The Changing Academy – The Changing Academic Profession in International Comparative Perspective 18

Maria de Lourdes Machado-Taylor
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Challenges and Options: The Academic Profession in Europe

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The series considers the implications of the changes for the attractiveness of the academic profession as a career and for the ability of the academic community to contribute to the further development of knowledge societies and the attainment of national goals. It provides analyses on these matters drawing initially on available data-sets and qualitative research studies with special emphasis on the international studies of the Changing Academic Profession and the national surveys in STEM fields. Among the themes featured will be:

- Relevance of the academy's work
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Chapter 1
Introduction

Maria de Lourdes Machado-Taylor, Virgílio Meira Soares, and Ulrich Teichler

Today's higher education institutions are extremely complex social organizations and the confounding effects the human factor introduces to social organizations cannot be minimized. The academic staff is considered as a key resource within higher education institutions and taking a major role in achieving the objectives of the institution. The importance of the academic staff as a constituent group of higher education institutions is undeniable. As stressed by Altbach, Reisberg and Rumbley (2009, p. 19),

> The professoriate is at the center of the university. Without an effective, well educated and committed academic profession, universities cannot succeed. Yet, the academic profession is under stress as never before.

Academic staff can, with appropriate support, build a national and international reputation for themselves and the institution in the professional areas, research and publishing (Capelleras 2005). The performance of academic staff determines much of the student learning and has major implications for the quality of the higher education institutions (Machado-Taylor et al. 2014). The centrality of the faculty role makes it a primary sculptor of institutional culture and demand for academic

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staff in higher education is increasing (Altbach 2000, 2003). Academics have an irrefutable and central importance to higher education and, hence, to society in general but there are many factors that undermine the commitment of academics to their institutions and careers (Kogan and Teichler 2007). The emergence of mass higher education has deteriorated the conditions of academics everywhere, several authors notice the challenges and the criticism faced by the academic profession (Altbach et al. 2009).

Thus, it is important to stress that higher education institutions are now traversed by profound uncertainties, are expected to seek new knowledge, are more challenged than ever on quality issues, and are exposed to pressure for greater accountability (Deem et al. 2008; Taylor et al. 2008). Authors such as O'Connor and O'Haganb (2015, p. 2) contend that they can be seen as bureaucratic and hierarchical organisations. Those issues have an impact on the "job" of professors. As stated by Kearney (2007, p. 8),

> Thus, universities and their academic communities face numerous dichotomies: academic freedom vs. institutional autonomy, the academic vs. managerial professions, the goals of teaching vs. those of research, and the steering role of institutional leadership vs. the disparity of scholarly priorities and concerns.

Nevertheless, the well being of the human capacity is emphasised by Tettey (2006, p. 6), when the author states that "In order for higher education to develop capacities, it must ensure that its own capacity is well-developed."

As Tettey (2006, p. 1) explained so clearly,

> A well-developed human capacity is an asset that enables countries to promote forward–looking ideas, initiate and guide action, and build on successes; it also makes those countries attractive destinations for investment and intellectual collaboration, both of which, if managed appropriately, will lead to positive returns. A solid higher education base is crucial for such transformation to take place.

The work of academics is influenced, according to Altbach and Chait (2001), by global trends such as accountability, massification, deteriorating financial support and managerial controls. However, as noted by Altbach (2003, p. 1),

> Conditions of work and levels of remuneration are inadequate, involvement in institutional governance is often very limited, and the autonomy to build both an academic career and academic programs […] is often constrained. These changing trends have led to the rapid shift of the academic workplace and to the necessity of managing tensions within the academic profession.

Other authors such as Enders (1999) observe the great uncertainties that the academic profession faces. Also on this particular, Altbach (2003, p. 1) recently recorded that

> Conditions of work and levels of remuneration are inadequate, involvement in institutional governance is limited, and the autonomy to build both an academic career and academic programs is constrained. The sad fact [is] … the conditions of academic work have deteriorated.

