increase from 29% in 2010 to about 35% in 2020. At the same time, the share of jobs employing those with medium-level qualifications will remain broadly stable (at around 50%) and the share of jobs employing those with low qualifications will decrease from 20% to less than 15%⁶⁴.

Studies of current and future skills requirements highlight the importance of both transversal core skills and subject or sector-specific skills for all individuals. "Transversal core skills" can be conceived of as a set of knowledge, skills and attitudes that allow people to lead a successful life in a modern knowledge society. The European Key Competences Reference Framework⁶⁵ defines eight core competences⁶⁶ - including communication and ICT skills, an ability to

62 See Oxford Research (2010).

63 See European Commission (2010b).

64 CEDEFOP (2010a).

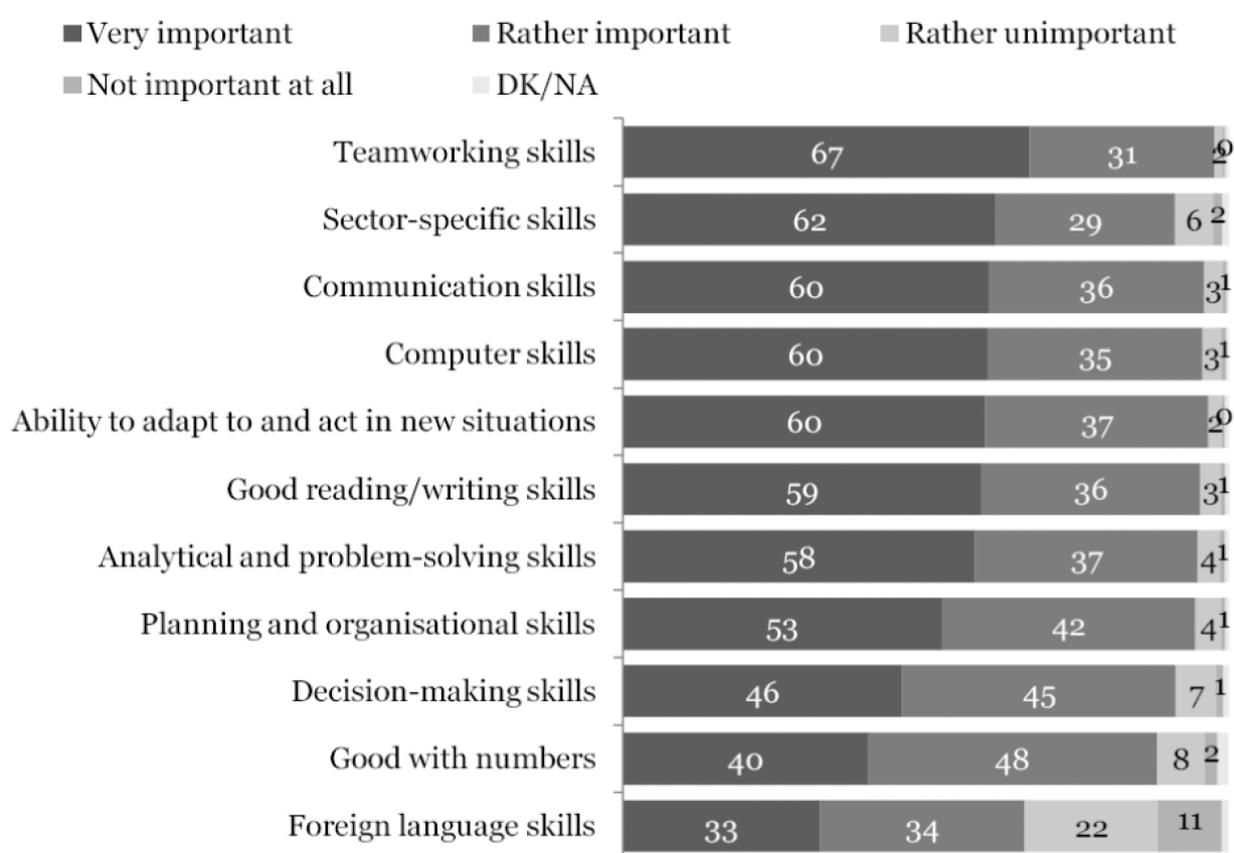
65 European Commission (2006).

66 1. Communication in the mother tongue; 2. Communication in foreign languages; 3. Mathematical competence and basic competences in science and technology; 4. Digital

learn, and initiative and entrepreneurship - which all individuals should seek to develop.

These core competences correspond closely to the skills employers consistently say they seek in their employees. In a recent Eurobarometer survey⁶⁷ (See Figure 4–1), employers from across Europe ranked transversal competences such as team-working, communication skills, computer skills and adaptability, alongside sector-specific skills, among the most important attributes they look for in graduate recruits.

Figure 4–1: Importance of skills for employers in recruiting graduates



Q3.2. Please rate the following skills and competencies in terms of how important they are when recruiting higher education graduates in your company.

Base: all companies , % TOTAL

Source: Flash Eurobarometer 304, 2010

competence; 5. Learning to learn; 6. Social and civic competences; 7. Sense of initiative and entrepreneurship; 8. Cultural awareness and expression.

67 Eurobarometer (2010a).

As noted by the EU's Expert Group on New Skills for New Jobs⁶⁸, today's knowledge society and economy call for individuals to develop "T-shaped" skills profiles, in which they combine transversal core skills (the horizontal bar) with the specific skills needed for particular occupations or jobs (the vertical bar). The Expert Group argues these competences should be acquired as soon as possible by everyone and developed throughout life. This model of skills development holds for those seeking to develop the highest levels of skills and thus has direct implications for Europe's higher education systems⁶⁹.

Key implications for higher education

The predicted growth in demand for high-level skills in the European economy means the EU needs more skilled graduates in absolute terms and for these graduates to have the right mix of skills to allow them to succeed in the changing economic environment. As a result of the continuing growth in student and graduate numbers in all Member States highlighted in Section 3, the EU appears to be on the right path in terms of producing the right quantity of graduates, even if widening access to higher education to under-represented groups remains a challenge. Judging the quality of the education received by higher education students in the EU and the relevance of the knowledge and skills they acquire is inherently more difficult.

The rapid expansion of quality assurance in higher education over the last decade, accelerated in Europe by the Bologna Process, has stimulated a wide-ranging debate on how best to assess the quality of higher education programmes. Views on the components of quality, and on the best approaches to guaranteeing it, vary across the EU. However, the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), developed as a common framework by the European Association for Quality Assurance in Higher Education (ENQA)⁷⁰, place emphasis on ensuring the inherent intellectual quality of programmes and teaching, their relevance to students and society in terms of learning outcomes and the importance of creating a "culture of quality" that promotes continuous improvement. As reflected in the ESG, there is a broad

68 European Commission (2010b).

69 The OECD's Programme for the International Assessment of Adult Competencies (PIAAC) is undertaking a new wide-ranging survey of adult skills in order to assess the skills competencies needed for individual success. The outcomes are intended to inform education practitioners and policy makers on appropriate ways to develop these skills and competencies.

http://www.oecd.org/document/35/0,3746,en_2649_201185_40277475_1_1_1_1,00.html

70 ENQA (2005). Developed by ENQA in cooperation with EUA, EURASHE and ESIB.

consensus that high quality higher education programmes combine a number of core features:

- The programme is defined in terms of clear *learning outcomes*, which allow students to understand the knowledge and skills they should acquire, form the basis for student assessment and quality assurance and provide employers and other stakeholders a clear idea of the skills set graduates should possess;
- The content draws on the *best available knowledge* in the subject field concerned, including insights from the latest research and the world outside academia;
- The *staff teaching the programme* are well qualified and have the right training and skills set to fulfil their pedagogical role;
- The *structure, teaching or delivery methods* are appropriate to the subject matter and tailored to the needs of the target student group and adequate *learning resources* (research and computer facilities⁷¹, libraries etc) are available;
- The programme is subject to *quality assurance procedures* from the outset, including formal, up-front approval for the course and regular periodic reviews by external experts, taking into account the views of students and employers, labour market representatives and other relevant organisations.

1. The focus on learning outcomes

Reformulating study programmes in terms of defined learning outcomes for students represents a significant cultural shift for European higher education. It requires the core focus of programme design to move away from inputs (the qualifications of teachers, hours studied) – the means through which programme objectives are achieved - and onto outputs, defined in terms of knowledge, skills and attitudes acquired by the learners. This shift lies at the heart of the move towards “student-centred learning” – wherein the results and impacts of the study experience *for students* are attributed utmost importance at programme and institutional level.

The focus on learning outcomes in higher education is part of a wider trend within education and training more generally, spurred on by the development of National Qualifications Frameworks (NQFs) in the context of the Bologna Process⁷² and the development of the European Qualifications Framework (EQF). Initially focusing on the level of higher education, NQFs show what learners

71 See Section 4–3.

72 See 2005 Bergen Communiqué.

may be expected to know, understand and be able to do on the basis of a given qualification (ie the learning outcomes expected from these qualifications). They also show how learners may move between qualification levels and types in an education system⁷³. At EU level, the European Qualifications Framework (EQF), agreed in 2008, provides a standardised set out learning outcomes organised into eight levels, to which national qualifications can be linked. The objective is now to relate all existing and new qualifications – at all levels of the education and training systems - to the appropriate EQF level, to allow employers and others to better understand the learning outcomes expected from qualifications gained in another EU Member State⁷⁴.

The balance of evidence from recent analysis of the situation in Europe shows that the concept of learning outcomes has not yet become established in many higher education institutions⁷⁵. As noted by the OECD's current AHELO project⁷⁶, formulating programmes in terms of learning outcomes is challenging, and represents a particularly significant departure for universities accustomed to delivering courses defined centrally in national systems. In such cases, academic staff have to take on a range of new responsibilities for the design and implementation of the courses they deliver. The European University Association argues the shift to a student-centred learning outcomes approach in many cases requires further resources to support smaller staff-student ratios, better learning facilities and staff training⁷⁷.

In addition to the shift to learning outcomes, higher education institutions are also adapting to the increased focus on transversal competences. This implies that higher education programmes should seek not only to impart subject-specific knowledge and skills, but also help individuals to develop their core transversal competences, notably in terms of critical thinking and learning, communication, entrepreneurship and creativity. This development brings with it its own challenges. In particular, there is an ongoing debate about, firstly, the extent to which higher education can be expected to develop core competences if these have been neglected in earlier stages of the education system and, secondly, the best way to measure and assess such competences, which have not always been a focus of many higher education programmes.

73 <http://www.ehea.info/article-details.aspx?ArticleId=69>

74 See http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm

75 See for example, EUA (2010), GHK (2011).

76 *Assessing Higher Education Learning Outcomes* (AHELO) www.oecd.org/edu/ahelo

77 EUA (2010).

*Box 4-1: Policy and practice: The Nexus project, Germany*⁷⁸

The German Federal Government is funding a project to support higher education institutions in their efforts to modernise their study programmes, teaching, examination and recognition procedures. 'Nexus', which has been funded for the period 2010 to 2014, is coordinated by the German Rectors' Conference (HRK) and has a core focus on student-centred learning, modularisation and ensuring employability of graduates. The project involves dissemination of good practice from within Germany and beyond though through workshops, seminars and publications.

2. Better links to research, innovation and the world of work

Higher education systems must continue to evolve if they are to respond effectively to the skills needs of a knowledge economy and challenges related to delivering high quality education to an even larger proportion of the population. At a fundamental level, this implies complementing the traditional academic culture in universities with a focus on delivering a highly skilled, enterprising and flexible workforce – which in turn requires increased interaction between higher education institutions and the world around them. Experience from around the world has shown the benefits of cooperation with external partners, including employers, innovative businesses and local and regional authorities. As the Expert Group on New Skills for New Jobs put it, "education and training can be effective and innovative only if the institutions themselves are innovative, "learning organisations" open to interactions with the world of business and work"⁷⁹.

In order to support the development of closer cooperation between higher education institutions and companies in Europe, the Commission has launched the University-Business Forum⁸⁰, 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 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 val-

78 See: http://www.hrk.de/de/projekte_und_initiativen/5913.php

79 European Commission (2010b).

80 University-Business Forum, see http://ec.europa.eu/education/higher-education/doc1261_en.htm

ued skills, underpinned at all times by high levels of adaptability, entrepreneurship and creative and innovative capacities.

In order to support implementation, a pilot action called "knowledge alliances" was launched in April 2011⁸¹. 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.

At the same time, it is important that teaching programmes in universities benefit as much as possible from new insights from the world of research – research which may be undertaken in the same organisation, but does not always feed into the programmes delivered to students. In this context, the concept of the "knowledge triangle" – comprising education, research and innovation – is important. 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. As noted by in Council Conclusions on the role of education in the knowledge triangle:

for education to fulfil its role in the knowledge triangle, research and innovation objectives and outcomes need to feed back into education, with teaching and learning underpinned by a strong research base, and with teaching and learning environments developed and improved through greater incorporation of creative thinking and innovative attitudes and approaches⁸².

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. At European Union level, the European Institute of Technology (EIT) has been established to test innovative approaches linking different actors in the knowledge triangle, including for the development of new higher education programmes and curricula.

81 Call for proposals: http://ec.europa.eu/education/calls/doc2905_en.htm

82 Conclusions of the Council and of the Representatives of the Governments of the Member States on developing the role of education in a fully-functioning knowledge triangle, 26 November 2009.

*Box 4–2: Policy and practice: Education in the European Institute of Technology (EIT)*⁸³

The Knowledge Triangle is a useful tool to grasp the dynamics of education, research and innovation working together in a mutually reinforcing way in order to enhance quality, achieve excellence and to contribute to economic growth and advancement of society as a whole. The European Institute of Technology (EIT) is the first EU initiative that seeks to address the grand societal challenges by connecting the different parts of the knowledge triangle, in particular through the "Knowledge and Innovation Communities" (KIC).

