PETER MAASSEN, MONIKA NERLAND, RÓMULO PINHEIRO, BJØRN STENSAKER, AGNETE VABØ AND MARTINA VUKASOVIĆ

1. CHANGE DYNAMICS AND HIGHER EDUCATION REFORMS

Effects in Education, Research, Governance and Academic Profession

Higher education institutions have become in practically every society the main institutionalized domains for handling advanced knowledge. They have survived since their origin in more or less the same organizational form (Kerr, 2001), which is all the more remarkable given the fundamental changes that have taken place in their environments. Their main organizational building blocks have always been the knowledge areas around which chairs, departments, faculties, schools and centres are positioned (Clark, 1983), and universities and colleges are populated by academic staff, students, and administrators, whose interactions determine the institutional day-to-day life. These relatively stable elements can still be found as basic organisational characteristics in any higher education institution in the world and are still used as reference points for legitimisation or quality assurance purposes.

Throughout their long institutional history universities and colleges regularly have faced demands for dramatic changes. As argued by Olsen (2007:28) this is also currently the case:

... an institution under serious attack re-examines its pact with society and its rationale, identity and foundations... Likewise, there may be public debates about what different institutions are supposed to accomplish for society, how each is to be justified and made accountable, what is to be core institutions and auxiliary institutions, and what kind of relationship government is supposed to have to different types of institutions. A possible outcome is the fall and rise of institutional structures and their associated systems of normative and causal beliefs and resources. Arguably, the University now faces this kind of situation...

While this is a worldwide phenomenon, what is particular about the reform pressures in Europe is that over the last decade they have increasingly come from the European level. This is caused by the growing importance of higher education in terms of its political, social and economic roles. As such, higher education is more and more regarded as a solution to problems in various policy areas (Elken, Gornitzka, Maassen, & Vukasović, 2011), such as economy, environment, welfare or even security. At the same time, higher education has become less special

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meaning that a growing number of actors, including other ministries than Education, involved at various levels in higher education governance expect that higher education is governed like other public and private organisations. In that vein, higher education institutions' claims of uniqueness justifying a special governance approach, are regarded less and less as legitimate (Olsen, 2007).

That there is a need for a new pact or social contract between higher education and society can be seen also in the fact that key socio-economic and political actors argue for far-reaching reforms and modernisation (European Commission, 2006; Maassen & Olsen, 2007) despite the fact that higher education systems in many countries in Europe have been under almost continuous reform in the last twenty years. Such perceived "performance failures", have led many countries to focus their reform efforts at strengthening the competitive basis of especially the universities, as expressed, amongst other, in performance based funding components, the use of performance contracts or agreements, the interest in university rankings, and the structural rearrangements of higher education systems through institutional mergers. In addition, knowledge economy related policy issues, such as the growing importance of human capital, the internationalisation of labour markets, and the policy links between research, education and innovation have made higher education a sector of major reform processes, on both the national and the European level.

Thus, one seems to be faced with a puzzle. Higher education is, on the one hand, seen as bottom-heavy and thus resistant to change, also capable of shielding its core functions from the pressures of the changing environment (Clark, 1998). On the other hand, it is also obviously capable of significant adaptation, otherwise it would not have survived in a largely similar form the political, social, economic and cultural changes that took place since its inception. From that perspective there is a need to clarify the conditions under which higher education change is a fairly autonomous internal process, and the conditions under which internal processes are overwhelmed by wider political processes and socio-economic mobilization. There is a need to distinguish between incremental change and reforms in higher education within fairly stable organizational and normative frames, and change and reforms where the legitimacy of higher education's mission, organization, public funding, functioning, and ways of operating are doubted and challenged (Olsen 2007). Furthermore, there is a need to address the process of change on all relevant governance levels alike, in order to better capture the dynamics of change, but perhaps even more importantly to be able to distinguish superficial change or allomorphisms (Vaira, 2004) from profound transformation of the basic characteristics of higher education.

