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1. REFORM OF HIGHER EDUCATION IN EUROPE

1.1 AN INTRODUCTION

Nowhere today is higher education undergoing more substantial change than in Europe. As countries pursue policies designed to integrate their economies, political systems and social structures, it is becoming increasingly clear that higher education, research and innovation are critical components to fully realising the potential gains stemming from the changes ahead. This very idea has been espoused in several high-level European wide processes and has given rise to a series of ambitious goals and objectives designed to ensure long term European pre-eminence as both a knowledge producer and transmitter. European higher education systems have shown themselves to be no stranger to political reform: for the better part of three decades the sector has been included in the much broader national and international—even global—reforms in Western and Eastern Europe. In order to celebrate the twenty-fifth anniversary of our Center for Higher Education Policy Studies, former and current CHEPS staff have written the chapters of this book analysing and reflecting on issues of reform in European higher education. This introduction provides a brief overview of some of the major issues at stake in European higher education and introduces the contributions to this book.

European higher education systems have always undergone political reform; since the late 1990s, though, the rate of intended change has accelerated to unprecedented levels, largely on the shoulders of two key developments: the Bologna Declaration (1999), whose objective is to make the European higher education systems more competitive and attractive and the EU's Lisbon Strategy (2000), which seeks to reform the continent's still fragmented higher education systems into a more powerful and more integrated, knowledge-based economy. The EU's Modernisation Agenda (2007) highlights education, research, innovation and the modernisation of higher education institutions as important pillars of the Lisbon Strategy. Appropriate governance and funding structures and processes are regarded as a precondition to achieve these goals.

The Sorbonne Declaration of 1998 constituted the first signal of the preference of major European countries (France, Germany, Italy and the UK) for a more compatible and comparable set of European higher education systems while preserving the rich diversity of teaching, learning styles and higher education cultures. In Bologna one year later, 25 other European countries joined the original four. At each biannual ministerial follow-up conference since, more countries have joined the fray and by 2010 the total number of countries had reached 47. Though the

diversity within European higher education is regarded as one of its major strengths, at the same time a common path towards transparency, quality, growth, efficiency and excellence is regarded a prerequisite for making Europe one of the strongest educational and economic leaders in the world.

The Bologna Process aimed at the establishment of a European Higher Education Area by 2010, and Westerheijden et al. (2010) have recently assessed the first decade of working on it. While signatory countries have to some extent interpreted the Declaration in their own ways, the process rapidly achieved a wide acceptance. Focusing at first on reforming study programmes into the two-cycle 'bachelor-master' structure, concerns about comparability soon pushed quality assurance and accreditation and degree recognition firmly into the mix. Bologna's perspective broadened in Berlin (2003) with the inclusion of the Ph.D. as the third cycle and with linking the European Higher Education Area with the European Research Area. The third cycle was discussed again in Bergen (2005) through the explicit mentioning of 'the importance of higher education in further enhancing research and the importance of research in underpinning higher education for the economic and cultural development of our societies and for social cohesion.' The London communiqué (2007) stressed steps towards more student-centred higher education, and the increase in mobility between cycles and internationally. Important progress was made towards a European Qualifications Framework (EQF) adopted in April 2008 and the European Register of Quality Assurance Agencies (EQAR) was initiated in June 2008. In the 2009 follow-up conference in Leuven/Louvain-la-Neuve, the latest one before the writing of this book, the development of instruments to facilitate transparency came to the forefront.

In this book, *Marieke Faber and Don Westerheijden* analyse multi-level policy dynamics in the context of the Bologna process in their contribution *European Degree Structure and National Reform: Constitutive Dynamics of the Bologna Process*. In their comparative analysis of national case studies they find that 'Bologna' was deployed as additional support for initiating changes of national higher education systems while 'Bologna' also brought about European pressure that affected national higher education policies. Although the Bologna agreement is a non-binding construction in a legal perspective, national actors can conceive of striving towards a common European degree structure as coercion. National technical changes in degree structure can be interpreted as having created a symbolic outcome in the creation of a European higher education system based on a common degree structure: there is unity in a European dimension at face value, while diversity at the national levels continues.