The EIT has departed from the traditional knowledge transfer vision of a linear progression from education into research and then further to the market. Instead, it strives to create an interactive and dynamic relationship between education, research and business and industry, which better reflects the needs of the knowledge economy. A strong research base is a pre-requisite for the Knowledge and Innovation Communities established by the EIT. Each KIC aims to become a world-wide reference for cutting-edge research in its specific thematic area, pooling the best talent in a collaborative, cross-disciplinary setting. Excellent research is then tapped by the EIT education programmes, which provide an environment for training world-class researchers will.

The EIT educational concept will enhance the potential of the higher education institutions engaged in KICs to integrate research and innovation results into the educational offer and to exploit the potential for marketable products and services with relevance to the thematic area. The universities participating in the KICs will continue to award EIT labelled Masters degrees and PhDs, which provide in-depth scientific knowledge coupled with entrepreneurial skills, creative and innovative attitudes. Dialogue with national authorities and quality assurance bodies helps to ensure recognition of the EIT labelled degrees in national and international context. The EIT labelled degree programmes are characterised by inter-sectoral, as well as international cooperation.

Academia and business work hand in hand for the design and delivery of the curricula and the definition of the learning outcomes, while students and staff can move smoothly from higher education to business and vice versa. The approach of the EIT labelled Master and Doctoral courses is explicitly international, with world-wide recruitment of students and staff combining high research potential with an entrepreneurial mindset. The courses reflect the achievements of the European Higher Education Area in terms of international curriculum development, structured mobility periods in each programme, awarding of joint degrees and correct application of European transparency and internationalisation tools.

3. *Appropriate quality assurance*

As already highlighted, the development of internal and external quality assurance (QA) mechanisms has been one of the most important trends affecting

83 See: <http://eit.europa.eu/nc/activities/education/overview.html?print=1>

higher education in Europe in the last decade⁸⁴. The call for rigorous QA systems as part of the Bologna Process was motivated in the first instance by a need to ensure mutual trust among participating countries in the quality of qualifications delivered by other higher education systems within Europe. However, this initially trans-national concern has sparked a widespread debate on the appropriate role and form of quality assurance systems in guaranteeing high quality at national level, particularly in those countries with little or no previous experience of QA.

Evidence from the ground shows a growing "quality culture" in higher education institutions, with internal quality systems in place and frequently managed at faculty level⁸⁵. Moreover, almost all EU Member States now have independent QA agencies, working to a greater or lesser extent in line with the European Standards and Guidelines (ESG) mentioned earlier. Many agencies are members of the European Association for Quality Assurance in Higher Education (ENQA) and registered in the European Quality Assurance Register (EQAR) to facilitate recognition across Europe. This European dimension to quality assurance has been widely welcomed, with the EUA (2010) finding it have had a range of positive impacts, including in internationalising quality review panels, ensuring the participation of students in QA processes and further professionalising national QA agencies.

Reliable information about the quality and relevance of learning programmes is of particular importance for young people entering higher education, for young graduates considering further studies and for adults seeking suitable continuing education or retraining. However, as shown in the European Commission's reviews of progress in implementing QA systems in the EU⁸⁶, both internal and external quality systems in Europe have tended to focus on accreditation of programmes against minimum standards, rather than pushing for excellence, and exploring new and innovative ways to ensure the quality and relevance of programmes. This said, recent developments in a number of Member States, show positive trends in developing new approaches to QA.

84 60% of respondents to the 2010 EUA Trends survey rated the development of internal quality processes had been one of the most important changes affecting their organisations in the last 10 years – EUA (2010).

85 EUA (2010).

86 See European Commission (2009).

*Box 4–3: Policy and practice: Employability in quality assessment in Sweden*⁸⁷

Sweden is introducing measures of "employability" and the employment outcomes of graduates as criteria to be taken into account in assessing the quality of study programmes as part of its national higher education quality assurance system. Questionnaires will be sent to alumni to collect data on graduate views on whether the education they received was useful in the labour market. The results of this analysis will be used as one element in determining the quality-based allocation of extra funding to the best performing universities.

4. Guidance and counselling

Recent analysis of the skills situation in Europe⁸⁸ concluded that too many individual education and training decisions are made in the absence of competent career guidance and counselling, with a lack of understanding of people's strengths and the real dimensions and opportunities of different careers, leading to inappropriate training and career choices.

Improving guidance and counselling on career and further study choices in schools is vital to help individuals make informed decisions and reduce wasteful drop-out resulting from inappropriate course selection. At the same time, career guidance within higher education itself is important to help students prepare for the world after studying and develop individual career management skills. There is evidence that career guidance in higher education institutions has been developing rapidly in recent years, with universities striving to improve student retention and prepare their students for employment⁸⁹. Reliable information on the employment outcomes of previous graduates can be a valuable tool for students in selecting study options and for career guidance counsellors, as well as providing valuable feedback for those designing and delivering programmes. Improved data on what happens to alumni after their study period is vital for this to happen.

87 See: <http://www.sweden.gov.se/content/1/c6/14/30/87/358bd536.pdf>

88 European Commission (2010b).

89 EUA (2010).

*Box 4–4: Policy and practice: Tracking graduates in Hungary*⁹⁰

In Hungary, a new national tracking system for graduate employment outcomes is being developed and produced its first results in autumn 2010. This new system consists of 30 projects in higher education institutions. It is locally implemented with a nationally consistent and audited methodology, covering the professional satisfaction and the assessment of the personal career, the retrospective assessment of education and institution, and the applicability of studies.

ICT in higher education

Information and Communication Technology (ICT) has had and will continue to have a significant impact on higher education. The ubiquity of ICT means educational systems at all levels need to respond to increased demand for digital literacy and competences⁹¹ while such technologies also offer the potential to transform the teaching and learning, research cooperation and the administration of academic institutions. However, deploying ICT is generally costly and is by nature a "disruptive" innovation, requiring both considerable resources and cultural change within organisations. These factors help explain why the radical and rapid transformation of educational systems through technology, predicted by some at the turn of the millennium, has not yet materialised⁹², even if the impact of ICT has been considerable and e-learning remains firmly on the agenda of higher education institutions.

Recent studies show that higher education institutions worldwide are increasingly implementing integrated Learning Management Systems (LMS) at institutional level. These are software systems developed for both administration and teaching in higher education, enabling, for example, enrolment data to be handled electronically, access to online course materials and assessments and online interaction between faculty and students⁹³. Such systems provide core infrastructure to support the work of both administrative and teaching staff, with clear advantages in terms of knowledge management.

Change in the classroom and in the delivery of teaching and learning, requires not only infrastructure, but a reformulation of curricula and course elements to exploit the potential of ICT. This can range from simply making course

90 See: <http://www.kslll.net/PoliciesAndAchievements/ExampleDetails.cfm?id=139&OtherSourceId=&compendiumid=2>

91 Digital Agenda for Europe, European Commission (2010x).

92 Economist Intelligent Unit (2008).

93 OECD (2005).

material available online and using email, through incorporating web-based elements (projects, assessments, discussion fora) into campus-based programmes to fully online delivery, allowing students to follow courses from another location (distance learning, also allowing "virtual learning mobility"). Fully web-based programmes, with no or limited requirements for physical presence on campus, offer new options for widening access to higher education (for example to those in the labour market or with children) and marketing higher education courses internationally⁹⁴. The falling costs and expansion in use of mobile web-enabled devices makes it even more feasible to incorporate innovative, ICT-based teaching techniques and components into higher education programmes.

Although the potential of ICT to enhance the learning and research experience is great, the barriers to wider deployment remain considerable. Alongside the basic infrastructure requirements and the associated investment, remodelling provision to take best advantage of ICT is no easy task. Teachers often need new skills, to adopt new patterns of working and develop new ways of cooperating with technical staff. Moreover, staff often have to undertake such work on top of their existing duties, particularly as e-learning generally complements, rather than replaces, traditional class-room-based learning⁹⁵. This means they need to be convinced that the introduction of new technologies really improves the quality of the educational offer they provide – an area where evidence is often still needed. The use of on line delivery tools also raise questions about intellectual property and sharing of learning resources more widely, as well as concerns about an increased risk of plagiarism and "distractability" among students⁹⁶.

In the context of an information age, where students are increasingly unfamiliar with environments without continuous internet connectivity, it is clear the remaining barriers to the deployment of ICT in higher education will need to be overcome. This will in turn require response from public policy⁹⁷, including through continued support for the development and testing of innovative e-learning solutions, dissemination of effective practice, support for staff training and the creation of appropriate regulatory frameworks for intellectual property.

The added value of learning mobility

At meetings in Leuven and Louvain-la-Neuve in April 2009, ministers responsible for higher education from the countries participating in the Bologna Pro-

94 Evidence to date indicates that internationalisation is not a primary motivation for deploying ICT in programmes - see, for example Economist Intelligent Unit (2008).

95 OECD (2005).

96 Economist Intelligent Unit (2008).

97 See European Commission (2010d), OECD (2005).

ness agreed the objective that by 2020 20% of those graduating in the European Higher Education Area should have completed a study or training period abroad⁹⁸. This decision reflects a growing body of evidence demonstrating the value of mobility, particularly as a way for individuals to develop their transversal core competences and help prepare themselves for work in an increasingly Europeanised and globalised economy. A recent study, examining the career paths of students having participated in the EU's Erasmus Programme found that those who had spent a study period abroad were 15% more likely to work abroad in later life: a positive trend in the context of the European Single Market⁹⁹.

Student mobility can take various forms. The Erasmus Programme supports short-term or "credit" mobility, typically for one or two semesters during which students study or undertake placements in companies or other organisations in another participating country. Such credit mobility should ideally be built into the curriculum at the student's home institution and allow them to gain experience and credits of direct relevance to their home qualification. The term "degree mobility" is frequently used to refer to students undertaking an entire degree course in another country. Recent years have seen an increase in degree mobility in Europe, most notably at Masters-level. Although there are some examples of comparatively large cross-border student flows at undergraduate level, these are comparatively few and tend to concern neighbouring countries with a shared language¹⁰⁰. Recent years have seen a considerable increase in international degree mobility, as learners from outside Europe follow degree programmes in Europe¹⁰¹, although with a strong concentration in the UK, Germany and France (see Section Section 7.1).

Despite difficulties in measuring mobility and limited data availability, it is clear that mobility flows within the EU are unbalanced. In the UK, for example, less than 1% of residents undertaking a higher education course are enrolled abroad, while in Cyprus, Ireland, Luxembourg, Malta and Slovakia more than 10% of students are enrolled in another country. France, Germany and the UK are notable in combining high levels of incoming mobility with comparatively low (if varying) levels of outgoing mobility. In contrast, some Central and East-

98 See Leuven / Louvain-la-Neuve Communiqué : http://www.ehea.info/Uploads/Declarations/Leuven_Louvain-la-Neuve_Communicu%C3%A9_April_2009.pdf

99 Parey, M and F. Waldinger (2011).

100 For example, French and German students on medical courses in, respectively, Belgium and Austria.

101 The number of international students studying in Europe increased by 60% between 1999 and 2007, CHEPS (2010a), p. 73.

ern European countries, such as Slovakia, have high rates of outgoing mobility and low rates of incoming mobility¹⁰².

Some countries have adopted a mobility policy, either to boost outgoing mobility (for example through top-up mobility grants), or incoming mobility (for example through courses in English or preferential access to accommodation), or both. However, relatively few countries have set targets for mobility as part of their higher education development strategy, and no EU country has yet implemented a comprehensive strategy to tackle all aspects of student mobility¹⁰³.

Box 4–5: Policy and practice: Promoting outgoing mobility in Denmark¹⁰⁴

The main goal of the Danish national mobility strategy is to enhance the outgoing mobility in professional Bachelor programmes by mapping the opportunities and obstacles to mobility and on that basis develop a strategy for a strong, high quality internationalisation as an integral part of professional bachelor programmes.

Promoting transnational learning mobility for higher education students and those in other types of education and training has long been a key policy objective of the European Union, as reflected in the objectives of the successful Erasmus and Erasmus Mundus programmes. In addition to direct financial support for individuals undertaking mobility, the EU works to improve the framework conditions for mobile learners. The 2009 Green Paper on Learning Mobility¹⁰⁵ formed the basis for a wide-ranging public consultation on the obstacles to mobility, the results of which informed the recently adopted Council Recommendation on promoting the learning mobility of young people¹⁰⁶. This Recommendation calls upon Member States to take action to promote learning mobility and remove obstacles to it, including in the areas of information provision, administrative obstacles, "portability" of student funding¹⁰⁷ and recognition of learning credits and diplomas gained in other countries.

102 Eurydice Higher Education in Europe 2009, p. 43.

103 Eurydice (2010).

104 <http://www.uvm.dk>

105 "Promoting the Learning Mobility of Young People", Green Paper, COM(2009) 329 final.

106 <http://register.consilium.europa.eu/pdf/en/11/st10/st10545.en11.pdf>

107 The ability to have access to national student support funding (grants and/or loans) during study periods abroad.

Academic recognition is a core action line of the Bologna Process and is governed by the Lisbon Recognition Convention of 1997¹⁰⁸, now ratified by all EU Member States with the exception of Cyprus. The most recent stocktaking report of the Bologna Process¹⁰⁹ concluded that there is a long way to go before there is a coherent approach to recognition of qualifications in Europe.

Box 4–6: Policy and practice: EU funding support for academic recognition: PRIME¹¹⁰

The project “Problems of recognition in making Erasmus” (PRIME 2010), aims to deliver a qualitative and quantitative analysis of current practice of recognition in the EHEA, collect best practices and success stories and create a student guidebook and video guide for current and future Erasmus students. It is hoped these tools will provide students with clear information on their rights and obligations in terms of recognition and drive forward improvements in recognition practice at institutional and national level.

Public student support funding is frequently not portable across national borders in the EU: only a few countries/regions actually provide unconditional support to students studying abroad. These include Belgium (German-speaking Community), Luxembourg and the Netherlands. Some non-EU Member States, including Norway, have introduced fully portable funding mechanisms (see below). National funding is not portable in any cases in Italy (with the exception of two autonomous regions), Latvia, Poland and Romania. The majority of the remaining Member States are between these extremes, and provide support when certain conditions are fulfilled.