There is a growing competitiveness for academics (between higher education institutions and between countries), growing demand for academic work and increased international mobility (Coates et al. 2009). Nevertheless, according to

Dunkin (2005), the impact of funding cuts, of increased accountability measures and wide-scale change in teaching processes and technologies, have left the academic staff de-motivated. Thus, institutions need to develop strategic responses to answer the huge changes and trends that are occurring. Higher education institutions need to identify not only what motivates existing academics, but also potential academics – knowledge workers who can meet desires elsewhere.

Altbach, Reisberg and Rumbley (2009, p. XXI) have renewed thinking on the matter and contended that

> The multiple and diverse responsibilities of higher education are ultimately key to the well-being of modern society, but this expanded role adds considerable complexity and many new challenges. Understanding the broader role of higher education in a globalized world is the first step to dealing constructively with the challenges that will inevitably loom on the horizon. The enormous challenge ahead is the uneven distribution of human capital and funds that will allow some nations to take full advantage of new opportunities while other nations risk drifting further behind.

Under the influence of European policies and changes, academics' choices vary between European countries as regards the preferences for teaching and research, in the attraction of new researchers and concerning the evolution of pecuniary and no pecuniary returns to academic careers. Moreover, there are also differences as regards the extent to which these changing perceptions have contributed to an increasing inequality in the financial and working conditions of academics and on the changing nature of academic strategy in the transformational world of higher education and its implications for academic structures, work and careers (Teichler and Höhle 2013; Shin et al. 2014; Santiago et al. 2014).

This book discusses the academic profession in Europe. It consists of three main parts. In Part I, the book deals with challenges and issues in the higher education academic career in the context of current dynamics and likely futures. It discusses the significance of academic work between teaching and research, reviews workforce characteristics, and analyses tensions and pressures.

In Chap. 2, Ulrich Teichler addresses the influence of European policies and changes, academics' choices as regards the preferences for teaching and research. In Chap. 3, Maria Taylor and Marvin Peterson discuss the changing nature of academic strategy in the transformational world of higher education, an evolutionary shift, of new models and their implications for academic structures and careers. In Chap. 4, Pedro Teixeira deals with the increasing influence of economic and management ideas in higher education and the evolution of pecuniary and non-pecuniary returns to academic careers.

Part II analyses the findings of a national study – An Examination of Academic Job Satisfaction and Motivation in Portuguese Higher Education, carried out at the Centre for Research in Higher Education Policies (CIPES). The main purpose of this research project, financed by the Foundation for Science and Technology (FCT), was to identify factors and their interactions affecting the dimensions associated with job satisfaction and motivation of the academic staff.

The study was motivated by the fact that academic staff is an important resource of higher education institutions. As the processes of globalization takes shape, it is

becoming abundantly clear the need of societies to take advantage of their human resource capabilities. However, the importance of academic staff job satisfaction and although several studies have been examined around the world, little or nothing is known in Portugal and has not been discussed or well documented. Nevertheless, job satisfaction is important in revitalizing staff motivation and in keeping their enthusiasm alive and there is ample and somewhat obvious evidence that job satisfaction is related to employee motivation. Well motivated academic staff can, with appropriate support, build a national and international reputation for themselves and the institution in the professional areas, in research and in publishing. Such a profile may have an impact on the quality of higher education institutions. As indicated by Long (2005), job satisfaction not only is critical to an individual's overall well-being, but it also has important implications for organisational productivity and performance.

Portuguese higher education is diverse and has changed significantly over the past 40 years. Major reforms have included the implementation of the Bologna Process, a new legal regime for higher education institutions and new statutes relating to academic careers in the public higher education institutions (Magalhães and Amaral 2007; Neave and Amaral 2011). The explanation of all these changes does not fit here. However, it is worth noting that they resulted in a number of changes that are affecting and will continue to affect academic careers.