In her contribution, *Reform of Doctoral Training in Europe: A Silent Revolution?*, *Andrea Kottmann* argues that attempts to reform doctoral education increasingly move from the national to the European level. The 2003 Berlin Communiqué of the Bologna process can be seen as a starting point for this shift in the discussion. It stated that doctoral studies should be regarded as a third cycle in the Bologna reform, but at the same time diversity was explicitly to be maintained. Yet a 'silent revolution' towards more convergence has taken place. Kottmann argues that international organisations play a crucial role in disseminating policies, for example by publishing handbooks and standards. She points in particular to the EUA and its Council

for Doctoral Education. At an operational level, this has allowed for maintenance of diversity including the number of years of doctoral training, but at a more abstract level, doctoral education has shifted from an individual to an institutional responsibility. Not only international organisations, but also higher education institutions acquire more actorhood through this type of European processes.

Maarja Beerkens and Hans Vossensteyn discuss a related though different issue of European multi-level policies in their contribution *The Effect of the ERASMUS Programme on European Higher Education: The Visible Hand of Europe*. They argue that through ERASMUS, the European Union has had quite a considerable effect on higher education in Europe. To facilitate a smooth mobility of students, higher education systems need to be compatible, educational quality must be transparent, and qualifications need to be comparable. Such needs have triggered major developments in European higher education, such as the Bologna degree reform, the ECTS, the European Qualifications Framework, and changes in quality assurance systems. As a result of these developments we also see new supranational organisations coming to prominence, such as ENQA and the European Quality Assurance Register. As predicted by the conceptual framework of trans-national societies, the cycle does not stop here but feeds further trans-nationalisation. As a result, there will be need for more regulation at the European level and greater roles for supra-national organisations.

In March 2000, the countries of the European Union committed themselves in the Lisbon Strategy to the ambitious objective of becoming 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.' European policy-makers' intentions took a more concrete form in 2003 when the operational goal of raising EU-countries' investments in R&D to 3% of GDP was outlined in Barcelona. Aggregate public investment in both education and research still lags behind that in the United States and it seems that EU member states' abilities to make further investments are limited. The investments differ significantly across countries and even more so across sub-national regions (Dill and Van Vught, 2008). Although state investments in research have grown since 2000, industry contributions grew only marginally. The mid-term evaluation report (EC 2004) showed that the Lisbon summit goals were very difficult to reach, partly due to weak economic growth in the larger member states and partly due to the fact that the design and the implementation of the policy actions rely on the member states and industry. Another mid-term review (EC 2006) on a similar note reported a gap between the political rhetoric about the knowledge society and the realities of political financial priorities. The Lisbon process was restarted with the New Lisbon Partnership for Growth and Jobs (EC 2005c) where 'knowledge and innovation for growth' have been identified as one of the three main areas for action. In 2010, the Lisbon strategy evolved into the EU Commission's strategy 'Europe 2020', responding to the economic crisis and broadening the agenda to overcome some of the shortcomings of the previous initiatives. For instance, the link with higher education was strengthened with the goal that by 2020, 40% of the population aged 30 to 34 ought to have achieved tertiary-level education.

In such a context, the European Commission has increasingly emphasised the role of universities in contributing to the knowledge society and economy (EC 2003, 2005a) 'Europe must strengthen the three poles of its knowledge triangle: education, research and innovation. Universities are essential in all three' (EC 2005b). The Commission found that governments have increasing difficulties to match the rising costs of science and providing quality education and excellent research. Lack of competitiveness has been one of the major challenges for European universities noted by the Commission since 2003. The major criticism lies in European universities failing to use their full potential to stimulate economic growth, social cohesion, and improvement in the quality and quantity of jobs. The European Commission identifies the following problems: the tendency of uniformity and egalitarianism in many national higher education systems, too much emphasis on mono-disciplinarity and traditional learning and learners; and too little world-class excellence (Dill and Van Vught, 2008). Despite these difficulties the Commission believes that the quality and attractiveness of European universities need to increase, human resources need to be strengthened, and the diversity of the European higher education system needs to be combined with increased compatibility.

In his contribution to this book *Responding to the EU Innovation Strategy: The Need for Institutional Profiling in European Higher Education and Research*, Frans van Vught addresses the EU's innovation strategy and its consequences for the European higher education landscape and more particularly its higher education and research institutions. The creation, transfer and application of knowledge are assumed to be of prime importance for a process of economic reorientation and further social and economic development and higher education and research institutions are vitally important here. After an elaborate presentation of the relevant EU policies, Van Vught discusses the expectations and challenges for the institutions in this global and European context. The need to increase enrolment and graduate numbers; the levels of access and equity; research performance and knowledge transfer capacity; private income; academic stratification and regional differentiation are all discussed. In response to these challenges Van Vught argues that higher education and research institutions need to design and implement clear and realistic institutional profiles.