Box 4–7: Policy and practice: Portable student funding in Norway¹¹¹

Norwegian students may spend financial support of approximately EUR 10 600 a year on full-time studies in a country of their own choice. They may also get extra support to cover tuition fees at foreign universities, partly as a grant and partly as a loan, to target exchange students and Master’s level.

108 Convention on the Recognition of Qualifications concerning Higher Education in the European Region.

109 Rauhvargers, Deane and Pauwels (2009).

110 See <http://www.esn.org/content/prime-problems-recognition-making-erasmus>

111 See: <http://www.lanekassen.no/Toppmeny/Languages/English/Norwegian-students-abroad/>

Higher education institutions as drivers of innovation

Higher education institutions as centres of open innovation

In the context of national and regional innovation strategies for smart specialisation¹¹² and in partnership with research centres and businesses, higher education institutions can play a crucial role in knowledge and technology transfer – the process through which ideas are turned into innovative marketable products and services. There are a range of mechanisms by which higher education institutions can contribute to these strategies, varying in their complexity.

At one end of the scale, there are "transactional" services, provided by institutions in response to specific requests or requirements from outside organisations, with clear objectives and specified *outputs*. However, there are also more developmental or transformational activities, which can be in response to latent or unstated needs, usually involving multifaceted partnerships and with less clear timelines and a more *outcome* driven approach. For instance, institutions can provide advices and services to small and medium-sized enterprises (SMEs) and participate in schemes promoting the training and placement of high-level graduates in innovative businesses. They can also host incubators for spin-offs in science and technology parks and be linked to innovative clusters and networks. Such activities are frequently supported by dedicated national funding instruments and regional development funds, as well as the European Regional Development Fund (ERDF).

Realising the potential contribution of higher education institutions to regional innovation and growth requires to overcome barriers and to take advantage of enablers to build connections between the different partners in the so-called "triple helix": higher education institutions and research centres, businesses and public authorities. "Disconnections" can occur both between and within the three types of partner and the barriers to overcome are of different nature. For instance, higher education institutions are usually focused on teaching and research, driven by academic outputs and are part of national academic systems that are not targeted to respond to regional needs. As a result, there some institutions are viewed as being 'in' the region but not 'of' the region where they are located.

In assessing the role of higher education institutions in the region, it is useful to identify the steps needed to create "connected region", in which institutions are key players. The process for connecting institutions into a regional innovation system requires a critical evaluation of the ability of the region's public

112 Defined as "an entrepreneurial process of discovery that can reveal what a country or region does best in terms of science and technology" – see Foray *et al.* (2009).

institutions and private businesses to articulate a demand for, and capacity to absorb, university expertise. There is ample evidence from national and international case studies that successful partnerships involve 'boundary spanners' providing leadership within and across the partners and enabling a mutual understanding of the drivers affecting all the partners¹¹³.

Through this connecting process, higher education institutions become key partners for the regional authorities in formulating and implementing their smart specialisation strategies. They can contribute to a rigorous assessment of the region's knowledge assets, capabilities and competencies, including those embedded in the institutions' own departments, as well as local businesses, with a view to identifying the most promising areas of specialisation for a region, but also the weaknesses that hamper innovation.

Higher education institutions that are already strongly involved in regional economic development are those that are most suitable to join this smart specialisation process in the short term. Moreover, it is necessary to raise the awareness of other institutions and to encourage them to engage more actively in smart specialisation strategies. Institutions dealing with economics, public policy and administration, as well as those dealing with specific policy areas (such as industry, health, energy, environment, culture) can provide public authorities with strategic advice, as well as experts to work directly on regional development priorities.

The European Commission has set a set a Smart Specialisation Platform for providing methodological guidance and practical assistance to the national and regional authorities involved in the preparation of these strategies¹¹⁴. The toolbox of this Platform will include a Guide 'Connecting universities to regional growth' to facilitate successful partnerships between higher education, research institutions, businesses and public authorities.

Creating the governance and funding conditions for success

Funding higher education

Table 6–1 shows public and private expenditure on higher education as a percentage of GDP in the EU and selected non-EU countries for the most recent

113 See, for example, the forthcoming European Commission publication *Connecting Universities to Regional Growth: A guide to help improve the contribution of universities to regional development, with a view to strengthening economic, social and territorial cohesion, in a sustainable way*.

114 http://ipts.jrc.ec.europa.eu/activities/research-and-innovation/s3_a.cfm

year for which comparable data is available¹¹⁵. The data here include all spending on higher education, including on research and development. The table distinguishes between *total* public spending on higher education and *direct* public spending on higher education. The latter includes direct payments to institutions, but excludes payments to private individuals in the form of student support. Where there is a considerable difference between the total and direct public spending figures – for example in Cyprus, Denmark, the UK, Sweden, the Netherlands and Austria - this is typically explained by relatively high expenditure on student support mechanisms, through which public money is transferred to individuals in the form of grants (and potentially loans). Private expenditure on higher education includes tuition fees paid by students and research funding and other payments from non-governmental sector sources. As students may receive publicly funded grants or loans, which they in turn use to cover tuition fees (which count as private expenditure), it is preferable to use the combined total of direct public spending and private spending to avoid double counting and gain a more accurate comparison of national spending patterns.

Table 6–1: Public and private expenditure of higher education in Europe as a proportion of GDP

Country	Total public spending		Of which direct public spending	Total private	Total private plus direct public
	2001	2008	2008	2008	2008
EU-27	1.08	1.14	0.92	0.39	1.30
Belgium	1.34	1.38	1.19	0.30	1.50
Bulgaria	0.82	0.89	0.83	0.69	1.53
Czech Republic	0.79	0.97	0.92	0.27	1.20
Denmark	2.71	2.19	1.57	0.70	2.27
Germany	1.10	1.21	0.98	0.25	1.23
Estonia	1.03	1.13	0.96	0.26	1.21
Ireland	1.22	1.31	1.14	0.24	1.38
Greece	1.07		1.42 (05)	:	1.5 (05)
Spain	0.97	1.07	0.96	0.26	1.22
France	1.21	1.24	1.15	0.32	1.47

115 2009: Comparable expenditure data only becomes available around three years after the reference year.

Italy	0.80	0.84	0.67	0.41	1.08
Cyprus	1.14	1.85	0.91	0.89	1.80
Latvia	0.89	0.99	0.92	0.72	1.64
Lithuania	1.33	1.04	0.89	0.44	1.33
Luxembourg	:	:	:	:	:
Hungary	1.08	1.02	0.87	0.3 (06)	1.1 (06)
Malta	0.88	1.06	1.06	:	1.1 (05)
Netherlands	1.36	1.52	1.07	0.47	1.54
Austria	1.37	1.49	1.12	0.20	1.32
Poland	1.04	1.05	1.03	0.50	1.53
Portugal	1.03	0.95	0.81	0.49	1.30
Romania	0.78		1.08 (07)	0.53 (07)	1.6 (07)
Slovenia	1.28	1.22	0.93	0.18	1.11
Slovakia	0.82	0.77	0.62	0.44	1.06
Finland	1.99	1.90	1.62	0.08	1.70
Sweden	2.00	1.82	1.36	0.17	1.52
UK	0.79	0.84	0.39	0.83	1.22
Croatia	:	0.95	0.92	0.32	1.24
Iceland	1.07	1.49	1.16	0.10	1.25
Turkey	0.87	:	:	:	:
Norway	1.84	2.08	1.16	0.04	1.20
United States	1.48	1.26	1.00	1.68	2.69
Japan	0.55	0.65	0.48	1.01	1.50

Source: Eurostat (UOE data collection). Spending on the tertiary level includes R&D spending at universities.

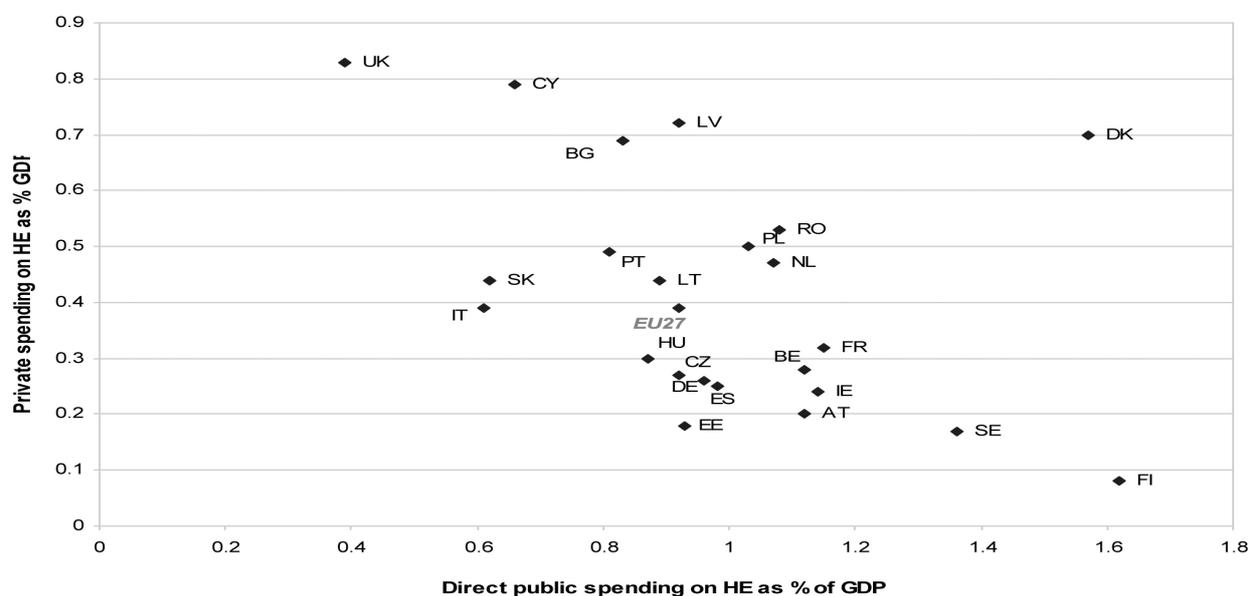
In 2008, the average level of combined direct public and private spending on higher education in the EU was 1.3% of GDP, varying from around 1.06% in Slovakia¹¹⁶ to 2.27% in Denmark. On an EU scale, a clear majority of expenditure on higher education comes from the public purse, although private expenditure is far from insignificant, ranging from less than 0.2% of GDP in Finland, Sweden and Slovenia to 0.7% or above in Denmark, Bulgaria, Cyprus and the UK. Average direct public expenditure and private expenditure in the EU lag considerably behind spending levels in the US. This is particularly true in the case of private spending on higher education, which equates to 1.68% of GDP in

116 Along with SK, combined direct public and private spending was below the EU average in IT, HU, MT, SI, CZ, EE, ES, UK and DE.

the US (compared to 0.39% of GDP in the EU) and is the key factor in the exceptionally high level of total investment in higher education in the US (accounting for 2.69% of GDP in 2008).

As illustrated more clearly in Figure 6–1, 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.

Figure 6–1: Direct public spending and private spending on higher education as % GDP (2008)¹¹⁷



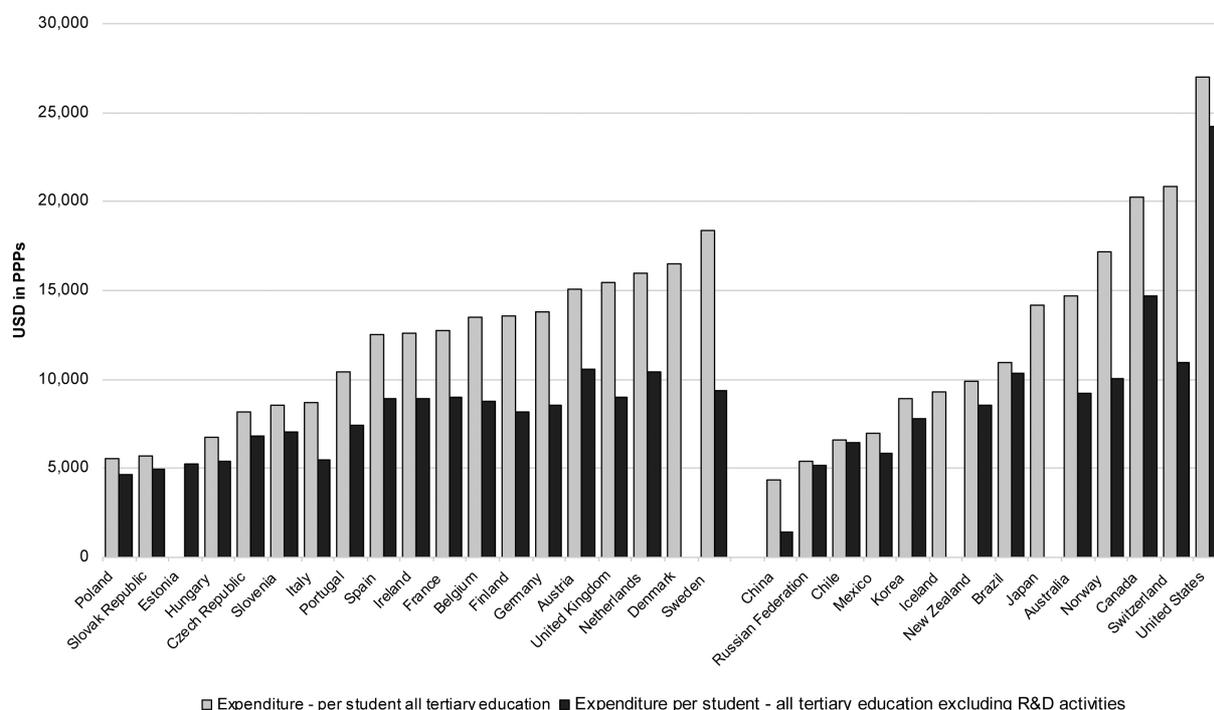
Source: Eurostat (UOE data collection). Spending on the tertiary level includes R&D spending at universities.