The legal provisions of academic careers in public higher education institutions have not changed in three decades although criticism over the years has been made. Until 2009, the legal documents regulating academic careers were dating back from 1979 for the university academic staff, and from 1985 for the polytechnic academic staff. In 2009, a new legal framework changed the academic careers regulations. According to the new legal framework, academics of university and polytechnic public institutions continue to have different careers against one old pretension to have a unique career. However, with recent changes, there was a rapprochement between the two sectors. One difference that remains between both careers is the weekly teaching load, which is higher in polytechnics than in universities. However, the requirement of a doctorate to gain access to the rank of professor, in both cases, means an approximation between both subsystems. In university education, it was required the degree of doctor to access the categories of professor. In the case of the polytechnics, the degree required to access the categories of professor was a master's degree. However, in the case of the polytechnic, one could also access these categories, without a master's degree, through the provision of public trials. This was the situation until 2009. The situation has now changed and the degree required to access the categories of professor in both subsystems is the degree of doctor. The implementation of the new statutes is just in the beginning and higher education institutions shall adopt internal regulations regarding the hiring of their academics, the assessment of their performance and the provision of services they must provide (Machado-Taylor, Meira Soares, & Gouveia 2011).

In Portuguese higher education academics are being challenged. First, Portuguese higher education has changed significantly. Second, the number of academics has increased significantly. Third, higher education institutions in general and academic

work in particular have been influenced the deteriorating financial support and managerial controls that have led to the rapid change in the workplace and the need to manage tensions within the academic profession (Machado-Taylor et al. 2014). Additionally, the recent financial crisis and the economic recession has led to governmental priorities from unfettered expansion to a decrease in enrolments and strong emphasis on quality (Amaral and Magalhães 2005). This is another aspect affecting the academic profession. Nevertheless, the academics face challenges and obstacles. Career advancement and inbreeding of faculty members are subject to criticism (Taylor et al. 2007). Moreover, there is virtually no mobility of faculty members between institutions. Taylor et al. (2007, p. 225–226) have explored some of these issues:

> In general terms, one would have to say Portugal has shown substantial growth and improvement over the past half century and continues to progress in a positive manner. This is not to suggest, however, that the higher education system is not faced with legitimate challenges and obstacles. […] Regulations governing careers are extremely rigid and inhibiting. […] openings and advancement opportunities are currently limited, but will be increasing for young academics that now must wait in line for senior professors to move on or retire. At the same time, it means a heavy economic burden will soon be placed on a reduced workforce as the demand for retirement benefits increases. While this is clearly a policy in need of modernization for the public higher education institutions, the situation is exacerbated in the private sector by the fact there is no policy at all. Portuguese higher education is also notorious for 'inbreeding', where students who earned their degree are then placed in employment at the same higher education institutions. In many cases, former students become junior colleagues within the professorial ranks. Some argue that the worst effect from inbreeding is the absence of different ideas and approaches to professional conduct.

Moreover, there are complains that higher education institutions are not providing quality training to graduates. This is due to a variety of factors. Previous research indicates that dissatisfaction including inadequate and non-competitive salaries of academic staff and lack of job satisfaction due to non-monetary reasons is a key factor to undermining the commitment of academics to their institutions and careers.

This study seeks to understand if there is lack of job satisfaction and motivation to accomplish priorities of higher education institutions and suggest feasible responses to the problem. Thus, higher education institutions have to manage change in order to be proactively positioned so as to seize opportunities and confront threats in an increasingly competitive environment.

Part III of this book analyses the academic career in European countries, namely Austria (Hans Pechar and Elke Park); Germany (Ulrich Teichler, Ester Ava Höhle and Anna Katharina Jacob); Italy (Massimiliano Vaira); Switzerland (Gaële Goastelec and Fabienne Cretaz von Rotten) and United Kingdom (John Brennan, Rajani Naidoo and Monica Franco).

The studies from the European countries presented herein aim at answering questions on the changing relevance and increasing expectations around the academic career, including the impact of recent changes and challenges for the higher education sector on the academic profession. According to Altbach et al. (2009, p. 89),

> To understand the contemporary academic profession, it is useful to examine the status and working conditions of the academic profession worldwide. The academic profession is aging in many countries.

Or, as stressed by (Henkel 2005), to know the boundaries within which academics might operate and the impact of recent changes and challenges for the higher education sector on the academic profession (Enders 1999).

The context of academic work has been changing everywhere, affecting expectations concerning working conditions, remuneration, and teaching and overall widening possibilities and reducing time and energy available. Generally speaking, the academic profession has lost its traditional respect and social status.