With that in mind, the 2010 conference of CHER (the Consortium of Higher Education Researchers) invited participants to go beyond reform agendas as such and focus on the effects of reforms at all relevant levels in higher education systems. The aim was to 'take stock' of the growing knowledge basis with respect to higher education with a special focus on the influence of reforms on the internal life of higher education institutions. This volume does not come close to reflect the richness and quality of over 130 papers presented, but rather offers a glance of

interesting research problems, approaches and results. It is organised in four themes – education, research, governance, and academic profession – with a variety of levels of analysis, theoretical perspectives, methodological approaches and geographical focus. Each theme is introduced separately, through a short review of the main developments in the area, presentation of the related chapters and discussion of possible topics for further research.

EDUCATION

The responsibilities for teaching, learning and assessment in higher education institutions are in one sense rather stable. Today, as in previous times, higher education institutions are expected to provide good and relevant educational programs which foster skills and competencies needed for societal welfare and economic growth, as well as to secure the continuation of core academic disciplines and bodies of knowledge inherited from previous generations. At the same time, the organization and management of educational processes is subjected to substantive changes both where external and internal mechanisms are concerned. With changes in policies as well as in the social contract (Neave, 2006) new stakeholder relationships come to the fore, which alter the educational mission as well as how its realization is organized and performed.

First, policy processes and efforts to harmonize educational systems across national boundaries influence the structure of curriculum as well as the relationship between teaching, learning and assessment (Karseth, 2008; Keeling, 2006). In European countries, convergence in degree structures following from the Bologna process, as well as new qualification frameworks and assessment regimes represent core change drivers in this regard. Second, changes are also related to new and more dynamic relations between higher education and working life (Brennan, 2008; Tynjälä, Välimaa, & Sarja, 2003). Students' learning trajectories are getting more complex, as higher education is no longer restricted to the initial phase of preparing practitioners sufficiently for the world of work. Practitioners increasingly enrol in higher education in different phases of their life to update or advance their competencies. New partnership models emerge through which higher education institutions and employers or professional organizations collaborate in programme development. The professional orientation of many degree programmes makes work placements increasingly important sites for learning. At the same time, processes of academic drift in many professional education programmes create tensions and give rise to contesting discourses in curriculum development (Ensor, 2004; Kyvik, 2007). Third, and related to the former, the dynamics of knowledge development in different fields of expertise generate changes in the epistemic cultures and processes that constitute academic communities, their logics and their boundaries. One aspect in this regard is the emergence of new interdisciplinary fields of research which manifest themselves also in new educational programs (Neumann, 2009; Spelt, Biemans, Tobi, Luning, & Mulder, 2009). Another aspect is that disciplinary cultures change 'from within'

in their ways of organizing knowledge production, as well as in their social organization and logics of participation (Knorr Cetina, 2007).

These trends and their related change drivers call for research along a number of themes. Among these are the influence of the current changes on students' engagement and commitment to their areas of study, as well as the mechanisms through which students today become enrolled in expert cultures. While graduate and professional education historically have been regarded as processes of enculturation into academic disciplines or expert cultures, it is not given how these processes take place today. Knowledge and its expert communities are dispersed on a variety of sites; students may participate in multiple practices within and beyond formal educational practices; and the increased use of new technologies provides access to extended knowledge worlds. Curriculum structures and approaches to teaching are in this respect not only means for transmitting knowledge to the next generation, but also structures that mediate students' mobility and participation in wider areas of the knowledge domain (Nespor, 1994).

This extension of learning spaces and environments reflects new relations between knowledge production and distribution in academic disciplines and expert cultures. To understand conditions for education and learning today, we need to revisit the way disciplinary cultures are understood and examine their mechanisms for continuity as well as change. The general emphasis on inquiry-oriented activities and creative-constructive forms of engagement in educational programmes construct students as inquiry-oriented co-producers of knowledge (Simons & Elen, 2007) and invite more research on what research-based education may look like today.

The above issues also point to how notions of expertise may be in transition in ways that also influence higher education. Students are expected to develop skills and competencies not only for taking part in today's society and working life but also to engage actively in shaping the future of knowledge and work. This involves complex and often contradictory demands, including the handling of complex knowledge and practices and the ability to adjust to changes, to just mention a few (Nerland & Jensen, 2007). In this respect, the very notions of skilful practitioners need to be revisited.