117 Data on private expenditure for HU are from 2006, for private and public expenditure for RO are from 2007.

The data shown above naturally reflect relative, rather than absolute, levels of spending. Countries with higher GDP per capita are able to spend more in absolute terms for every percentage point of GDP. This to some extent helps to explain the comparatively low levels of spending on higher education as a proportion of GDP in Ireland, Germany and, to a lesser extent, Spain – all of which have relatively high levels of GDP per capita.

Figure 6–2, based on OECD calculations, attempts to provide an indication of the absolute level of investment in higher education by showing the expenditure per student in selected EU and non-EU countries in US dollars converted using Purchasing Power Parity. The chart shows both total investment per student and investment per student excluding R&D expenditure – the latter giving a better impression of investment levels in core teaching activities. This alternative measure of investment also shows the Nordic countries, the Netherlands and the UK with the highest levels of investment in the EU and a number of Central and Eastern European states, along with Italy, with among the lowest levels of investment. It is notable that those EU countries with the highest level of overall spending per student – and particularly Sweden, the Netherlands and the UK also devote a comparatively high proportion of total investment to research and development. Figure 6–2 also confirms the very high levels of investment in higher education in the US, with a comparatively small difference between spending per student with and without R&D spending. Although it may reflect differing accounting methods, this provides an indication of the scale of investment in teaching and learning facilities, at least in the top US universities, in comparison to the level in the EU.

Figure 6–2: Expenditure per student in higher education in developed and emerging economies



Source: OECD, *Education at Glance* (2010). Data for 2007 showing annual expenditure by educational institutions per student for all services

The expansion of higher education systems of the last decade, combined in some cases with increased pressure on public finances and evidence about the high individual returns of higher education, has led to an ongoing debate about the appropriate balance between public and private investment in higher education. Over the last decade, more countries have either introduced or raised tuition fees for individuals or at least started a policy discussion on the topic¹¹⁸, even though public funding is and is likely to remain the dominant source of investment in most EU countries.

The recent economic crisis has led to a renewed emphasis on the long-standing question of the effectiveness and efficiency of public expenditure on higher education¹¹⁹ and the right level and modes of public investment in human

118 See CHEPS (2010c).

119 See European Commission (2010c).

capital¹²⁰. The central role of education, training and human capital development in the Europe 2020 Strategy means these questions also come to the fore in the latest EU Annual Growth Survey and the related country-specific recommendations¹²¹.

As comprehensive, comparable data on higher education spending takes several years to become available, 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 EUA¹²² highlights substantial cuts in public spending on higher education in a number of Member States, including Greece, Italy, Latvia and the UK¹²³, 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.

In those countries where public spending cuts have been implemented, the EUA survey highlights a proportionally greater impact on teaching than on research. The reductions in the level of funding available for teaching appear likely to place further strain on systems that have already had to cope with large increases in student numbers. 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 longer¹²⁴. 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. The recent Eurydice study, *Modernisation of higher education in Europe: Funding and the Social Dimension* provides an overview of current levels of tuition fees and student support in the EU¹²⁵.

The developments related to the impact of the economic crisis and debates over tuition fees are taking place against a backdrop of wider, longer-term evolutions in the pattern of higher education funding in the EU. The most important trends include the following issues:

120 This debate reaches well beyond the EU. See for example: OECD Education Ministerial Meeting, *Invest in Human and Social Capital: new post-crisis challenges*, Paris 4-5 November 2010 (Chair's Summary).

121 European Commission (2011b).

122 EUA (2011a).

123 In the UK, the decline in direct public spending is set to be compensated by increased private contributions in the form of tuition fees, which will in most cases at least double from the academic year 2011-2012.

124 OECD (2011a).

125 Eurydice 2011.

A longer-term trend¹²⁶ towards the use of competitive funding mechanisms by public authorities. These competitive funding methods include specific funding schemes, such as the Excellence Initiative in Germany, as well as less high profile changes to research funding allocation. The 2010 CHEPS study found that in nine out of 33 European countries surveyed, universities receive a high share of competitive research funds, accounting for over 25% of combined core funds and research budgets.

At the same time, there is evidence of a diversification in the funding sources drawn on by higher education institutions. The 2010 CHEPS study found higher education institutions in 14 countries receive more than 25% of their revenues from “third party” funds (ie not directly from public sources). This trend appears to be well established and intensifying, evening in countries where public investment in higher education is increasing, such as Germany¹²⁷. The ability of institutions to draw increasingly on alternative sources of funding in part reflects increasing levels of financial autonomy¹²⁸.

The development of a more substantial private higher education sector in the EU, alongside public universities. This trend is still concentrated mainly in Central and Eastern Europe, as well as in certain southern European countries. It also tends to be focused in particular disciplines (notably business-related) and types of provision (including continuing education, e-learning institutions). In the short to medium term, however, this trend will have an important impact on the distribution of public and private spending on higher education

The emergence of new models public funding to students, combining grants and/or loans to cover both living expenses and, where they exist, tuition fees. New loans systems have been introduced not only in the UK, but also in Sweden and other countries. Where such funding is intended to covered tuition fees, it begins to follow a “funding follows the student”, rather than a traditional institutional, funding model. Lithuania has recently implemented a voucher system which takes this model even further.

126 See CHEPS (2010c).

127 Rollwagen, I (2011).

128 CHEPS (2010c) found universities in 14 countries had a high level of financial autonomy in 2008 (compared to 11 countries in 1995).

*Box 6–2: Policy and Practice - Student voucher system in Lithuania*¹²⁹

A new funding model based on a ‘student voucher’, whereby the funding follows the student, has been introduced in Lithuania. The student voucher covers the full study costs, e.g. the salaries for teachers and other staff, the necessary resources and services, and incentives for students (grants). The students choose freely an educational institution, be it public or private. Prior to the reform, the state financed only 47% of all costs per state-funded place, which led to concerns about the quality of study. With the implementation of the reform, twice as much funding has been allocated to each study place.

Governance of higher education

Europe's higher education landscape is characterised by a wide range of organisational and governance models. In all EU countries, higher education institutions are legally autonomous¹³⁰, although the extent of this autonomy varies between Member States. In all cases, institutional autonomy is framed within national accountability systems, intended to ensure institutions are answerable to governments, taxpayers and society at large for their activities and use of public resources. All accountability systems involve checks and balances to institutional autonomy and to some extent condition the freedom of institutions to act, although the degree of direct state intervention and control has traditionally varied considerably across the Union. While the majority of higher education institutions in most Member States are formally public institutions, in others they are independent (albeit publicly funded), while in many countries private institutions co-exist alongside public or publicly funded universities.

The last decade has been characterised by widespread and far-reaching reform of higher education governance in EU Member States. The broad trend has been towards increased institutional autonomy, reflecting evidence that more autonomous institutions are better able to focus on their particular strengths and adapt to a changing environment at local, regional and international level. The Bologna Process and the EU modernisation agenda have both promoted greater institutional autonomy, combined with appropriate accountability mechanisms, arguing that "universities will not become innovative and responsive to change unless they are given real autonomy"¹³¹.

129 See: <http://www.smm.lt/en/index.htm>

130 Eurydice (2008), CHEPS (2010b).

131 European Commission (2006a), p.5.

Governance reform is a complex area, covering many aspects of higher education systems and their day-to-day operation. Key issues include human resource management, financing and quality assurance, course planning, access and internationalisation. A recent review of governance in higher education in 33 European countries¹³², including all EU Member States, and covering different dimensions of governance found:

- In 20 countries (out of 33¹³³) universities have considerable institutional autonomy in starting new teaching and research programmes;
- In 14 countries universities have a high level of financial autonomy;
- In 11 countries universities enjoy a high level of institutional autonomy in terms of selecting their academic staff;
- In 5 countries universities have a high level of autonomy in determining their internal governance structures;
- The vast majority of European countries have internal and external evaluation systems in place for teaching and for research;
- In 16 countries, universities have supervisory or governing boards with external stakeholder membership.

The same study found many country-specific examples of a positive interaction between governance reform and the performance of institutions, although the difficulties associated with performance measurement across countries, as well as national institutional particularities, make it hard to identify a single model for successful governance.

Across the EU, governance reform has often resulted in higher education institutions assuming responsibilities formerly held by ministries, notably in the areas of human resources and financial management. The introduction of performance contracts and multi-year agreements between the state and the institution and the move from line-item to lump sum budgeting have led to a "devolution" of authority. This is reflected in the strengthening of the position of the executive head of the institution (rector, president, vice-chancellor) or department (dean) and the creation of new institutional governance bodies such as advisory or supervisory boards, largely or solely composed of external stakeholders.

In parallel, the development of external quality assurance systems highlighted above, has led to a greater centralisation of accountability in many cases, with institutions called upon to justify their performance to a greater extent than in the past. Both the increased devolution of responsibility and additional requirements in terms of performance reporting, place new demands on senior

132 CHEPS (2010b).

133 EU-27, NO, LI, IS, CH, TR, HR.

management within higher education institutions. This in turn calls for a professionalization of the management within institutions, including through training.

Box 6–3: Policy and Practice - Supporting the efficient management of institutions, Czech Republic¹³⁴

The Czech Ministry of Education has launched a project (running from 2009 to 2012) to respond to the need to strengthen the effectiveness of higher education management in the Czech Republic. The core goal of the project is to support and develop efficient management principles, especially in economic and administrative processes in higher education institutions and research organisations. The main output of the project will be a new set of guidelines for institutions, along with policy recommendations on how best to support institutional development, notably through training.

The internationalisation of higher education

The growing internationalisation of the higher education sector is characterised by two potentially contradictory trends. It is possible to observe in parallel an increase in cooperation - between higher education institutions, departments and individuals across the world - and intensification in international competition – as institutions and countries compete for mobile students and staff. In a related trend, the development of higher education systems in emerging economies, and notably the so-called BRIC¹³⁵ countries, has a double set of consequences for European higher education. Firstly, it increases the supply of domestic graduates for the national labour markets in these countries, allowing the economies in question to upgrade their skills base and thus increasing pressure on the Europe's economy to compete and European higher education to keep pace. Secondly, it brings new competitors into the global market place for higher education, which may at least mean fewer students from these countries choose to go abroad for study and may attract prospective international students away from Europe. The global higher education landscape is already a complex picture of competition in some areas and cooperation in others. This complexity seems set to increase in the years to come¹³⁶.

134 <http://www.msmt.cz/european-union/ipn-in-the-field-of-tertiary-education-research-and-development/efficient-institutions?lang=2>

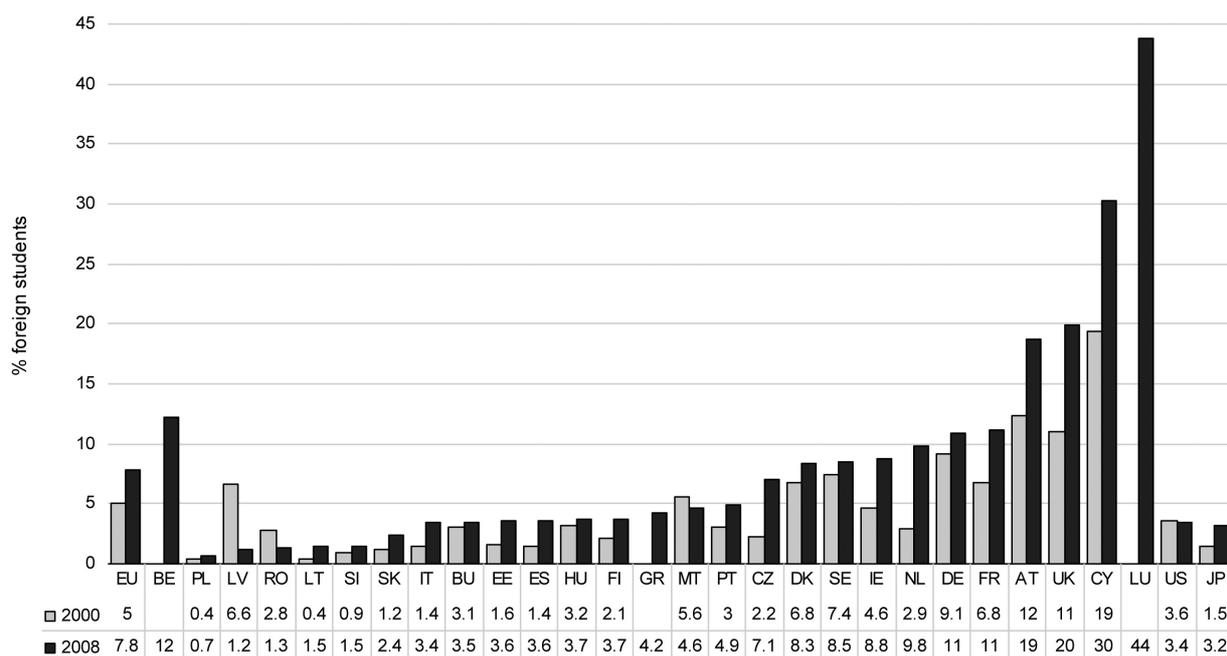
135 Brazil, Russia, India and China.

136 On this, see OECD (2009).

Internationalisation of the study body

The last decade has seen an increasing "internationalisation" of the study body in the EU. In 2008, roughly 1.5 million (7.8%) of the 19 million higher education students in the EU were enrolled in countries other than their country of citizenship¹³⁷. This figure compares with only 788 000 in 2000 (5% of total students at that time), equating to an average annual increase of 8.1% over the eight-year period. This trend has been driven by increased international student mobility both within the EU and on a global scale. Figure 7–1 shows students with foreign nationality as a share of the total student population in the EU, as well as the US and Japan, distinguishing between country or region of origin. The data includes students with foreign citizenship, rather than mobile students *per se*. This means the figures include residents of the countries of study who happen to have foreign citizenship.