The attractiveness of the academic profession seems to be low today compared with other highly qualified professions. As stressed in the report written by Jeroen Huisman, Egbert de Weert and Jeroen Bartelse (2002), based on research on the academic workplace in the UK, Sweden, Finland, Flanders and Germany, "The fundamental problem in Europe is the loss of appeal of the faculty job" (Huisman et al. 2002, pp. 141, 156).

Also the professional stability is declining. The gender distribution of doctorates and habilitation clearly favours men and gender gap is being seen all over Europe.

Therefore, the academic workplace is bound to be changing, though, and its current appeal may be even smaller in the future, especially if globalisation processes will be transforming higher education systems as a part of transforming welfare states in Europe towards more Anglo-Saxon variations of them and if necessary reforms of the system are not introduced soon (Kwiek 2003, 2004).

Lastly, a final chapter presents the conclusions on the changing academic profession, using the different national cases to argue whether the academic profession is merely an artificial term that has to do with a heterogeneous range of occupations or whether there are important common elements of the academic profession across European higher education systems.

Today, the academic profession faces great uncertainties in terms of its future. And it has to live with professional tensions. One can consider that there are different conceptual traditions and variations of the academic profession according to countries with specific social and economic conditions. Therefore, we can ask if there are important common elements of the academic profession and if the recent changes and challenges for the higher education sector such as the massification of higher education and the trend towards a 'knowledge society', a 'highly qualified society' or an 'information society' have serious impact on the academic profession.

The impact of funding cuts, of increased accountability measures and wide-scale change in teaching processes and technologies, have left the academic staff demotivated. Thus, the development of strategic responses on people issues must consider the huge changes and trends that are occurring. Besides, higher education institutions need to identify not only what motivates existing academics, but also potential academics. Our hope is to help to understand and improve higher education institutions in relation to its main functions, such as teaching and research.

References

Altbach, P. G. (Ed.). (2000). *The changing academic workplace: Comparative perspectives*. Chestnut Hill: Boston College, Center for International Higher Education.

Altbach, P. G. (Ed.). (2003). *The decline of the GURU – The academic profession in the third world*. New York: Palgrave Macmillan.

Altbach, P. G., & Chait, R. (2001). Introduction. *Higher Education, 41*, 1–2.

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher education: Tracking an academic revolution*. Paris: UNESCO.

Amaral, A., & Magalhães, A. M. (2005). Implementation of higher education policies: A Portuguese example. In A. Gornitzka, M. Kogan, & A. Amaral (Eds.), *Reform and change in higher education: Analysing policy implementation* (pp. 117–134). Dordrecht: Springer.

Capelleras, J. (2005). Attitudes of academic staff towards their job and organization: An empirical assessment. *Tertiary Education and Management, 11*(2), 147–166.

Coates, H., Dobson, I., Edwards, D., Friedman, T., Goedegebuure, L., & Meek, L. (2009). *The attractiveness of the Australian academic profession: A comparative analysis*. Melbourne: LH Martin Institute, University of Melbourne & Australian Council for Educational Research & Educational Policy Institute.

Deem, R., Hilliard, S., & Reed, M. (2008). *Knowledge, higher education and the new managerialism*. Oxford: Oxford University Press.

Dunkin, R. (2005). *The HR challenge: Some more thoughts*. Paper presented at the OECD conference on "Trends in the management of human resources in higher education". Paris: OECD.

Enders, J. (1999). Crisis? What crisis? The academic professions in the "knowledge" society. *Higher Education, 38*(1), 71–81.

Henkel, M. (2005). Academic identity and autonomy in a changing policy environment. *Higher Education, 49*(1), 155–176.

Huisman, J., de Weert, E., & Bartelse, J. (2002). Academic careers from a European perspective: The declining desirability of the faculty position. *Journal of Higher Education, 73*(1), 141–160.

Kearney, M.-L. (2007). Foreword. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 7–8). Kassel: International Centre for Higher Education Research Kassel.

Kogan, M., & Teichler, U. (Eds.). (2007). *Key challenges to the academic profession*. Kassel: International Centre for Higher Education Research Kassel.

Kwiek, M. (Ed.). (2003). *The university, globalization, Central Europe*. Frankfurt a. M.: Peter Lang.