This book includes three chapters which in various ways address the educational mission and the themes outlined above. The chapter by Marina Elias and her colleagues investigates how student engagement is influenced by new teaching methodologies that follow from the implementation of the Bologna Process. They take as a point of departure that the Bologna Process has brought forward an increased emphasis on continuous assessment, problem-based learning and more student-centred approaches to teaching. There are, however, few studies that examine students' learning in the context of changes introduced through the Bologna Process. Drawing on the work of Pascarella & Terinzini, Tinto and their associates, the authors have investigated this issue by interviewing students enrolled in 10 degree courses at four public universities in the Barcelona region. Their findings show that students now spend more time on their studies which lead to a stronger identification with the university. In addition, the social interaction

with teachers and peers seem to be increased, and may lead to a stronger social identification. Hence, this study shows that reforms implemented in the framework of the Bologna Process not only have effects on the organizational aspects of higher education programmes, but also influence the 'inner life' of students' and teachers' participation. There are, however, also differences in how students negotiate their identification processes students are involved in.

The chapter by Mark Kaulisch and Kalle Hauss investigates cultures of doctoral education in Germany. Previous research on doctoral education has often used the perspective of disciplinary cultures (Becher & Trowler, 2001) and found that doctoral education to a large extent is marked by disciplinary characteristics (Neumann, 2009; Parry, 2007). However, an emerging question is how disciplines are placed in wider groups based on their common characteristics. Kaulisch and Hauss take as a point of departure that the dominant ways in which disciplines are classified in disciplinary groupings may not have accounted sufficiently for the role of doctoral education as a linking pin between teaching, research and the labour market. They introduce the concept of role and identity cultures to examine how disciplines can be grouped in alternative ways that are meaningful for describing differences in doctoral education. However, their findings showed that role and identity cultures do not seem to be distinctive for differences in doctoral education. Although doctoral students differ in their norms, values and attitudes towards becoming a researcher, these aspects seem to be more influenced by the epistemic characteristics of the knowledge domain and by the organizational arrangements of teaching, learning and research.

In chapter four, Torill Strand and Karen Jensen take as a point of departure that the ways in which professional expertise is conceptualized and understood are tightly linked to shifting societal conditions, such as the character of social institutions and symbolic economies. However, a challenge for researchers is to develop analytical approaches which can give insight into these dynamics. By reviewing literature on professions and professional expertise, the authors identify three analytical positions which have influenced our understanding of the professions, their knowledge and competencies: (1) a classical sociological position which highlights the ethos or credibility of professions and their expertise; (2) a discursive position which highlights the pathos or public appeal; and (3) a semiotic position which highlights the logos or epistemic dimension of professional expertise. Using examples from a Norwegian study which followed graduates from four professional programmes over a span of eight years, the authors employ the three analytical outlooks to discuss changes in the social mission, recognition and knowledge dynamics of the respective professions. They show how multiple readings are needed to understand the complexity of change dynamics at play. At the same time, the third position seems especially relevant to reveal how professional expertise now is altered in the context of global knowledge economies.

Together the chapters show the need for looking across the research-teachinglearning divide to reconsider how academic and professional communities, their

expert practices and enrolment mechanisms are constituted in today's higher education. They reflect a renewed interest in the role of knowledge in the organization of educational programmes, activities and practices. In a wider perspective, they also point towards how higher education not only is embedded in, but also a continuous producer of, cultures of knowledge and expertise. This is not only the case where research activities are concerned, but also true for the educational mission.

RESEARCH

The emerging focus on the notion of a knowledge-based society in policy arenas around the world and the resulting objective in many countries of strengthening their global economic competitiveness has led to an increasing policy interest in the scientific quality and economic relevance of national research efforts, both within and beyond Europe. A central element in this concerns the expectations about higher education's contributions to economic development and innovation. The main assumption underlying this expectation, in a simplified form, is that more complex and competitive economic and technological global environments require rapid adaptation to changing opportunities and constraints. Higher education institutions are expected to play a central role in this adaptation, since as core knowledge institutions in any society they are assumed to link especially their research activities effectively to innovation. This expectation has been the underlying rationale for reforms aimed at stimulating higher education institutions to develop more focused and effective institutional strategies and a strong, unitary and professional leadership and management capacity that matches those of modern private enterprises. At the same time higher education policies have increasingly become coordinated with other policy areas, such as innovation and technology, as part of national (and supranational) knowledge and innovation policies (Braun, 2008; Gornitzka, 2010). In addition, other public and private actors have entered the higher education policy arena, demanding to have influence in policy matters. The underlying vision is the need to create higher education institutions that are dynamic and responsive to socio-economic agendas and that give priority to innovation, entrepreneurship and competitiveness.