Figure 7–1: Proportion of foreign students enrolled in EU Member States, the US and Japan (2000/2008)



Source: Eurostat - UOE data collection (UNESCO, Eurostat, OECD)

137 This includes both EU students studying in another EU country and non-EU students studying within the EU.

Figure 7–1 masks significant differences in the composition of the foreign student cohort in different Member States. Whereas in countries like Luxembourg, Austria and Belgium, a majority of foreign students in 2008 come from other EU countries¹³⁸, in Cyprus, France, Malta and Portugal, for example, more than 80% of all foreign students come from outside the EU. As shown in Figure 7–1, the number of non-EU higher education students enrolled in EU higher education institutions more than doubled in absolute terms between 2000 and 2008 (from less than 500,000 to almost 1 million) to account for 67% of all foreign students (compared to only 60% in 2000). The number of students from India and from China grew six-fold from 2000 to 2008, reaching 43 000 from India and 116 000 from China in 2008.

Table 7–1: Foreign students in the EU

	Foreign students in EU-27 (in 1000)		
	2000	2007	2008
Total	788.5	1430.2	1467.4
Europe	384.4	599.6	608.1
- EU 27	316.4	479.2	487.8
-other Europe	68.0	120.4	120.3
Africa	134.2	246.0	241.7
Morocco	38.2	46.3	44.2
Algeria	14.9	21.8	20.3
Nigeria	3.5	22.0	23.3
Asia	183.0	405.5	413.5
China	18.6	117.5	115.8
India	6.6	39.3	43.1
Japan	10.7	12.4	10.5
Americas	63.1	121.6	124.3
USA	22.7	32.2	30.8
Canada	5.8	10.8	10.8
Brazil	6.8	12.9	14.6
Oceania	2.9	7.7	7.1
Unknown nat.	20.9	49.8	64.3

Source: Eurostat (UOE collection)

138 Around a third of foreign students in Austria come from Germany. Over half the foreign students in Luxembourg come from France, Germany and Portugal.

In the context of international student mobility flows, the EU is a net receiver of students. Over 700 000 more students with non-EU citizenship are studying in the EU than EU citizens are studying outside the EU. However, the US is a net receiver of students from EU, with more than twice as many students from the EU going to the US as the reverse. In 2008, 138 000 US students came to study in Europe, although this figure includes short stays and summer courses. It is estimated that only around 30 000 US students annually come to study for at least a year.

Looking at the wider picture, Table 7–2 shows the proportion ("market share") of all students studying outside their country of citizenship in selected countries across the world in 2000 and 2008, based on OECD data. This shows that 18 EU countries together host almost 40% of foreign students in the world and that this proportion remained broadly stable between 2000 and 2008. Around 28% of these students came from other EU Member States and over 40% from the European Higher Education Area. Moreover, within the EU, there is a marked concentration of foreign students in the UK, Germany and France, reflecting historical international links and language, as well as the attractiveness of the higher education systems in these countries.

Over the same eight-year timeframe, the US market share in foreign students fell from 24% to less than 19% (although absolute numbers have increased), partly reflecting increases in foreign student intake in Russia, EU countries such as Italy and the Netherlands and New Zealand. Despite this trend, the US continues to attract considerably more students from Asia than the EU: in 2008, for example, over 50% of the 185,000 Indian students studying abroad went to the US¹³⁹.

Table 0-1: Market share for foreign students 2000 and 2008

	Market share, 2000 (%)	Market share, 2008 (%)
Total share of 18 EU States included below (shaded rows)	39.3	38.4
United States	24.1	18.7
United Kingdom	11.3	10.0
Germany	9.5	7.3
France	7.0	7.3
Australia	5.4	6.9

139 In 2008, almost 95,000 Indian citizens were studying in higher education in the US, compared to 34,600 in the 19 EU Member States that are members of the OECD.

Canada	4.8	5.5
Russian Federation	2.1	4.3
Japan	3.4	3.8
Italy	1.3	2.0
Spain	1.3	1.9
New Zealand	0.4	1.8
Austria	1.5	1.6
Switzerland	1.3	1.4
Belgium	2.0	1.3
Netherlands	0.7	1.2
Korea	0.2	1.2
Sweden	1.3	1.0
Czech Republic	0.3	0.8
Greece	0.4	0.8
Turkey	0.9	0.6
Denmark	0.7	0.6
Portugal	0.5	0.6
Norway	0.4	0.5
Hungary	0.5	0.5
Poland	0.3	0.4
Ireland	0.4	0.4
Chile	0.2	0.4
Finland	0.3	0.3
Slovak Republic	0.1	0.2
Estonia	0.0	0.1
Mexico	0.1	0.1
OTHER COUNTRIES	17.4	16.6

Source: OECD Education at a Glance 2010

Expansion of higher education internationally

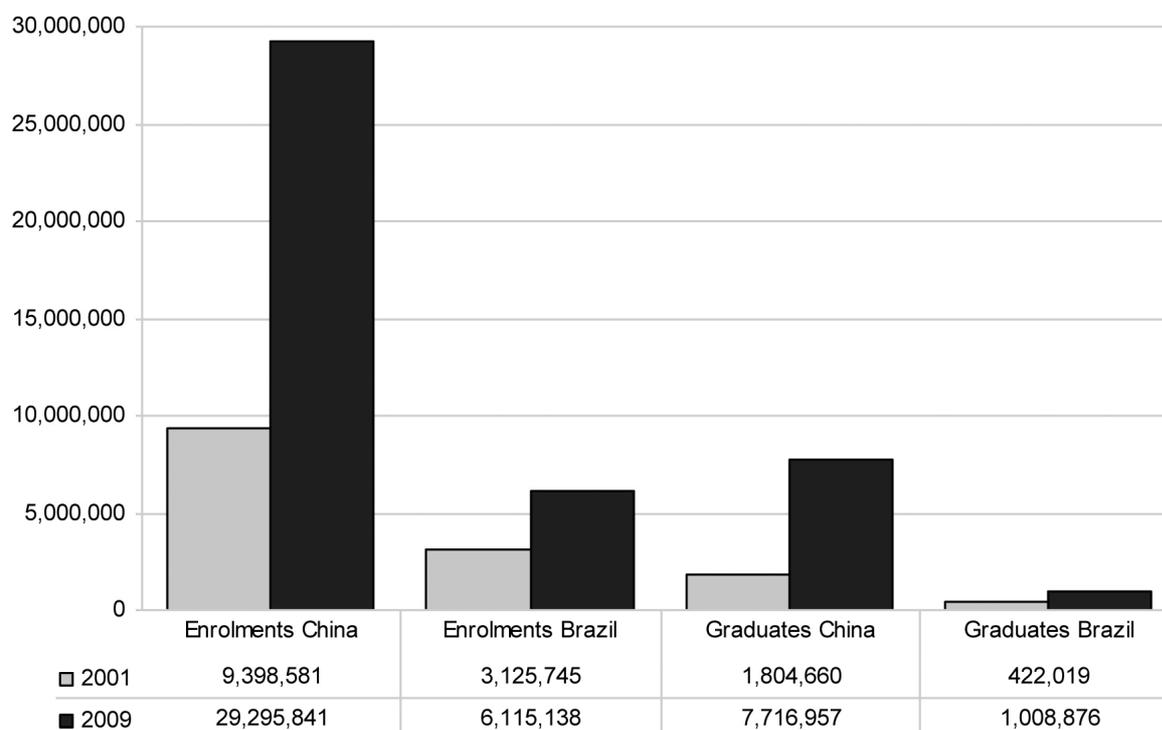
Investment in higher education as a driver of innovation has become a world-wide trend¹⁴⁰ and a growing number of emerging countries – in particular the BRIC states- have started investing massively in their universities and research

140 Weber, L. and J. Duderstadt (2010).

organisations with a clear focus on science and technology¹⁴¹. As noted, these developments increase the pressure on European higher education to keep pace in terms of quality and attractiveness.

Figure 7–2 shows the growth in students enrolled in higher education and in annual numbers of higher education graduates in China and Brazil between 2001 and 2009. This illustrates the expansion of the sectors in these two countries in the last decade, with student enrolment in China increasing by over 200% (almost doubling in Brazil) and the number of graduates quadrupling in China and more than doubling in Brazil.

Figure 7–2: Number of higher education students and graduates in China and Brazil 2001 and 2009



Source: UNESCO

Over the last few years, awareness of mounting international competition in higher education and research has grown among European governments and universities. This has been one of the factors behind a series of current and an-

141 ACA Seminar on *Brazil, Russia, India, China: Key points on the European Higher Education Compass?* Brussels, 18 March 2011.

nounced policy responses, including initiatives to boost the competitiveness of national higher education systems. This is the case, for example, in Denmark, the UK, Germany (Initiative for Excellence¹⁴²), France (through the development of regional poles of excellence), Spain (through the selection of thematic “campuses of international excellence”, as part of a comprehensive national plan called Strategy University 2015). These initiatives are to a varying extent also a response to the challenge posed by rankings: there is little doubt that in France, for example, the pooling of research capacities on a regional basis and the merger of universities (as in the case of the formerly three universities of Strasbourg) also aims at helping national clusters of institutions gain visibility in the leading rankings.

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Chapter 14

Concluding Remarks: European Strategies and Higher Education

Marek Kwiek

1. Introduction

This concluding chapter discusses EU-level developments in policy thinking in the area of higher education, training, and labour markets based on the analysis of a major large-scale strategy promoted by the European Commission in the 2000s: “Education and Training 2010” (ET 2010, launched in 2001, followed by a new strategy for the next decade, “Education and Training 2020”, ET 2020). The strategy shows major EU-level conceptualizations in the areas of education, training and labour market policies. The major focus of this analysis of the most relevant documents debated within this strategy is youth, students, and graduates; in particular in connection with higher education and lifelong learning opportunities. The EU-level strategy is linked here to the formerly existing Lisbon Strategy and to the new Europe 2020 Strategy for “smart, sustainable and inclusive growth”.

2. “Education and Training 2010” and its implications for European higher education

The focus of this chapter is on the two components of the “Education and Training 2010” strategy: (A) Developing Lifelong Learning (LLL) strategies, and (B) Higher education reforms. The chapter does not discuss such ET 2010 components as the initiative of the European Institute of Technology (EIT), developing school education policies, removing obstacles to mobility, promoting multilingualism, ICT for innovation and lifelong learning, and enhanced cooperation in vocational and adult education. The two selected components are large-scale systemic issues regarding the changes in which all EU member states are currently involved, under close supranational, EU-level, supervision, with common guidelines and common benchmarks. Mobility, as another component of ET 2010, for both students and academics, can be viewed as part of the higher education reform package.

The overall rationale of the ET 2010 strategy presented below is based on its major policy documents: “‘Delivering lifelong learning for knowledge, creativity and innovation’. *2008 joint progress report of the Council and the Commis-*

sion on the implementation of the 'Education & Training 2010' Work Programme" (February 2008); "'Education and Training' as a key driver of the Lisbon Strategy". *Adoption of Resolution* (November 2007); "'Modernising education and training: a vital contribution to prosperity and social cohesion in Europe'. *2006 Joint Interim Report of the Council and the Commission on progress under the 'Education & Training 2010' Work Programme*" (February 2006); "'Education & Training 2010'. The success of the Lisbon Strategy hinges on urgent reforms'. *Joint Interim Report of the Council and the Commission on the implementation of the detailed work programme on the follow-up of the objectives of education and training systems in Europe*" (February 2004); and "'The concrete future objectives of education and training systems'. *Education Council report*" (February 2001).

The ET 2010 documents strongly support the idea of the dual role of education and training: both social and economic objectives are major policy objectives. The synergy between economic policy objectives and social policy objectives is emphasized. The non-economic effects of education and training systems are stressed, and their effects on social cohesion are mentioned:

Education and training are a determining factor in each country's potential for excellence, innovation and competitiveness. At the same time, they are an integral part of the social dimension of Europe, because they transmit values of solidarity, equal opportunities and social participation, while also producing positive effects on health, crime, the environment, democratisation and general quality of life. All citizens need to acquire and continually update their knowledge, skills and competences through lifelong learning, and the specific needs of those at risk of social exclusion need to be taken into account. This will help to raise labour force participation and economic growth, while ensuring social cohesion. Investing in education and training has a price, but high private, economic and social returns in the medium and long-term outweigh the costs. Reforms should therefore continue to seek synergies between economic and social policy objectives, which are in fact mutually reinforcing (EC 2006i: C79/1).

The ET 2010 has been linked to the future of the European social model, but not as dramatically as in the case of, for instance, higher education policies promoted within the "modernization agenda of European universities" and in all major communications from the European Commission throughout the 2000s about "universities" and their direct link to economic competitiveness, economic growth and the sustainability of the European social model in the future. In the former set of EC initiatives (and as conceptualized in EC communications, including "The Role of Universities in the Europe of Knowledge" from 2003), the economic future of the next generations of Europeans indeed depends, to a large extent, on the triangle of "research, innovation, and education". The ET 2010 (as well as ET 2020) documents have much less dramatic overtones and their anal-

yses of the status quo in higher education are much more balanced. The following set of passages from the above mentioned documents set the tone for the strategy and shows its major themes:

Europe is facing enormous socio-economic and demographic challenges associated with an ageing population, high numbers of low-skilled adults, high rates of youth unemployment, etc. At the same time, there is a growing need to improve the level of competences and qualifications on the labour market. It is necessary to address these challenges in order to improve the long-term sustainability of Europe's social systems. Education and training are part of the solution to these problems (EC 2006i: C 79/2).

Education and training form one apex of the knowledge triangle and are crucial to providing research and innovation with the broad skills base and creativity which these require. They represent the cornerstone on which Europe's future growth and the well-being of its citizens depend (EC 2007g: C 300/2).

The knowledge triangle [i.e. education, research and innovation] plays a key role in boosting jobs and growth. So it is so important to accelerate reform, to promote excellence in higher education and university-business partnerships and to ensure that all sectors of education and training play their full role in promoting creativity and innovation (EC 2008m: C 86/1-C 86/2).