Kwiek, M. (2004). The international attractiveness of the academic profession in Europe: The case of Poland. In J. Enders & E. de Weert (Eds.), *The international attractiveness of the academic profession* (pp. 332–348). Enschede: Twente University, CHEPS.

Long, A. (2005). Happily ever after? A study of job satisfaction in Australia. *Economic Record, 81*(255), 303–321.

Machado-Taylor, M. L., Brites, R., Magalhães, A., & Sá, M. J. (2011). Student satisfaction with higher education: Critical data for student development. *European Journal of Education, 46*(3), 415–432.

Machado-Taylor, M. L., Meira Soares, V., Brites, R., Brites Ferreira, J., Farhangmerh, M., Gouveia, O., & Peterson, M. (2014). Academic job satisfaction and motivation: Findings from a nationwide study in Portuguese higher education. *Studies of Higher Education, 41*, 541–559.

Magalhães, A., & Amaral, A. (2007). Changing values and norms in the concept of governance in Portuguese higher education. *Higher Education Policy, 20*, 315–338.

Neave, G., & Amaral, A. (Eds.). (2011). *Higher education in Portugal 1974–2009: A nation, a generation*. London: Springer.

O'Connor, P., & O'Haganb, C. (2015). Excellence in university academic staff evaluation: a problematic reality? *Studies in Higher Education*. http://dx.doi.org/10.1080/03075079.2014.1000292.

Santiago, R., Sousa, S., Carvalho, T., Machado-Taylor, M. L., & Dias, D. (2014). Teaching and research: Perspectives from Portugal. In J. C. Shin, A. Arimoto, W. K. Cummings, & U. Teichler (Eds.), *Teaching and research in contemporary higher education* (pp. 153–176). Dordrecht: Springer.

Shin, J. C., Arimoto, A., Cummings, W. K., & Teichler, U. (Eds.). (2014). *Teaching and research in contemporary higher education*. Dordrecht: Springer.

Taylor, J. S., Graça, M., Machado, M. L., & Sousa, S. (2007). Adapting in order to promote change. In W. Locke & U. Teichler (Eds.), *The changing conditions for academic work and careers in select countries* (pp. 211–227). Kassel: International Centre for Higher Education Kassel.

Taylor, J. S., Machado, M. L., & Peterson, M. (2008). Leadership and strategic management: Keys to institutional priorities and planning. *European Journal of Education, 43*, 369–386.

Teichler, U., & Höhle, E. A. (Eds.). (2013). *The work situation of the academic profession in Europe: Findings of a survey in twelve countries*. Dordrecht: Springer.

Tettey, W. (2006). *Staff retention in African Universities: Elements of a sustainable strategy*. Report commissioned by the World Bank.

Part I
Higher Education Academia: Global Challenges

Chapter 2
Teaching Versus Research: An Endangered Balance?

Ulrich Teichler

2.1 Introduction

Teaching and research, the two core activities of the academic profession, are described at times as closely intertwined, at times as loosely related, at times as competing for funds and academics' attention, and at times as being largely separate from each other. Therefore, it is not always very clear whether the statements put forward intend to be normative claims or the presentation of actual facts. In the first place, this article aims to depict central features of the discourse surrounding the potential provided by the interrelationships between teaching and research as well as the vulnerability of these links. Second, it will discuss what information can be drawn from an international comparative survey about the relationship between teaching and research, given the views of the academic profession.

2.2 The Ideal of a Teaching-Research Link

Teaching and research are commonly named as the core functions of higher education, and they are considered to be the core tasks of the academic profession (see Enders 2006). Occasionally, references are made to a "third function", notably a "service function". Other tasks of higher education are named as well in higher education laws, or "mission statements" of individual higher education institutions, but as rule, those statements do not call into question the central functions of

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teaching and research, but rather include them as part of a broader notion of "scholarship" (Boyer 1990) affecting society.

Teaching and research have not been viewed as the core functions of universities throughout their history. Teaching is certainly considered the core activity of the medieval European university. A close link between teaching and research, however, is viewed as typical for the "modern" university. The belief in the virtue of a close link between teaching and research, as it was formulated by Wilhelm von Humboldt, has not only been essential for the foundation of the University of Berlin in 1810, but – more importantly – it has subsequently spread all over the world, even though so many modifications have occurred that the starting point is often hardly recognizable anymore (see Perkin 1991). For example, the idea of such a close link has persisted in the fact that the European University Association accepts – at least until recently – only those higher education institutions as "universities" that are characterized by a close link between teaching and research.