The Sorbonne and Bologna Declarations, the Lisbon Strategy and the Modernisation Agenda have not been the only influences on European higher education institutions. In many European countries a series of reforms were already underway in the 1980s (in the West) and 1990s (in Central and Eastern Europe) and many current reform initiatives have their origin in this period. The changing role of the state vis-à-vis higher education institutions (i.e. in the form of enhancing institutional autonomy and stressing quality assurance and accountability) are well-known themes of the last two decades. This has been convincingly demonstrated in Neave's article on the rise of the evaluative state (Neave, 1988), and Eurydice's 2000 study on two decades of higher education reform. Globalisation, internationalisation, the fall of communism and privatisation have all done much to shape the current situation. Some examples are the growing importance of international profiling, international consortia, tuition fees, external research funds and the emergence of private higher

education institutions. If, however, one seeks a common thread that links these larger developments to the current state of European higher education reforms, then few would disagree that it is the growing recognition that higher education sectors are both remarkably complex and not immune to the pull of the market.

Behind the policy initiatives discussed above considerable attention has been given to the adoption of more market-type mechanisms and modern types of governance (Enders, 2002). Keywords like accountability and New Public Management or network governance ('state supervision', 'the evaluative state') are gradually replacing the traditional focus on state control and academic collegial governance. State control is giving way to more institutional management in the name of efficiency and responsiveness to society's diverse needs, demonstrated through new processes of accountability including quality assurance. Institutions are encouraged - some would argue forced - to increase their capacity and willingness to become engaged in the production of useful knowledge and relevant teaching. Through competition and greater institutional autonomy higher education institutions are stimulated to become more sensitive to their varied consumers' demands for relevance.

Two contributions to this book address the role of higher education for commercialisation and knowledge transfer. *Arend Zomer and Paul Benneworth* address *The Rise of the University's Third Mission*. They argue that commercialisation has become an intrinsic part of what universities do. The third mission was a response to demands from government, industry and other societal actors for universities to become more self-reliant as institutions (covering their costs) but at the same time creating benefits for a range of societal actors, principally by supporting business innovation and boosting national competitiveness. Over time, the idea of a third mission has acquired a degree of autonomy as something shaping not only debates about universities' societal impacts, but also the meaning of university. The idea continues to evolve, with successes being extended and failures leading to evolutionary dead-ends and policy lacunas, as policy-makers distance themselves from those failures.

Egbert de Weert's contribution, *Transformation or Systems Convergence? The Research Profile of Universities of Applied Sciences in Europe*, provides a cross-national comparative perspective on the practice-oriented research function of Universities of Applied Sciences (UAS). Does the growing research function of UAS lead to a further blurring of boundaries or does it justify the preservation of binary systems? After a description of the UAS sector across Europe, the drivers of the research ambitions of the UAS sector are discussed such as making a contribution to the needs of the knowledge society, to boost regional innovation and to change competencies for professional practice. Based on examples from Ireland, Germany, Switzerland, Finland and the Netherlands, De Weert argues that commonalities between European countries regarding practice-led research and its distinctiveness from university research contribute to a further profiling of the UAS sector as a whole. UAS research is complementary and may result in a stronger differentiation between UAS and traditional universities. The core identity of the UAS sector concerns a strengthening of ties with companies and professional fields a re-balanced nexus between teaching and research and a focus on practice-led research. Within the UAS

sector De Weert foresees more differentiation, which is likely to contribute to a diversified European higher education system.

Until recently the higher education governance policy focus has largely addressed the relationship between institutions and the state. However, since the 1990s shifts in system governance are evident. In terms of system coordination one can witness growing recognition that relationships are not only more complex and dynamic but involve more actors from various levels. This overall shift has been termed ‘from government to governance’, which further reinforces the position that it is not just the state that rules. Authorities and powers have been redistributed across the various policy levels. In many countries, coordination has changed from a classical form of regulation dominated by a single actor, the state, to forms in which various actors at various system levels coordinate the system (‘multi-level multi-actor governance’) (Van Kersbergen & Van Waarden, 2001). Coordination increasingly takes place through interconnected policy levels with a substantial number of actors influencing agenda setting, policy development, policy determination, policy implementation, and evaluation (De Boer, Enders, & Leisyte, 2007).