The key message of the Education and Training 2010 strategy is that it is essential to strengthen “synergies and complementarity between education and other policy areas, such as employment, research and innovation, and macroeconomic policy” (EC 2004: 4). One of the three priority areas to be acted upon “simultaneously and without delay” is the following: to focus reform and investment on the key areas for any knowledge-based society (the other two being “to make lifelong learning a concrete reality” and “to establish a Europe of Education and Training”):

In order to make the European Union the leading knowledge-based economy in the world, there is an urgent need to invest more, and more efficiently and effectively in human resources. This involves a higher level of public sector investment in key areas for the knowledge society and, where appropriate, a higher level of private investment, particularly in higher education, adult education and continuing vocational training (EC 2004d: 4).

A key area is also higher education which is central to a Europe of Knowledge:

Given that the higher education sector is situated at the crossroads of research, education and innovation, it is a central player in the knowledge economy and society and key to the competitiveness of the European Union. The European Higher Education Sector should therefore pursue excellence and become a world-wide quality reference to be in a position to compete against the best in the world (EC 2004d: 12).

The ET 2020 strategy, in general, is consistent with the major ideas expressed in the ET 2010 strategy. The methods of conceptualizing youth and students, as well as higher education institutions, education and training systems are structurally similar.

3. Developing Lifelong Learning strategies and “Education and Training 2010”

The most relevant documents for this section include the following: “New skills for new jobs” (*Adoption of the Council Resolution*, November 2007); “Towards more knowledge-based policy and practice in education and training” (*Commission Staff Working Document*, August 2007); “Efficiency and equity in European education and training systems” (*Conclusions of the Council and the Representatives of the Governments of the Member States, meeting within the Council and Communication from the Commission to the Council and to the European Parliament*, September 2006); “Investing efficiently in education and training: an imperative for Europe” (EC Communication, January 2003); “Lifelong Learning” (*Council Resolution*, June 2002); “Making a European Area of Lifelong Learning a Reality” (EC Communication, November 2001); and “A Memorandum on Lifelong Learning” (*Commission Staff Working Paper*, October 2000). The two guiding passages for brief analyses below are the following:

The need to increase participation rates in further learning remains a major challenge for Europe, particularly in the southern European countries and the new Member States. Greater numbers of adults in lifelong learning would increase active participation in the labour market and contribute to strengthening social cohesion (EC 2006f: C79/4).

Many countries are encouraging universities to play their part in making a reality of lifelong learning by widening access for non-traditional learners, such as those from low socio-economic backgrounds, including through the establishment of systems for the validation of non-formal and informal learning (EC 2006f: C79/5).

The European Commission’s conceptualizations of education and training systems increasingly link universities and lifelong learning. One of the major tasks of universities in the future could be the accommodation of elements of lifelong learning, especially elements of what is sometimes termed today adult learning. European universities are expected to have much wider openings than currently for older generations of potential students, albeit in different modes of studies with study programmes, particularly short-term vocational courses, specifically designed for them. At the same time, the Commission in general is increasingly concerned with lifelong learning viewed as learning throughout one’s life, from

pre-school education through higher education and beyond. From this perspective, higher education is merely part of lifelong learning, designed specifically for students, mostly at the traditional age of study and mostly studying to gain either bachelor's, master's, or doctorate degrees (the tripartite division of the Bologna Process). Consequently, in the decade of the 2000s (under the Education and Training 2010 strategy), lifelong learning strategies were by definition focused on "making lifelong learning a reality" (EC 2001b). The definition of lifelong learning adopted by the European strategy ET 2010 was the following:

In addition to the emphasis it places on learning from pre-school to postretirement, lifelong learning should encompass the whole spectrum of formal, non-formal and informal learning. ... The principles which underpin lifelong learning and guide its effective implementation emphasise the centrality of the learner, the importance of equal opportunities and the quality and relevance of learning opportunities (EC 2001b: 3)

In the next decade (under the new Education and Training 2020 strategy), lifelong learning strategies will be much more focused on all stages and all modes of learning, learning throughout life regardless of the age of the learner. Certainly the European Qualifications Framework (EQF) for Lifelong Learning is going in this direction:

The European Qualifications Framework (EQF) acts as a translation device to make national qualifications more readable across Europe, promoting workers' and learners' mobility between countries and facilitating their lifelong learning. The EQF aims to relate different countries' national qualifications systems to a common European reference framework. Individuals and employers will be able to use the EQF to better understand and compare the qualifications levels of different countries and different education and training systems.

The EQF introduces a fundamentally new way of thinking about learning as it uses a "learning outcomes" idea with eight levels of reference in respect of all types of education and training. In some countries both are realities, with learning outcomes having been defined and EQF levels 1 through 8 having been applied in policy thinking about education. In others, Poland included, no work has been done in this area so far except for pilot studies.

Both the ET 2010 and ET 2020 strategies increasingly focused on two other types of lifelong learning than formal learning: non-formal learning and informal learning. This is a reflection of a greater appreciation of learning taking place in non-traditional settings (e.g. out-of-school) and taking place in non-traditional modes. As the EC document stresses, so far, these learning experiences have been "invisible" in education systems, and consequently it was not possible to recognize them properly:

Learning that takes place in formal education and training systems is traditionally the most visible and recognised in the labour market and by society in general. In recent years, however, there has been a growing appreciation of the importance of learning in non-formal and informal settings. New approaches are needed to identify and validate these 'invisible' learning experiences.

At the European level, the following definitions of types of learning are used:

- Formal learning is typically provided by education or training institutions, with structured learning objectives, learning time and learning support. It is intentional on the part of the learner and leads to certification.
- Non-formal learning is not provided by an education or training institution and typically does not lead to certification. However, it is intentional on the part of the learner and has structured objectives, times and support.
- Informal learning results from daily activities related to work, family life or leisure. It is not structured and usually does not lead to certification. In most cases, it is unintentional on the part of the learner.

Within wider lifelong learning debates, the social dimension of higher education has been consistently stressed (see EC 2010b, see also Goetschy 1999 and Heidenreich 2004). This new EC document refers to the old topic in new ways, though. The major differences in themes are the following: the need to strengthen the financial support for students is accompanied by a reference to "affordable, accessible, adequate, and portable students loans" – which perhaps for the first time may lead directly to promoting the implementation of cost-sharing and cost-recovery mechanisms in higher education (because loans in general accompany fees). The role of universities in recognizing non-traditional paths to higher education is stressed, as are "more flexible and diversified learning paths". Knowledge produced at universities is also expected to return benefits to society. And, finally, universities should be prepared to be more open to adult, non-formal and informal learners – which will be made easier through the recognition of learning outcomes and the widespread use of the European Qualifications Framework (EQF) for Lifelong Learning.

More flexible and diversified learning paths – for example recognising prior learning, part-time education, and distance learning – can help to reconcile higher education with work or family commitments and to encourage wider participation. ... Higher education institutions can also exercise social responsibility by making their resources available to adult and informal and non-formal learners, strengthening research on social exclusion, fostering innovation and updating educational resources and methodology (EC 2010b: C/135/5).

Lifelong learning strategies, major components of both the Education and Training 2010 and 2020 strategies, seem to be directed in EU conceptualizations to those parts of diversified higher education systems which are focused mostly on

teaching. Research-intensive universities are referred to mostly within the “modernization agenda of European universities”, discussed briefly below.

4. Higher education reforms, their contexts, and “Education and Training 2010”

The most relevant documents for this section on higher education reforms include the following: “Modernising universities for Europe’s competitiveness in a global knowledge economy” (*Council Resolution*, November 2007); “Delivering on the modernisation agenda for universities: education, research and innovation” (*Communication from the Commission to the Council and the European Parliament*, May 2006); “Further European cooperation in quality assurance in higher education” (*Recommendation of the European Parliament and of the Council*, February 2006); “From Bergen to London: The EU Contribution” (*Commission Progress Report*, January 2006); “Mobilising the brainpower of Europe: enabling higher education to make its full contribution to the Lisbon Strategy” (*Resolution of the Council and of the Representatives of the Governments of the Member States*, November 2005); “European Higher Education in a Worldwide Perspective” (*Annex to the: Communication from the Commission ‘Mobilising the brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy’*, April 2005); “The role of the universities in the Europe of knowledge” (EC Communication, February 2003); and “Strengthening cooperation with third countries in the field of higher education” (*Communication from the Commission to the European Parliament and the Council*, July 2001). In addition to these, there are two recent documents from the EC which are major points of reference throughout the present book: “Communication from the Commission: Supporting growth and jobs – an agenda for the modernisation of Europe’s higher education systems” and “European Commission staff working document: Supporting growth and jobs: an agenda for the modernisation of Europe’s higher education systems” (see EC 2011a, 2011b or Chapter 12 and Chapter 13 in this book).

Additionally, the policy agenda for the “higher education reform” component of the ET 2010 will be analysed below in two other contexts that are most relevant for EU-level debates: the first is the “modernization agenda of European universities”, and the second is the new Europe 2020 Strategy.

The first context is the “modernization agenda of European universities”. The policy agenda for the “higher education reform” component of the ET 2010 strategy will be compared with another related – but separate and distinct – agenda pursued by the EC throughout the 2000s: the “Modernization Agenda”

regarding European Universities, along with its policy documents as well as accompanying discussions within the emergent European Research Area (ERA).

The modernization agenda of the EC is directed towards research and innovation, especially in the Green Paper, “The European Research Area: New Perspectives” (2007, and the accompanying Staff Working Document). The creation of the ERA was proposed by the European Commission in its communication “Towards a European Research Area” of January 2000 (which can be viewed as both a starting and a reference point). Subsequently, both the “higher education reform” component of the ET 2010 strategy and the modernization/ERA agendas can be compared with the new, emergent “2020 vision for the ERA”. Overall, and without going into details, youth/students appear in the latter context in quite a limited way.

The overall view of higher education by the EC in both the “modernization agenda” of European universities and the ERA strategy is that universities are currently prime loci for economic growth, economic competitiveness and engines for innovation-driven knowledge-based economies. Social cohesion, equitable access to education, widening participation in education – and related issues – seem to be left mostly to the ET 2010 strategy, with both the modernization agenda and the ERA strategy being generally not involved with these issues (see Holman 2006).

The modern university in Europe (especially in its German-inspired Humboldtian version) has been closely linked to the nation-state. With the advent of globalization, and its pressures on nation-states, universities are increasingly experiencing their de-linking from both the traditional needs of the nation-state (inculcating national consciousness in the citizens of nation-state, etc.) and from its financial resources as the sole source of their revenues (Kwiek 2006a, 2009a and Kwiek and Maassen 2012). The share of non-core non-state revenues has been on the rise in many European systems. Universities increasingly need to rely on “third stream income” – especially non-core non-state income and earned income (as opposed to core state income and fee based income). In Europe, the overall social and economic answer to globalization has been the strengthening of European integration, and the policy agenda for this regional response to globalization was called the “Lisbon strategy for growth and jobs”. European universities, as well as the governments of EU member states, find it useful to refer to this strategy in redefining the role(s) of educational institutions under both globalization and its regional response, Europeanization. Consequently, the 2000s brought about substantially new ways of thinking about universities at the level of the European Commission. Emergent EU educational policies are increasingly influential as the university reform agenda is viewed as part of the wider Lisbon strategy reforms. The EU member states – national

governments – are not only adopting the Lisbon strategy, but also the social and economic concept of the university implied in it and consistently developed in subsequent official documents from the European Commission. The EU member states, for the first time in the fifty years of the history of the European Union, need to balance their educational policies between the requirements of the new policies strongly promoted by the EU and the requirements of their traditional national systems (in the four first decades, higher education in general was left in the competence of the member states; today it is viewed by the European Commission as being of critical importance to the economic future of the European Union as a whole and therefore in need of EU-level interventions). Additionally, national educational policies are under strong globalization-related (mostly financial) pressures, as are all the other social services provided under the general label of the “European social model”.

In these new ways of thinking, the traditional link between the nation-state and the modern institution of the university has been broken; moreover, higher education in the EU context has clearly been put in a post-national (and distinctly European) perspective in which the interests of the EU as a whole and of particular EU member states (nation-states) are juxtaposed. The reason for the renewed EU interest in higher education is clearly stated by the European Commission: while responsibilities for universities lie essentially at national (or regional) levels, the most important challenges are “European, and even international or global” (EC 2003f: 9). The major challenges facing Europe – related to both globalization and demographics, such as losing its heritage and identity, losing out economically, giving up the European Social Model, etc. – should, according to an influential *Frontier Research: The European Challenge* report, be met through education, knowledge, and innovation:

The most appropriate response to these challenges is to increase the capacity of Europe to create, absorb, diffuse and exploit scientific and technical knowledge, and that, to this end, education, research and innovation should be placed much higher on the European policy agenda (EC 2005b: 17).

Thus recent years have brought about intensified thinking, from a distinctly EU perspective, regarding the future of public universities in Europe. Regional processes for the integration of educational and research and development policies in the European Union add a new dimension to the nation-state/national university issue. On top of discussions about the nation-state (and the welfare state), we are confronted with new transnational ideas on how to revitalize the European project through higher education, and how to use European universities for the purpose of creating, in Europe, a globally competitive knowledge economy. In the 2000s, for the first time, new ways of thinking about higher education

were formulated at the EU level – and were accompanied by a number of practical measures, coordinated and funded by the European Commission. Higher education, left at the disposal of particular nation-states in previous decades in Europe, seems to have returned now to the forefront in discussions about the future of the EU (see Kwiek 2006b, 2012b, Maassen 2008, Maassen and Olsen 2007).