It is by no means clear that teaching and research are considered to be "twin" functions of the academic profession, coexisting in a balanced way. This might be illustrated by an excerpt from two articles printed in handbooks on higher education, the first of which was published just before the first major comparative study and the second just before the second major comparative study on the academic profession, the results of which will be discussed below.

Altbach (1991) first emphasizes the importance of the teaching function, presenting a highly expanded definition of teaching: "The defining characteristic of the academic profession is teaching. From the beginning, professors have taught. Research, and a myriad of other roles, came later. As universities have become more complex and multifaceted, the central role of teaching has sometimes become less clear. Teaching takes place in different contexts and settings. Traditional lectures can be supplemented by seminar discussions and tutorials. Teaching includes advising an advanced student about a dissertation or working with postdoctoral fellows in a laboratory. Teaching also takes place by means of publication of journal articles and books. Knowledge dissemination in a variety of formats is part of the teaching process and is central to the role of the academic profession." (Altbach 1991, p. 23). Altbach, however, also points out that research contributes substantially to the rise of the status of the academic profession: "During the past century, since the growth of research as a key university function, first in Germany and then in the United States and elsewhere, the role of the professoriate has expanded dramatically in function and the profession has become much more important." (Altbach 1991).

Enders (2006), in contrast, emphasizes the dominance of the research function, while underscoring an appreciation for a close link between teaching and research: "The impetus for reform and the birth of the modern university came from Scotland in the eighteenth century and from Germany in the nineteenth century. As part of the Enlightenment, Scottish scholars gave leeway to the establishment of new disciplines, accompanied by a growing specialization and departmentalization of knowledge […] University reform in Germany led to the concept of academic freedom, encompassing the freedom to teach and the freedom to learn, as well as the ideal of […] Wissenschaft as a concept for all fields of study and academic specializations

[…] The creation of a teaching-research nexus gave the professionalization project in academe an important push. It provided a kind of mutual legitimacy base for basic research and academic teaching that were supposed to benefit from each other" (Enders 2006, p. 6). The research function is seen by Enders as having clearly emerged as the dominant function for the academic profession after World War II, while a multitude of pressures has made this hierarchy less clear in recent years. He characterizes this period of clear research dominance in retrospect: "In these days, a consensus emerged among faculty in modern universities about what it means to be a professional in the higher education strata: research forms the more prominent focus of academic work, and knowledge is pursued for its own sake; the search for the latest frontiers of truth is best organized in academic-disciplinary units; reputation is established in national and international peer groups of scholars; and quality is assured by peer review and academic freedom […]" (Enders 2006, p. 7).

Looking at the public discourse on the ideal of the modern university in general, we observe a widespread yearning for an ideal link between teaching and research: comprehensive, balanced, appropriately resourced, harmonious and cross-fertilizing. Ironically, this is underscored so often that it nourishes the suspicion of a reality which is characterized by a vulnerable relationship between teaching and research. And, in fact, the research literature on the academic profession suggests that there are enormous tensions visible which call into question a reasonable co-existence of the core functions of higher education or even a 'balance' (see the above names for overviews: Altbach 1991; Enders 2006; cf. also Vessuri and Teichler 2008). Given this, is the close link between teaching and research seen as endangered?

2.3 Imperfections of the Teaching-Research Link

It is not possible here to provide an in-depth overview of all the concerns expressed and all the stated potential regarding a fruitful teaching-research nexus in higher education. It may be justified, though, to contend that five arguments have been put forward frequently in recent decades in economically advanced countries.

First, it is generally assumed that the Humboldtian idea of the "unity of research and teaching" ("Einheit von Forschung und Lehre") has had an enormous impact on the modern university in terms of upgrading research to a core function of high quality education almost everywhere in the world, but the issue of a "unity" between teaching and research is certainly understood differently in different parts of the world. For example, the Japanese higher education researcher Akira Arimoto (2010, p. 17–19) classifies national higher education systems into three types:

- The "German model" which "stresses research more than teaching",
- the "Anglo-Saxon model" which "stresses research and teaching equally",
- the third model "stresses teaching more than learning"; Arimoto has called it the "Latin American model", because all the Latin American countries participating in the Carnegie International Survey of the Academic Profession conducted in the early 1990s have resembled such a model most closely.