Adrie Dassen’s and Paul Benneworth’s contribution to this book, *Understanding the Limits to Higher Education Policy*, addresses the increasing popularity of policy networks in the governance of higher education and research. Governments have sought to use policy networks to deal with situations which are problematic, involving intractable or ill-defined problems, complex groupings of stakeholders and interests, demanding a solution with no easy end in sight. Policy networks can be used with an experimental rationale, in which they allow sense-making in novel situations, and a displacement rationale, in which governments can withdraw from having responsibility for the issues at stake. The question that remains to be answered is the extent to which governments oscillate between these rationales and whether experiments in governance are acquiring widespread support and becoming normalised, or whether they allow a postponement of improving efficiency in higher education.

Whatever governments’ rationales may be, they have to be realized by the higher education institutions and units and individuals within them. *Liudvika Leišytė and Jürgen Enders* in their chapter, *The strategic responses of English and Dutch university life scientists to the changes in their institutional environments*, address the question of how research groups react to governmental initiatives. They show that there are different strategies, from conformity to symbolic compliance and proactive manipulation and negotiation of the environment. Research groups use a mix of these strategies, with the higher credibility groups being able to engage more in proactive strategies and keep their core activities intact, while low-credibility groups more often have to resort to conformity strategies and adapt more to governments’ policies. Yet, ‘playing the game’ and research groups being strategic actors using a mix of strategies may well be the most striking characteristic emerging from their study. How such reactions affect the effectiveness of policies, and thus what governments can do and how, needs further exploration. The difference between ‘government’ and ‘governance’ may play an important role in those explorations.

The notion of ‘less government and more governance’ is strongly and supported by several factors (De Boer, Enders, & Schimank, 2006). One is financial; high

public expenditures for continuously expanding higher education systems are demanding new steering instruments. Another is the ideological shift towards the market as a coordinating mechanism. Today in Europe it is evident that higher education increasingly functions in quasi-markets, where governments continue to play an important guiding role (Texeira, Jongbloed, Dill, & Amaral, 2004). Third, globalisation, internationalisation and Europeanisation have all challenged the national boundaries of higher education systems and posed new questions to governments and higher education institutions. For example, the European Union instrument of the Framework Programmes has encouraged higher education institutions to engage in large scale partnerships across national boundaries, which have resulted in different networks and consortia and research agenda setting moving towards a supra-national level. Fourth, empirical evidence suggests that the New Public Management (De Boer, Enders & Schimank, 2006) organisational approach has been influential in “modernising” public services. Some European countries increasingly treat their public service sector organisations as corporate enterprises with the goal of increasing their efficiency and effectiveness by giving them more autonomy and at the same time asking for more accountability.

Across the board, a major trend has been the strengthening of higher education institutions as organisations (De Boer, Enders & Leisyte, 2006). One of the consequences of reshuffling authorities and responsibilities between the various levels within the higher education systems is that many powers have accrued at the top level of the institutions. Enhancing institutional autonomy, a state policy in many countries, has often meant strengthening of institutional leadership, particularly in those higher education systems where traditionally the institutional top level was relatively weak. The enhanced institutional autonomy has meant higher levels of accountability as well as more stringent and detailed procedures for quality assurance at the state as well as institutional levels (‘the rise of the evaluative state’). Greater accountability also means that higher education institutions have to redefine the ways in which they inform their stakeholders about their performances and the ways in which they integrate external stakeholders into their internal decision-making processes.

This latter aspect is considered in the contribution of *Harry de Boer and Jon File, Old Wine in New Skins: The Long Evolution of Supervisory Boards in Dutch Higher Education*. They observe that, despite differences between higher education governance systems in Europe, external stakeholder involvement in internal university governance is on the rise. Through a longitudinal case study of supervisory boards in Dutch higher education, they highlight persisting issues around supervisory boards such as who should serve on a supervisory board, what should be their main roles and what kind of relationships should exist between the supervisory board, the ministry, society and the academic community. They argue that, at least in the Netherlands, a supervisory board is not a new phenomenon, as many would like us to believe, despite all the changes that have taken place in higher education of the last two centuries. The oldest Dutch university, Leiden, founded in 1575, had a supervisory board from the outset. The Dutch experience of external representation in internal university governance is much more a case of ‘reinventing the wheel’ than of ‘modernising governance’.