Consequently, Europe in the 2000s was undergoing two powerful integration processes, initially separate but recently increasingly convergent. The former is the Bologna process, the gradual production of a common European Higher Education Area (started by the Bologna Declaration signed in 1999) by 45 Bologna-signatory countries (reaching far beyond 27 EU member states and ranging geographically from the Caucasus to Portugal). Its main goals include the adoption of a system of easily readable and comparable degrees, the adoption of the three cycles of studies – undergraduate, graduate and doctoral, the spread of credit transfer systems enabling student mobility, and the promotion of pan-European quality assurance mechanisms. The latter is the Lisbon strategy for growth and jobs, adopted by EU countries in 2000 and simplified and relaunched in 2005: it had two targets – total (public and private) investments of 3% of Europe's GDP in research and development, and an employment rate of 70%, both to be reached by 2010, and both not achieved by most European economies. Increasingly, the goals of the Bologna process were being subsumed under the goals of the Lisbon strategy and then the Europe 2020 strategy (see Davoine *et al.* 2008, Palmer and Edwards 2004, Sjørup 2004, Triantafillou 2009).

The European Commission stresses that the divergence between the organization of universities at the national level and the emergence of challenges which go beyond national frontiers has grown, and will continue to do so. Thus a shift of balance is necessary, the arguments go, and the Lisbon strategy in general, combined with the emergence of the common European Research Area (co-funded by EU research funds totalling 51 billion EUR for 2007-2013) in particular, provided new grounds for policy work at the European level, despite restrictions on the engagement of the European Commission in education – leaving the area of education in the competences of the member states – as defined by the Maastricht Treaty on the European Union (1992).

In recent years, the project of European integration seems to have found a new leading legitimizing motif: education and research for the “Europe of Knowledge”. A crucial component of the Europeanization process today is its attempt to make Europe a “knowledge society” (and “knowledge economy”) in a globalizing world. “Education and training” (a wider EU category) becomes a core group of technologies to be used for the creation of a new Europe; the creation of a distinctive and separate “European Higher Education Area” as well as a

“European Research (and Innovation) Area” were the goals the EU had set itself by a deadline of 2010. The construction of a distinctive European educational policy space – and the introduction of the requisite European educational and research policies – has become part and parcel of EU “revitalization” within the broad cultural, political and economic Europeanization project (see Lawn 2003).

We are witnessing the emergence of a “new Europe” whose foundations are being constructed around such notions as, on the one hand, “knowledge”, “innovation”, “research”, and on the other, “education” and “training”. Education in the EU, and especially lifelong learning, becomes a new discursive space in which European dreams of common citizenship are currently being located. This new “knowledge-based Europe” is becoming increasingly individualized (and de-nationalized), though; as ideally, it should consist of individual European learners rather than citizens of particular European nation-states. The emergent European educational space is unprecedented in its vision, ambitions and possibly its capacity to influence national educational policies. In the new knowledge economy, education policy, and especially higher education policy, cannot remain solely at the level of Member States because only the construction of a new common educational space in Europe can possibly provide it with the chance to forge a new sense of European identity, as well as be a practical response to the pressures of globalization; as the arguments presented by the European Commission go (see Kwiek 2006). “Europeans”, in this context, could refer directly to “European (lifelong) learners”: individuals seeking knowledge useful in a knowledge economy. The symbol of this new Europe is not “the locked up cultural resources of nation states, but the individual engaged in lifelong learning” (Lawn 2001: 177); not a nationally-bound and territorially-located citizen of a particular member state but an individual with an individualized “knowledge portfolio” of education, skills, and competencies. European citizenship is being discursively located in the individual for whom a new pan-European educational space is being built. The individual attains membership of this space only through knowledge, skills and competencies. At the same time, the economic future of Europe is increasingly believed to depend on investing in knowledge and innovation and on making the “free movement of knowledge” (the “fifth freedom”, complementing the four freedoms of movement in goods, services, people and capital) a reality (EC 2007h: 14); therefore, “science and technology” are “the key to Europe’s future”, as the title of an EC communication runs (EC 2004a); and “the success of the Lisbon strategy hinges on urgent reforms” of higher education systems in Europe, as another title runs (EC 2003a).

The idea of Europe, as well as the core normative narratives and major discourses that hold Europeans as Europeans together, is being redefined; and this

new education space (being constructed through the emergent European educational and research policies) in which the new European identity is being forged seems crucial. Through prioritizing the idea of “lifelong learning” in the Lisbon strategy and in the EU agenda of “Education and Training 2010” (see EC 2000c), learning becomes redefined as an individual activity, no longer as closely linked with national projects. The new “learning society” comprises more and more “(European) learning individuals”, wishing and able to opt in and opt out of particular European nations and states. Consequently, one of the key concepts in the Bologna process is no longer employment but employability, a transfer of meanings through which it is the individual’s responsibility to be employed, rather than the traditional responsibility of the state, as in the Keynesian “full employment” welfare state model.

The process of creating the European Higher Education Area and the simultaneous emergence of the European Research Area have one major common dimension: that of a redefinition of missions for the institution of the university (even though universities were at first neglected as places for research in EU thinking – for instance, in the first EU communication on the subject, “Towards a European Research Area”, universities and higher education in general were not even mentioned, see EC 2000c). Both teaching and research are undergoing substantial transformations today. The institution of the university is playing a significant role in the emergence of the common European higher education and common European research spaces, but in none of these two processes is the university seen in a traditional modern way – as discussed in the context of the emergence of the modern university in traditional European nation-states. It is evolving together with radical transformations of the social setting in which it functions (the setting of “globalization” and, regionally, “Europeanization”). Globalization is the overriding notion in most major European discussions about the role(s) of higher education and research and development, the notion behind the Lisbon strategy, especially when combined with such accompanying new notions as the “knowledge economy” and the “knowledge society” – and in respect of the traditional contexts of economic growth, national and European competitiveness and combating unemployment. The Lisbon “strategy for growth and jobs” was a regional (European) response to the challenges of globalization. As globalization seems to be redefining the role of nation-states in today’s world, it is indirectly affecting higher education institutions. In this context – and thus indirectly – the pressures of globalization are behind new higher education policies which promote the competitiveness of nations (and regions) through education, research and innovation. Globalization affects the proposed policy solutions in higher education for both national governments and the European Commission (Kwiek 2006a, 2009a, 2009b).

The impact of globalization on EU-level educational policies and strategies, and increasingly on the ensuing national policies and strategies, is substantial. Higher education is viewed, assessed and measured in the context of both globalization and Europeanization. Globalization, indirectly, for instance through the broad Lisbon Strategy for growth and jobs, fundamentally alters the lenses through which universities are viewed, assessed and measured. Its most evident impact on universities is the overall sense that European (predominantly public) universities need profound transformations if Europeanization is to be a successful response to globalization. Consequently, the overall picture on reading recent EU documents, reports, working papers and communications is that the relationship between government and universities is 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, see Kwiek 2006a) and “Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation” (EC 2006a) make clear that radical transformations of university governance are expected by the European Commission to make possible their full contribution to the Lisbon Strategy. Universities are urged to consider fundamentally new arrangements (new “contracts”) with societies and governments are urged to consider establishing new partnerships with universities, accompanied by a shift from state control to accountability to society (EC 2005a: 9). As explained clearly in an EU issue-paper on university governance: “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 2006a: 1). The policy lesson for the EU member states is that substantial changes in governance are needed: according to the new university/government contracts envisaged by the EU, universities will be responsible and accountable for their programmes, 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).

Globalization is viewed as a major factor influencing the transformations to the state today, in its two major dimensions: the nation-state and the welfare state. As the nation-state is changing, the argument goes, so is the modern university, most often very closely linked to the state in major European variants of higher education systems. The modern university becomes radically delinked from the nation-state – and in the European context, new EU higher education policies are being developed which put lifelong learning (and the lifelong learner) in the centre of the project for an integrated European Union. In the EU discourse on future university missions the individualized learner, the product of both globalization and Europeanization, is contrasted with the traditional citizen

of the nation-state, formed by the modern university which was born along with the nation-state. These challenges and opportunities seem to be clearly seen in the emergent EU discourse on the university in which both universities and students are delinked from nation-states; while universities are expected to be linked to the Lisbon strategy of more growth and more jobs, and more competitiveness of the European Union economy, students are expected to be more linked to the new project of the “Europe of Knowledge” than to traditional, individual national projects of particular European nation-states (see Maassen and Olsen 2007, Maassen 2008, Kwiek and Maassen 2012).

The second context is the *Europe 2020 Strategy*. The policy agenda of the “higher education reform” component of the ET 2010 strategy can be compared with the new ET 2020 strategy as viewed through several recent EC documents of 2009-2010: “Key competences for a changing world” (2009); “Joint progress report of the Council and the Commission on the implementation of the ‘Education & Training 2010 work programme’” (January 2010); “Messages from the EC Council in the field of education as a contribution to the discussion on the post-2010 Lisbon Strategy Council messages” (November 2009); “Developing the role of education in a fully- functioning knowledge triangle” *Council conclusions* (November 2009); “A strategic framework for European cooperation in education and training” (ET 2020) *Council conclusions* (May 2009); and “Enhancing partnerships between education and training institutions and social partners, in particular employers, in the context of lifelong learning” *Council conclusions* (May 2009).

In most general terms, *Europe 2020: A European strategy for smart, sustainable and inclusive growth* in the European Commission’s description is “the EU’s growth strategy for the coming decade. In a changing world, we want the EU to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion. Concretely, the Union has set five ambitious objectives – on employment, innovation, education, social inclusion and climate/energy – to be reached by 2020. Each Member State will adopt its own national targets in each of these areas. Concrete actions at EU and national levels will underpin the strategy”. To measure progress in meeting the Europe 2020 goals, 5 headline targets have been agreed for the whole EU, and they are being translated into national targets in each EU country. The 5 targets for the EU in 2020 include the following:

- Employment: 75% of 20-64 year-olds to be employed;
- R&D/innovation: 3% of the EU’s GDP (public and private combined) to be invested in R&D/innovation;

- Climate change/energy: greenhouse gas emissions 20% lower than 1990, 20% of energy from renewables, 20% increase in energy efficiency;
- Education: reducing school drop-out rates below 10% and at least 40% of 30-34-year-olds completing third level education (or equivalent);
- Poverty/social exclusion: at least 20 million fewer people in or at risk of poverty and social exclusion.

The targets should give an overall view of where the EU should be on key parameters by 2020; they are being translated into national targets so that each Member State can check its own progress towards these goals. They do not imply burden-sharing – there are common goals, to be pursued through a mix of national and EU action. They are interrelated and mutually reinforcing: educational improvements help employability and reduce poverty, more R&D/innovation in the economy, combined with more efficient resources, makes us more competitive and creates jobs; and investing in cleaner technologies combats climate change while creating new business/job opportunities. Every EU country is in the process of adopting the targets. These will be used to measure progress in meeting the Europe 2020 goals.

The targets are being translated into national targets. Those areas most in need of attention will be addressed by 7 flagship initiatives at the EU, national, local and regional levels. Within each initiative, both the EU and national authorities will have to coordinate their efforts so that they are mutually reinforcing. Within one of the three priorities (the Inclusive Growth component) of Europe 2020, what is of interest here is the flagship initiative called “An agenda for new skills and jobs”.

The agenda has been defined in 2010 as having the aim to “modernize labour markets and empower people by developing their skills throughout the lifecycle with a view to increase labour participation and better match labour supply and demand, including through labour mobility” (EC 2010c: 4). The strategy offers a vision of “Europe’s social market economy for the 21st century” (EC 2010c: 8). What are the implications of Europe 2020 for higher education reforms and for universities in particular? With reference to the EU target of 3% of GDP spent on research and development, the strategy means stronger links between knowledge (including knowledge produced in universities) and innovation. The strategy also refers to increases in both public and private funding for R&D and calls for improving the conditions for private R&D in Europe. There are two overall recommendations in the strategy referring directly and indirectly to universities:

- Innovation: R&D spending in Europe is below 2%, compared to 2.6% in the US and 3.4% in Japan, mainly as a result of lower levels of private invest-

ment. It is not only the absolute amounts spent on R&D that count – Europe needs to focus on the impact and composition of research spending and to improve the conditions for private sector R&D in the EU. Our smaller share of high-tech firms explains half of our gap with the US.

- Education, training and lifelong learning: A quarter of all pupils have poor reading competences, one in seven young people leave education and training too early. Around 50% reach medium qualifications level but this often fails to match labour market needs. Less than one person in three aged 25-34 has a university degree compared to 40% in the US and over 50% in Japan. According to the Shanghai index, only two European universities are in the world's top 20 (EC 2010c: 13).

Universities are also explicitly referred to in three (out of seven) flagship initiatives of Europe 2020: “Youth on the move”, “Innovation Union”, and “Agenda for New Skills and Jobs”. The conceptualizations of universities in each of the three initiatives will be briefly discussed below. Universities are directly or indirectly involved in these three flagship initiatives, at both the EU and national levels.

The Europe 2020 strategy in its “Youth on the move” flagship initiative involves a selection of tasks for universities: “The aim is to enhance the performance and international attractiveness of Europe's higher education institutions and raise the overall quality of all levels of education and training in the EU, combining both excellence and equity, by promoting student mobility and trainees' mobility, and improve the employment situation of young people”:

At the EU level, the Commission will work: - To step up the modernisation agenda of higher education (curricula, governance and financing) including by benchmarking university performance and educational outcomes in a global context; - To promote the recognition of non-formal and informal learning; - To launch a youth employment framework outlining policies aimed at reducing youth unemployment rates: this should promote, with Member States and social partners, young people's entry into the labour market through apprenticeships, stages or other work experience.

At the national level, Member States will need: - To ensure efficient investment in education and training systems at all levels (pre-school to tertiary); - To improve educational outcomes, addressing each segment (pre-school, primary, secondary, vocational and tertiary) within an integrated approach, encompassing key competences and aiming at reducing early school leaving; - To enhance the openness and relevance of education systems by building national qualification frameworks and better gearing learning outcomes towards labour market needs;

- To improve young people's entry into the labour market through integrated action covering i.a. guidance, counselling and apprenticeships (EC 2010c: 11).