Such macro-level dynamics are mirrored in the chapters focusing on research endeavours. Two specific aspects are highlighted: (a) supranational efforts aimed at enhancing the free movement of knowledge (Chou) and (b) the impact of policy instruments at the micro level (Primeri and Reale). In addition, a chapter that is part of the academic profession theme (Padilla-González et al.,) also touches upon research performance differences between male and female academics. Apart from presenting new methodological and conceptual insights, the above chapters discuss change dynamics at the macro, meso, and micro levels as grounded on recent empirical evidence.

By resorting to a comparative historical approach and the concept of 'layering', Chou demonstrates how changes in a given sector, the European Research Area (ERA), are intrinsically related to policy dynamics and incremental change outside that specific field. As a starting point, the author poses the question of how are we to account for changes in a policy field (European research cooperation) that has long been considered to be change-resistant. The selection of ERA as a case is substantiated on the observation that researcher mobility across Europe resembles the rationale for ERA's formation, i.e. an internal market for researchers in which knowledge is to circulate freely. In her analysis, the author pays particular attention to the sets of instruments (last decade) designed to enhance scientific mobility. A conceptual distinction between three key dimensions is made; 'internal' (e.g. Charter and Code), 'external' (visa package), and 'distributive' (e.g. supplementary pensions). The analysis identifies both the necessary and sufficient conditions leading to incremental changes in policy which, in the long-haul, are likely to result into significant transformations or innovations. The paper's central conclusion is that, at the EU-level, 'area construction' (e.g. ERA) is characterised as a multidimensional endeavour encompassing various policy processes and layers that are not necessarily linked with the specific field under analysis. Amongst other aspects, Chou demonstrates that contingency and intention are major features underpinning such processes, with change emanating from exogenous as well as endogenous sources. The findings point to the unfinished nature of the European polity.

Primeri and Reale investigate the impact of specific policy instruments introduced in the EU's framework programmes (EUFPs) in the organisation of research activities at the departmental and research-group levels. They start their discussion with a review of the literature, highlighting that there are three main theoretical approaches which can be used to investigate micro-level changes brought by involvement with the above programmes. These are: (a) the importance attributed to privileged access to resource pools (people and money), also known as resource dependency approach (Pfeffer & Salancik, 2003); (b) the role of formal and informal rules (macro and micro level) constraining and/or enabling the behaviour of individuals at the unit level, or the institutional perspective (Powell & DiMaggio, 1991); and (c) studies on processes of adaptation centred on institutional innovation and the pro-active behaviour of certain change agents and their respective interactions (Etzkowitz & Leydesdorff, 2000). The study draws upon the concept of 'institutionalisation' in order to explain how changes driven by the EUFPs are translated into rules and practices at the micro level of analysis, by research units and individual researchers. The evidence shown supports the notion that the above programmes are not the main drivers of Europeanization processes as such, and that they lead to differentiated academic responses by the various scientific fields. Furthermore, the study suggests that, first and foremost, the EUFPs contribute to strengthening research units that are already competitive at the EU level. Two consequences emerge from this. First, that the supranational instruments help reinforce existing academic behaviours and practices at the level of the research group and/or departmental unit. Second, that they constrain rather than enhance competition by excluding less experienced participants. As for the effects on research activities, the study show that by acting as 'soft law' EUFPs

function as tools fostering the Europeanization of academic research, through changes in: (a) formal structure; (b) cultural norms, and (c) academic behaviour.