The potentials and limits of various governance models such as stakeholder approaches, policy networks, quasi-markets and governmental regulation remain, however, contested. The role of governments is evolving into sometimes elaborate systems of incentives and sanctions that allow governments to continue utilising their higher education sectors by ‘steering from a distance’ in order to redress ‘government failures’ (Wolf, 1993) of the past. At the same time, the pace and reach of the changes now taking place raise the possibility that policymakers are fixing one problem by creating another. Markets breed ‘market failures’ and economists are quick to point out that universities are fundamentally different from the ideal-type firms that shape standard economic textbook theories (Winston, 1999). If Europe is to succeed in its efforts to create both a Higher Education and Research Area that will drive its economy in the years ahead then striking a balance between these types of failures will be crucial.

Teaching and research face similar problems and challenges lying ahead. While education is seen as critical to supporting and maintaining economic growth, so too is research and development (R&D) investment considered essential to ensuring that Europe remains at the forefront of technological innovation. Such goals however must be met in the context of increasing global competition for scarce academic talent and financial resources. Universities and other providers of higher education, as well as governments, are well aware that they play a major role in the “Europe of Knowledge” and of their responsibility to deliver the economic, social and cultural services expected from them. The regulatory environments and the governance structures and processes, combined with the material and human resources at their disposal, play a crucial role in the degree to which universities and colleges effectively provide these services locally, regionally, nationally and internationally (OECD, 2008).

In higher education the state’s new role may be called facilitative as it creates a higher education environment in which the state controls the outcomes at the state level without much detailed interference. In some countries one can speak of the state as steering the market (Texeira, Jongbloed, Dill, & Amaral, 2004). In the last two decades, most European countries have also revised their higher education funding systems. The extent to which the reforms have been implemented varies considerably, but no country has been able to ignore the debate on higher education funding entirely. There are several serious funding issues that are receiving attention in European higher education: most importantly, first, the funding gap between higher education investments in Europe and its main competitors, secondly the related pressure to attract private funds both from industry and students/parents, and thirdly, financial allocation principles to focus more towards outcome-based and competitive funding instruments (e.g. Teixeira et al., 2004; Jongbloed and Vossensteyn, 2004). New steering devices have been introduced, output funding and multi-year agreements with the (individual) higher education institutions provide illustrative examples.

In his contribution, *Funding through Contracts: European and Institutional Perspectives*, Ben Jongbloed discusses the state of the art and recent reforms in university funding in Europe. Contracting and performance-based budgeting (PBB) are two trends that emerge from a *tour d’horizon* of funding mechanisms for higher education institutions, as the result of, among other things, the New Public Management

doctrine. After presenting four main budget types (performance systems, process systems, project systems and input systems) and the mechanisms of public funding used by national authorities (negotiated funding, incremental funding, formula funding and contract funding), Jongbloed uses the Dutch example to explore the promises and pitfalls of contracting and PBB. In his conclusion he pictures a mixed pattern of pros and cons of the two trends and mentions that funding authorities and university administrators increasingly realise that their traditional funding approaches have been backward-looking, for instance, by using the formula funding mechanism. He foresees that formula funding will remain important but will increasingly be supplemented by contract (forward-looking) approaches.

In Europe, governments remain the primary funding source for higher education institutions. The figures and trends show that European investment in education and R&D, especially from private sources, is not pushing Europe towards parity with its global competitors instead show an ever-widening gap. This has prompted the European Commission to call on member-states to nearly double aggregate R&D investment and increase the share of industry-sponsored research from 56% to 66% by 2010 (EC 2002, 2005c). This is easier said than done, as continued and serious economic fluctuations have made it difficult for governments to provide incentives and subsidies that are capable of encouraging private investment in research and development. In the area of teaching, predominantly national policies towards cost sharing are sometimes met with scepticism due to fears of a decrease in access to higher education (Vossensteyn and Mateju, 2008).