The above selected tasks within the “Youth on the Move” flagship initiative may be viewed as EU priorities in conceptualizing the future of public universities: the modernization agenda for European universities, promoted throughout the 2000s, will be maintained; the attractiveness of European higher education will be linked to both excellence and equity; there will be increasing pressure on involving universities in lifelong learning, including the recognition of non-formal (and perhaps even informal) learning – with increasing emphasis on the European Qualifications Framework (EQF) within which universities are included as stages 6-7-8 in the stages relating to learning (BA-MA-PhD). Investments in education are expected to be efficient – and increases in investments are not mentioned in the document. Universities will be expected to be much more strongly linked to the labour market, by means of, inter alia, defining educational outcomes at higher education level and developing national qualifications frameworks leading to the EQF.

The Europe 2020 strategy in its “Innovation Union” flagship initiative includes another selection of tasks for universities: “to re-focus R&D and innovation policy on the challenges facing our society, such as climate change, energy and resource efficiency, health and demographic change. Every link should be strengthened in the innovation chain, from 'blue sky' research to commercialization”.

At EU level, the Commission will work: - To complete the European Research Area, to develop a strategic research agenda focused on challenges such as energy security, transport, climate change and resource efficiency, health and ageing, environmentally-friendly production methods and land management, and to enhance joint programming with Member States and regions; - To strengthen and further develop the role of EU instruments to support innovation; - To promote knowledge partnerships and strengthen links between education, business, research and innovation.

At national level, Member States will need: - To reform national (and regional) R&D and innovation systems to foster excellence and smart specialisation, reinforce cooperation between universities, research and business; - To ensure a sufficient supply of science, maths and engineering graduates and to focus school curricula on creativity, innovation, and entrepreneurship; - To prioritise knowledge expenditure, including by using tax incentives and other financial instruments to promote greater private R&D investments.

Within this flagship initiative of Europe 2020, the following themes linked to the future of public universities are raised: greater commercialization of research; closer links between research and innovation; strengthening the Europe-

an Research Area; linking research-intensive universities; strengthening of EU research programmes to be more closely linked with innovation; linking EU funded research to the business community; strengthening cooperation between universities and business through linking research with innovation; a focus on science, technology, engineering and mathematical areas of study (STEM) at universities, with possible shifts in the funding of teaching and research areas; and promoting greater private R&D investments, possibly with more public funding involved.

To sum up, the Europe 2020 strategy does not diverge from what was assumed for universities in the Lisbon Strategy regarding their ever-closer links to the knowledge economy. There are no significant differences between the roles of universities promoted in both strategies and in the “modernization agenda of European universities”, explicitly mentioned in Europe 2020. The major direction in conceptualizing the future roles of universities, and research-intensive universities in particular, has been reinforced in recent EU documents.

The “higher education reform” agenda of ET 2010 could also be analysed in the context of a series of 7 recent expert group analyses of the European Research Area, on a single labour market for researchers, on a world-class research infrastructure, on strengthening research institutions, on optimizing research programmes and priorities, and on opening up to the world (all published between 2008-2009) – which provide a large-scale experts’ account of the ideas developed in the Green Paper (“The European Research Area: New Perspectives”, EC 2007i) published by the European Commission, and which may result in future initiatives. Also, the context of the new EC communications on “Better careers and more mobility: a European partnership for researchers” and “Towards Joint Programming in research: Working together to tackle common challenges more effectively” (both with accompanying staff documents) would be valuable. The focus of research in this direction could be the overall missing dimension of youth/students in EU-level analyses, strategies, policy documents and expert-level reports (see also Weiler 2009).

The “Education and Training 2010” strategy was operating between a knowledge-based economic rationale and a knowledge-based society rationale. In the area of higher education, there is clearly a shift in public policy towards both “economization” of educational problems and towards “educationalization” of economic problems: European universities are increasingly made responsible for the (economic) future of countries, regions, and individuals. However, this is a relatively new institutional responsibility for an 800 year-old European social institution, even in its modern Humboldt-derived form which is 200 years old. Most EU-level policy documents seem to confirm the new, strongly economic role of universities, despite numerous references to other (e.g. social, cultural,

democracy-related, citizenship-related) dimensions of their functioning. A global public good/private good debate on higher education is very useful in this context: increasingly globally, and more often in the last five years at the EU-level, higher education credentials are viewed as a mostly a private good (which, over the passage of time, leads to conclusions that higher education systems bring about high private returns – consequently, credentials may have to be paid for, which paves the way for new cost-recovery and cost-sharing mechanisms to be discussed in EU economies). The wage premium for higher education in an EU-27 comparative perspective is high, and it is very high in major new EU member states (with Poland and Hungary among the top five OECD economies). The related issues include the uncertain role of the bachelor degree in the transition from higher education to the labour market (see Fleckenstein). The bachelor degree has been strongly supported at the EU level throughout the 2000s, despite the Bologna Process officially being an intergovernmental, rather than supranational, process.

The ET 2010, like the Bologna Process, seems to have different priorities than the modernization agenda for European universities. The social priorities of the ET 2010 can be juxtaposed with the economic priorities of both the European Research Area (ERA) and the “modernization agenda of European universities” promoted by the EC throughout the 2000s. The extent to which this social/economic distinction at the level of intergovernmental (Bologna Process) and supranational (ERA and modernization agenda) large-scale European processes – and the accompanying European strategies – is reflected in national level policies is still unclear. But, as reflected in the policy literature, the economic dimension, at least in the area of higher education policy, is clearly gaining a higher priority today than the social dimension.

The ET 2010, like the Bologna Process (and higher education institutions in general), functions within European Higher Education Area (EHEA) initiatives – while the modernization agenda of universities functions within the ERA (and top-level, research-intensive universities). To what extent are different priorities at the EU level translated into national level ones in EU member-states? To what extent are national translations of EU-level education and training strategies limited, or enhanced, by the traditions from which national higher education systems come (Napoleonic or southern models, Humboldtian or Central European models, as well as Anglo-Saxon models)? While the impact of traditions on national translations of EU-level strategies in higher education can be high in some systems, in others the impact on national strategies in respect of lifelong learning, rather than higher education, can be high. The EC’s “creeping competence” in education generally may mean that the EC is much more interested in those

policy areas in which its influence is not easily contested: lifelong learning and the vocational (VET) sector are good examples here.

In particular, the natural policy question would be why the “modernization agenda of European universities” does not belong with the ET 2010 (and, subsequently, to the new ET 2020)? Is it specifically economy-focused, rather than youth/student-focused? The answer is positive: the modernization agenda refers clearly to research universities as top research performers within particular national higher education systems. The ET 2010 refers to all higher education institutions, regardless of their research engagement levels. The more universities are linked to the economic dimension, the more will their cooperation with the business communities be supported, the more will universities’ financial self-reliance be promoted – and the more will European research-intensive universities stand apart from European higher education institutions generally. What are the consequences of the possible Europe-wide acceptance of this divide between economy-focused research intensive universities and teaching-focused (all the others) higher education institutions? What is the future of the (traditional) unity of research and teaching in institutional missions? The questions are beyond the scope of the present chapter but we have analysed them elsewhere in more detail (see Kwiek 2009b).

Consequently, there is an ever-growing diversification of higher education institutions in Europe: so the ET 2010 (and ET 2020) strategies may be linked more to teaching-oriented institutions (related to youth/students, the equitable access agenda, widening access agenda, etc.); while the “modernization agenda of European universities” (and ERA initiatives) – may be linked more to research-intensive universities. This may have far-reaching consequences for the funding and governance patterns of both types of institutions. The focus on research (international rankings, detailed research assessment exercises closely linked to funding levels, etc.), clearly separates the top 200 European universities (generally viewed as research-intensive and present in global university rankings based mainly on their research output and the international visibility of their research faculty) from the vast majority of the 3,800 European institutions focused on teaching youth/students, etc. And this, slowly emergent from various EU-level policy initiatives in the 2000s (ET 2010, Lisbon Strategy, “modernization agenda”, EHEA, ERA), is one of the most striking consequences of the combination of social and economic goals, the emergence of the possibility of two separate higher education regimes existing within national systems: one focusing on the economy (called research-intensive universities and involved in the ERA and the “modernization agenda”); and the other, comprising all the other institutions, focusing on students and their (increasingly economized, or viewed through a lens of economic rather than social) concerns. This emergent

structural differentiation would cut across national systems and across the EU as a whole. The combination of a research mission and a teaching mission for 90 per-cent of higher education institutions in Europe anyway seems “mission impossible” for a variety of structural reasons, including access to research funding, increasingly restricted to top national research performers with an increasing concentration of funds, and the sectors increasing competition-related parameters.

5. Conclusions and areas for further research

Slightly more than a decade ago, when the discourse regarding the knowledge economy was only emergent, youth and students were a major concern in the context of the ever growing attainment levels in higher education. Currently, especially in the European policies studied in the present chapter (but also in global thinking about economic growth on the one hand, and the role played by education in economic growth along human capital lines of thinking), the role of the low-skilled (and the low-waged) has been viewed as increasingly important; the low-skilled being of all ages, not only in the traditional student age bracket. Consequently, as shown in this chapter, the role of lifelong learning is growing, combined with the role of all educational providers, not only higher education institutions preparing higher education graduates for entry into the labour market. The traditional EU-level concern with youth is slowly being replaced by, or at least powerfully accompanied by, a concern for the generally low-skilled (because “new skills” for all age categories are needed for “new jobs”, also to be available to all age categories). The traditional EU-level concern for higher education and its graduates is accompanied by a concern for lifelong learning in general, and as a much wider category of both formal (in school, in university), non-formal and informal types. The overall interpretation of youth in the EU strategies studied here is strongly related to other wider constructs: the education and training sector in general, represented in the European Quality Framework by various levels from 1 to 8, and lifelong learning in general for both young and older workers.

Both “youth” and “universities” in the EU-level discourse can be construed as social policy targets, to be used to introduce relatively (historically) new ways of thinking about youth/students and their educational institutions. Together with the notions of employability and flexible job security, individuals themselves are becoming responsible for their social and economic fortunes (or misfortunes). Together with the notion of globally, or comparatively, “underperforming” universities, with European universities seen as “lagging behind” their American counterparts, European universities are becoming increasingly responsible for what they

produce (research output and graduates), and increasingly accountable to society – with an emphasis on seeking non-state income, increasingly private income, to support their new missions and expand in a social setting in which all social programmes have to increasingly compete for public subsidies. Both youth and universities are interpreted in the EC discourse in such a manner that their own responsibility increases, and the responsibility of their nation states decreases, especially from a public funding perspective. At the same time, wider constructs are in progress: all-encompassing education and training systems, lifelong learning, the low-skilled, new skills for new jobs, and related items. Their implications for national policies are still unclear. Regarding social policies in post-communist countries, the impact of the European social model in general, and several selected EU-level strategies and policy mechanisms in particular that were studied in this chapter, on the changing status of Central European countries in a historically unprecedented manner from “transition” to “accession” to “EU member states” within the last two decades, has been huge in ideological terms. But in practical terms, it has been negligible so far.

In general, “catching up” with the West at the beginning of the 1990s meant joining rich Western European democracies: economically, politically and socially. While the political transformation towards democracy has been successfully completed, and the economic transformation towards a market economy has been completed as well, the social transformation towards a European social model does not seem to have been completed, and it can be argued that from the very beginning of the transformation period it may have not have even been attempted in practical terms. It has not been attempted at the level of particular nation states – and, to a large degree, it has not been supported internationally; either by the subsequent European Commissions or by other international and transnational actors active in the areas of social policies in transition countries. The European Union, in general and without examining national variations, did not seem to support reforms leading to the introduction of this welfare model in post-communist countries. Perhaps the reason was that social policy reforms in this direction would have, in all probability, led to the destabilisation of the very fragile economic growth that followed the collapse of command-driven economies. The political priority throughout the region was given, and historically rightly so, to economic concerns, at the expense of social concerns that were left for more opportune times. In the meantime, Central European welfare states were evolving in different directions (Inglot 2008): different across post-communist countries, and different from their Western European counterparts. Central Europe was on its own in reforming its post-communist social policies, including pensions and healthcare, unemployment, and educational policies. A decade of neglect in reforms (generally the 1990s) may have led to the emer-

gence of the post-communist welfare state, or a new model of social policies specific for (the majority of) new EU member states.

Consequently, the EU-level strategies and policy mechanisms discussed here – the “Education and Training 2010” strategy, “the modernization agenda of European universities”, the European Research Area, the Lisbon Strategy, the Europe 2020 strategy, and related ideas – have had the double impact on national policies and national strategies in the region.

First, in the most general terms, those strategies and policies which required limited public financial support were followed, both in theory and in practice; those which required substantial public financial support were followed in theory rather than in practice. And, finally, those requiring unprecedented increases in public expenditure – for instance, major guidelines and benchmarks related to social policies, labour market activation policies, unemployment policies, public funding for research and development, public funding for higher education, etc. – resulting from the overall principles of the (economic) Lisbon and Europe 2020 strategies (or from “the modernization agenda of European universities” combined with the guiding principles of the emergent “European Research Area”), were generally disregarded. There were important cross-country differences in the region, for instance, in public expenditure on research and development or public expenditure on higher education (with different starting levels for the Czech Republic, Slovakia, Poland, Hungary, Romania, and Bulgaria, and different levels in 2010).

Second, EU-level strategies and policies were politically useful in Central Europe. Whenever it was politically useful for national governments in the region (while employing tough social reforms, especially related to the levels of coverage or costs of the public services available, or to the reforms of pensions or healthcare or higher education that led to them becoming partially privatized or substantially more market-oriented, as well as more privately-funded and less-publicly funded), EU-level strategies and policies were both referred to in public debates and in policymakers’ arguments within national legislative bodies. Whenever it was not politically useful, they were not brought into the public arena, leading to the conclusion that their impact on national policies was also highly instrumental.

EU-level conceptualizations of ET 2010 were generally much less relevant for public debates about the future of public services or higher education in France, Germany or the United Kingdom than the same conceptualizations in new EU member states where they were used in all those cases in which supranational support for tough economic or social reforms were sought. In this sense, the overall relevance of the EU-level strategies studied in this chapter was much higher in new EU member states than in the EU-15 countries – but not necessarily in full accordance with their original spirit.

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