The above chapters touch upon an old dilemma facing higher education systems worldwide, namely; to find an adequate balance between equity and excellence (Arrow, 1993; Guri, 1986). Similarly, Primeri and Reale demonstrate how access to EU funding is a direct function of scientific expertise and well established international networks not easily available across the board, thus producing/replicating existing inequalities amongst those actively involved with international competition (EUFPs) and those that are excluded from it.

When it comes to the future research agenda, four key aspects are highlighted by the above contributions. Firstly, the importance of resorting to novel conceptual perspectives (Chou), and the micro-level of analysis (Primeri and Reale) whilst investigating processes of adaptation and/or change. Secondly, the direct/indirect effects resulting from on-going processes of Europeanization at the macro, meso and micro levels, an area that has received increasing attention in recent years (Amaral, 2009; Maassen & Olsen, 2007; Tomusk, 2006). Thirdly, the importance attributed in the existing literature to the dynamic interplay between structure, e.g. professional conditions (Enders, 2001), and agency, e.g. institutional entrepreneurs and prolific academics (Powell & Colyvas, 2008). Lastly, the above inquiries shed light on the importance of approaching processes of change in higher education, at all relevant levels, as an incremental and piecemeal rather than a disruptive process per se (Clark, 1983; Gornitzka, Kyvik, & Stensaker, 2005; Kyvik, 2009).

GOVERNANCE

Reforms in governance arrangements can in general be regarded as one of the main change drivers in higher education and the last twenty years do not form an exception to this 'rule'. Reforms in this area have different sources and drivers. Some reform ideas stem from national initiatives and characteristics, while others have originated in the international sphere. Hence, in the last two decades we have increasingly been familiarised with policy terms and concepts such as globalisation, Europeanization, new public management, modernization of higher education, Bologna, the Lisbon 2000 Agenda, the knowledge society and a wide variety of general "university models" (i.e. the entrepreneurial university, the knowledge enterprise, the service university, etc.).

Within the literature, much attention has been devoted to de-composing these terms and concepts, often by taking into account and analysing the underlying policy-documents and processes driving the reform attempts, and often accompanied by more or less rigorous studies on what the nature and possible implications of the reforms might be. Hence, there are a number of studies identifying attempts to reform European higher education at the meso-level, including reforms aimed at the establishment of new study structures in the sector, changes in governance arrangements and funding systems, and adaptations in the area of quality assurance (Maassen, 2009; Maassen & Stensaker, 2011; Musselin,

2005; Paradeise, Reale, Bleiklie, & Ferlie, 2009; Westerheijden, Stensaker, & Rosa, 2007).

Although one cannot claim that European higher education is comprehensively transformed as a consequence of all these reform initiatives, there is a growing understanding that the current era of dramatic reform perhaps still is coming to an end, and that consolidation and more incremental but continuous "modernization" is being prioritized. For example, the extension of the Bologna process in 2010 indicated that little effort will be devoted to identify new objectives and directions in the forthcoming decade. Rather the objectives attached to the "forthcoming" Bologna process are almost identical to those that were identified a decade ago (Maassen, 2011). Hence, it seems that Europe is concentrated on realizing the potential of earlier reforms, perhaps even in a more pragmatic and experimental way than in the past.

In line with this picture of consolidation and pragmatism, recent studies on the impact of reform do show that higher education indeed is changing (de Boer, Jongbloed, Enders, & File, 2010). The most noticeable changes that have taken place can be found at macro and meso-level. At macro-level, we can identify a more influential role of supra-national actors in the policy-making processes in general. Interest organizations of students, higher education institutions, business and professions have during the last decade been reorganized and mobilized. Of special interest here are, of course, the political structures attached to the EU, and the political processes organized by the European Union - a truly unique experiment in higher education throughout the world.

However, changes at the meso-level should not be underestimated. Recent reform studies have shown that higher education has witnessed substantial changes in how universities and colleges are organized, funded and evaluated (de Boer, et al., 2010; Huisman, 2009). Governance arrangements have been reformed opening up for more external representation and influence in the decision-making processes. Quality assurance has been systematically introduced, and in line with the changes in governance, is being opened up for more external influence. The latter may stem from newly established quality assurance agencies or qualification frameworks pointing to the need for the sector to produce outcomes that are seen as relevant for the society. However, external influence is also working from "within" the institutions as students, employers, professions and professional bodies increasingly are being involved in defining, assessing and evaluating how the sector is performing, and what sort of standards that should serve as the basis for evaluation. With respect to funding, the same tendency can again be noticed in which public funding is challenged and sought complemented by a variety of other resource providers - opening up for new possibilities, but also representing new limitations and dependencies for the sector.