In many ways the higher education systems of the countries that in recent years have become members of the EU and the non-EU signatory countries in the Bologna Process face an even harsher economic situation than the 15 old EU member states. Any effort at integrating higher education into a European Higher Education Area will invariably need to accommodate an increasingly rich variety of systems with regard to cultural norms, economic policies, organisational structures and GDP levels. Nevertheless, due to the considerable national power in shaping the regulatory frameworks and incentive structures, national governments still shape higher education systems and institutions as they see fit. Whether the envisaged performance improvements will take place will be the result of the dynamics of the incentive structures and the responses of the actors involved. As such, institutional responses, as well as the reactions of students, academics, industry and other stakeholders are crucial to the extent and direction of higher education reforms initiated by governments or the EU and for the impact of such reforms. As a result, before national and trans-national policies can be fine-tuned, a better understanding of the implementation and effects of the policies is needed.

REFERENCES

- De Boer, H., Enders, J., & Leisyte, L. (2007). Public sector reform in Dutch higher education: The organizational transformation of the university. *Public Administration*, 85(1), 27–46.
- De Boer, H., Enders, J., & Schimank, U. (2006). On the way towards new public management? The governance of university systems in England, the Netherlands, Austria, and Germany. In D. Jansen (Ed.),

- New forms of governance in research organizations: Disciplinary approaches, interfaces and integration* (pp. 1–22). Dordrecht: Springer.
- Dill, D. D., & van Vught, F. A. (Eds.). (2008). *National innovation strategies and the academic research enterprise*. Baltimore: Johns Hopkins University Press.
- EC. (2002). *More research for Europe: Towards 3% of GDP, Communication from the European Commission*. Brussels: European Commission.
- EC. (2003). *The role of the universities in the Europe of knowledge* (No. COM (2003) 58). Brussels: European Commission.
- EC. (2005a). *Contribution to the conference of European higher education ministers in Bergen*. Brussels: European Commission.
- EC. (2005b). *Mobilising the brainpower of Europe: Enabling universities to make their full contribution to the Lisbon strategy*. Brussels: European Commission.
- EC. (2005c). *Working together for growth and jobs. A new start of the Lisbon strategy* (No. COM (2005) 24). Brussels: European Commission.
- EC. (2006). *Progress towards the Lisbon objectives in education and training* (No. SEC (2006) 639). Brussels: European Commission.
- Enders, J. (2002). Governing the academic commons: About blurring boundaries, blistering organisations, and growing demands. In *The CHEPS inaugural lectures 2002*. Enschede: CHEPS.
- European Ministers Responsible for Higher Education. (2007). *London communiqué—towards the European higher education area: Responding to challenges in a globalised world*. http://www.eua.be/fileadmin/user_upload/files/Publications/Londoncommuniqu.pdf
- Eurydice. (2000). *Two decades of reform in higher education in Europe: 1980 onwards*. Brussels: European Commission (DG Education and Culture).
- Jongbloed, B., & Vossensteyn, H. (2004). Keeping up performances: An international survey of performance-based funding in higher education. In M. Tight (Ed.), *The RoutledgeFalmer reader in higher education*. London: RoutledgeFalmer. (ISBN 0-415- 32765-2) (earlier published in: *Journal of Higher Education Policy and Management*, 23(2), 127–145, 2001).
- van Kersbergen, K., & van Waarden, F. (2001). *Shifts in governance: Problems of legitimacy and accountability*. The Hague: Social Science Research Council.
- Neave, G. (1988). On the cultivation of quality, efficiency and enterprise: An overview of recent trends in higher education in Western Europe, 1986–1988. *European Journal of Education*, 23(1/2), 7–23.
- OECD. (2008). *Tertiary education for the knowledge society. OECD thematic review of tertiary education*. Paris: Author.
- OECD. (2007). *Education at a glance 2007*. Paris: Author.
- Teixeira, P., Jongbloed, B., Dill, D., & Amaral, A. (2004). *Markets in higher education*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Vossensteyn, J. J., & Mateju, P. (2008). Challenges in funding, equity and efficiency in higher education. *IB Revija*, XLII(1).
- Westerheijden, D., et al. (2010). *The first decade of working on the European higher education area: The Bologna process independent assessment. Volume I: main report*. Enschede: Center for Higher Education Policy Studies, University of Twente, accessible at http://ec.europa.eu/education/higher-education/doc/bologna_process/independent_assessment_1_detailed_rept.pdf
- Winston, G. C. (1999). Subsidies, hierarchy and peers: The awkward economics of higher education. *Journal of economic perspectives*, 13, 13–36.
- Wolf, C. (1993). *Markets or governments: Choosing between imperfect alternatives*. Cambridge, MA: MIT Press.