Within this broader picture of change as a result of reform, it is still important to notice that not all domains of higher education have been equally exposed to reform attempts, and that much is yet to be done when it comes to understanding how specific governance arrangements and instruments actually function. Examples of areas where fewer reforms are visible include personnel management,

the regulations concerning the hiring and firing of academic staff, and how academic salaries and working conditions are determined (de Boer, et al., 2010), even though also in these areas far-reaching changes have been realised over the last two decades (Gornitzka & Maassen, 2011). In the areas of quality assurance and funding it seems that the number of reform initiatives has been larger and also the reforms have been more comprehensive (de Boer, et al., 2010; Stensaker, Harvey, & Amaral, 2011), although we are still short of having a more comprehensive account of the impact of these initiatives – both with respect to intended as well as un-intended effects. The high level of reform activity in these areas is still very interesting as it can be seen as a sign that governments and policy-makers are considering both the harder and the softer instruments that can be found within the governance tool-box (Ferlie, Musselin, & Andresani, 2009), and that perhaps a more pragmatic approach to governance is developing.

While quality assurance - at least historically - can be seen as a more academically oriented governance instrument, it has during the last twenty years been transformed including new dimensions, aims and purposes, and is an instrument that has been spread to every corner of the globe (Stensaker, et al., 2011). What quality assurance can be used for, by whom, and for what, are nevertheless questions still open for discussion since this is a governance instrument still under construction. In the chapter by Tina Hedmo quality assurance in Europe is seen as part of the development of more transnational governance arrangements - beyond the traditional control and command type of instruments. One reason why such instruments are beyond control and command is that transnational governance arrangements are developed through a process in which numerous actors are involved and where many tensions and potential conflicts must find their solution through negotiation and dialogue. In her article Hedmo provides a very interesting historical overview of how actors and stakeholders in Europe have used quality assurance as a way to strengthen their own influence in the sector, and how quality assurance as a specific governance instrument is becoming more "institutionalised" within higher education.

Another area in which many reform initiatives have been made is in the funding of higher education. In general, reforms in this area have involved the introduction of lump-sum budgeting as a way to strengthen institutional autonomy, but also to more strongly emphasise the link between funding and performance where the latter element to a greater extent is used to determine the level of resources that is made available to each of the higher education institutions. Although a stronger performance orientation can be found both within the area of education and research, it is in the research area we can find the most prominent examples of funding systems based on performance. The UK was an early innovator in this area with the Research Assessment Exercise (RAE), a procedure that later has been adopted by a number of other countries throughout the world. In the chapter by Gianfranco Rebora and Matteo Turri we learn more about how this instrument is functioning in Italy. A key finding in their chapter – very contrary to how the effects of the RAE at the institutional level in the UK have played out – is that the research assessment system in Italy actually has the potential to (further) weakening the strategic positioning of the universities within the higher education landscape. In this way, the case study illustrates how travelling governance ideas can be implemented in very different ways at the national and institutional level, as well as how national characteristics and historical path-dependencies of higher education systems are still very powerful factors influencing the shaping of reforms and reform agendas.

Governance reforms are sometimes introduced in order to boost the contribution of higher education to economic and social development. Nico Cloete, in his chapter "Higher Education and Economic Development in Africa: The Academic Core" focuses on the academic core of eight African universities and discusses the importance of that academic core for the potential contribution of universities to regional development. The data used in the analysis come from research project on "Universities and economic development in Africa" undertaken by a newly established network (HERANA) coordinated by the Centre for Higher Education Transformation (CHET) from South Africa and gathering academic staff from Africa, Europe and the USA. The analysis focuses on knowledge production input (e.g. enrolments into science, engineering and technology (SET); academic staff to student ratio; research funding per academic etc.) and output variables (e.g. graduation rates from SET; research publications etc.) and leads Cloete to conclude that, with one exception (University of Cape Town), "the knowledge production output variables of the academic cores do not reflect the lofty ambitions expressed in their mission statements" (Cloete, this volume). It therefore points the attention to the limited effects of governance reforms, in particular in cases where there is a lack of coherence between policies and policy instruments (in particular various incentive structures).

The significance of the nation state also comes to the fore in the chapter by Akiiki Babyesiza dealing with the re-structuring of the higher education in Sudan since the military revolution and the dramatic policy changes experienced after 1989. This chapter illustrates in a very detailed manner how "modern" reform ideas linked to developing the economy, increase the recruitment to higher education, introducing more private providers and more corporate institutional management practices, are translated to fit specific national agendas of arabicisation and islamisation. Hence, despite the overwhelming attention given to internationalisation and globalisation, we should not forget that most of the hard instruments regulating the sector are found within the nation state.

The latter insight is not least underlined in the chapter by Ray Franke and William Purdy in which they analyse a number of measures concerning student financing of higher education in the US. In their comprehensive review of various initiatives in this area at federal, state and institutional level, it is demonstrated how un-intended effects of well-intended schemes is created when they are ill-designed, but also not coordinated with other existing schemes. In their chapter the authors point out some of the potential risks identified when introducing tuition fees, grant, loans or tax credit/deduction as ways to finance student participation in higher education. As Europe seems to move in the direction where such measures are seen as more relevant, it is perhaps of special interest to note that the authors argue

strongly for developing measures that can counteract the tendencies for localism and protectionism which we currently witness in Europe.

For the studies of governance arrangements in higher education these five chapters – although in very in different ways and with very different focus areas – provide promising hints on the future of the research in this area. First, and demonstrated in the chapters by Hedmo and Babyesiza we are moving towards analysis of governance arrangements that are much more inclusive and aware of the influence of actors and processes outside strict instruments and formal structures. Second, as demonstrated by the chapters of Cloete, Rebora & Turri and by Franke & Purdy, we are currently seeing more studies in the area of governance that are trying to provide more substantial evidence of the impact of such arrangements.

ACADEMIC PROFESSION

Despite being divided by membership to different disciplines and institutions, and despite operating within different national traditions, the academic "profession" is united as a social group by their shared task of developing new knowledge and combining their role as researchers with teaching, writing and publishing (Teichler, 1996; Välimaa, 1995). As a professional group, responsible for conducting these core activities, it is of no doubt that academics have been significantly affected by recent changes and reforms in higher education. Expansion of higher education systems has been followed by changing modes of governance, a growing emphasis on social importance and the quest for relevance and internationalization and global competition. All of these changes are significant in understanding the changing working conditions of academics and they have not only affected academic autonomy, but have also gradually changed the nature of academic work and career structures (Henkel, 2000; Schuster & Finkelstein, 2006).

Against this backdrop the international project the Changing Academic Profession (CAP) was launched in 2007, to survey the features of the academic profession in 20 countries, spanning Asia, America and European continent, as well as South Africa (Locke & Teichler, 2007). In his contribution "Aspects of Academic profession's Internationalisation beyond Physical Mobility" Michele Rostan investigates the changing nature of academic work due to the increasing emphasis on internationalization within higher education. Comparing results from all the 19 countries surveyed in the CAP study, he finds that the academic profession is highly internationalized in regards to both teaching and research. The international dimension is integrated in the content of teaching and most academics characterize their primary research as international in orientation. However, Rostan's study also reveals that other important aspects of internationalization, namely international collaboration and international funding, are less widespread, a pattern that can partly be explained by differences between fields of science; while academics from the disciplines in the humanities and social sciences appear to be most internationalized "at home", academics from the STEM disciplines are more involved in international networks and knowledge transfer. Another important axis of differentiation is the country where academics work: at the extremes are Japan and USA which appear to be the least internationalized and Australia, Norway and the UK which appear to be the most internationalized.

In many countries, over the course of the expansion of the HE systems, women have come to compromise the majority of the student body. Parallel to this development the question of how to raise women's participation in science has gained increased importance in public policy debates. Arguments for increased participation have developed over time, from a focus on human rights and social justice to utilitarian arguments emphasizing the importance of a gender balance for achieving quality and efficiency in research (EC, 2008). Despite such structural developments and pro-active policies, achieving gender equality seems to be challenging, as women still tend to be scarce among top level positions, due to the continuous reproduction of gender segregation among disciplines and positional hierarchies. Two chapters address how this gender gap might be related to family and work related variables.

The first one focuses on the differences in research productivity between men and women faculty in North America, Mexico, Canada and the US (Padilla-González et al.) and finds that domestic as well as international research collaboration is a strong predictor of research productivity in all three samples. Furthermore, having a Ph.D. and belonging to the STEM disciplines are important for explaining why women faculty publish less than their male counterparts. The study builds on the CAP dataset in terms of inclusion of social background variables by paying attention to the different personal characteristics of male and female faculty – amongst other that male faculty are more likely to be married, and that women faculty are more likely to be single.

The other (Carvalho et al.) focuses on gender segregation found in universities in north and southern Europe, namely Norway and Portugal. Despite Norway receiving the top ranking on the global gender gap index, and having a comprehensive set of pro-active policies for gender equality in science, the gender ratio among staff is, as demonstrated, even more "skewed" than in Portugal. The facts that women are more likely to interrupt their career to take care of family, and that men are more extensively involved in decision making in research, have more access to resources, international networks and academic authority, all serve as part of a general explanation for the limited realization of gender equality policies. However, the academic profession in Portugal seems to be more stratified internally, as women faculty tend to be significantly less involved in research and other activities important for promoting a scientific career, than they are in Norway. In line with Padilla-Gonzáles et al., Carvalho et al. also emphasizes social background variables by paying attention to the different personal characteristics of male and female faculty - amongst others that in many countries male faculty are more likely to be married, and that women faculty are more likely to be single or that women faculty are holders of more cultural capital. The gender differences found in social background variables indicate national differences and crossnational similarities regarding the gendered character of the academic profession's social identity.

The feminization of the academic profession and academia becoming an arena populated by dual-career couples are both shifts that illustrate a changing academic profession, in terms of a new sociological generation with new demographic and social characteristics. The academic profession as a whole has also been subject to increasing diversification and changing career trajectories. This is the topic that Elke Park's contribution focuses on, in "The Transformation of the Academic Profession", offering an international perspective on tenure by comparing the working of this system in the US with Germany, Italy, France and the UK. By revealing the various national and institutional approaches taken to tenure. Park breaks with the often misleading standard interpretation of tenure; in practice it spans harder and softer forms, ranging between high and low job security. The higher education system in the UK might be said to represents the soft extreme of tenure, given that despite providing permanent employment, the system also allows permanent academic staff to be dismissed due to financial considerations. A striking finding of Park's contribution is that, in all countries analysed, the increase in the student population over the last two decades has corresponded with in an increasing number of non-tenure and part-time faculty as well as an increase in full-time non-tenure track positions.

All four contributions show the value of comparative studies. They reveal how different national conditions and HE policies provide distinct results regarding aspects such as academic demographics (e.g. gender composition of the faculty), academic practice (such as publishing and international cooperation) and working conditions (e.g. the use of different job categories and the extent of temporary employment in academia). There is a need to further develop comparative studies of the academic profession with emphasis on different types of national systems, also in order to achieve robust significant analytical results. It is however difficult to implement different analysis of the academic profession at this level. Given the importance of memberships in various disciplines and the diversity of job categories across countries, it is therefore important that comparative based analysis is supplemented with more qualitative and /or national and institutional case studies.

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CHANGE DYNAMICS AND HIGHER EDUCATION REFORMS

Peter Maassen Department of Educational Research, Faculty of Education, University of Oslo

Monika Nerland Department of Educational Research, Faculty of Education, University of Oslo

Rómulo Pinheiro Department of Educational Research, Faculty of Education, University of Oslo and Agderforskning

Bjørn Stensaker Department of Educational Research, Faculty of Education, University of Oslo

Agnete Vabø Nordic Institute for Studies in Innovation, Research and Education

Martina Vukasović Department of Educational Research, Faculty of Education, University of Oslo