Thereby, dominant national claims might not necessarily match national realities. For example, Arimoto argues that the German model "tends to pay too much attention to academic staff as researchers and too little to students as learners" (Arimoto 2010, p. 19), while the Anglo-Saxon model "seems to approach the Humboldtian ideal most closely in the sense that it seems to conform to the pattern of integrated research and teaching" (Arimoto 2010, p. 18).

Second, it seems difficult to establish an equal weight of teaching of research at any moment in time and on the part of any key actor in a higher education system. Many academics seem to appreciate research while they consider teaching a duty. Also, higher education institutions cannot much care for such a balance, because the results of research ensure the academics' reputation beyond one's institution of higher education, whereas the results of teaching are visible, as a rule, only within an institution.

Moreover, the regulatory systems within higher education are prescriptive, at least regarding the "teaching load" and the areas to be taught, while research is often left as a free zone for action. This is partly, because the provision of a study programme requires more coordinated action than is often the case for research, and partly because more pressure is needed to guarantee the functioning of teaching, which has to be based on a concerted action of many academics in order to guarantee provisions for a whole study programme. Thus teaching is not just a function of academics' preferences and the different ranges of reputation, as a consequence of the lack of public visibility of success in teaching on the one hand and the high public visibility of success in research on the other hand. Finally, higher education policies in many countries seem to be driven by exaggerated efforts at various moments in time in various directions putting either so much emphasis on teaching that research is in danger of being hampered or putting so much emphasis on research that teaching might be neglected.

Third, national higher education systems are diverse, and the relative weight of teaching and research differs in the various segments of each higher education system. It is widely assumed that the growth of student enrolment rates leads more or less automatically to increased vertical diversity of higher education, because the students become more diverse in their motives, talents and job prospects, and because growing research activities are also viewed as reinforcing diversity of higher education. In turn, this is because the scholars' research quality varies with the growth process in the academic profession and because a more or less regular spread of resources for research does not seem to be effective for ensuring the quality and relevance of research. Even though the link between expansion and diversification is not as automatic, regular and similar across countries as often claimed (see Teichler 2008), a high degree of diversity within the higher education system is a widespread feature. As a consequence, we note degrees of formal and informal diversification, according to which some institutions of higher education put so much emphasis on research that teaching is neglected, or emphasis on teaching to an extent that research plays only a marginal role. With notable exceptions, research dominates at academically prestigious institutions and teaching at academically less prestigious institutions. In many European countries, institutions are formally dif-

ferentiated between universities which are both more or less equally in charge of teaching and research, and other institutions of higher education, where teaching clearly dominates (see Taylor et al. 2008).

Fourth, the public discourse on higher education in recent decades seems to be overwhelmed by the notion of tight resources. In many countries of the world, the cost per student has declined over the years. Basic funding of research at universities often declined and was substituted by a competitive funding system which absorbs enormous resources just for the acquisition and allocation of funds. Altogether, survival strategies in resource acquisition, according to which the resources are clearly split for either research or teaching, are not necessarily good strategies for achieving a balanced, cross-fertilizing relationship between teaching and research.

Fifth, the political debates on the role of higher education in society seem to drum up individual functions of higher education separately at any given moment in time rather than the relationships between teaching and research. Many experts argue, that the debates about the relationships between educational expansion and economic growth in the 1960s and 1970s had given a clear edge to the teaching function, whereas the debates in recent years about higher education and the "knowledge society" or "knowledge economy" as well as those on "world-class universities" and "rankings" are clearly preoccupied with the role of research. Thus, the more the universities want to serve the Zeitgeist, the less they can be concerned about a fruitful relationship between teaching and research.

2.4 Comparative Research on the Academic Profession

The first major comparative survey of the academic profession was initiated in the early 1990s by a US foundation. The Carnegie Foundation for the Advancement of Teaching, and its respective predecessor organisation, had already supported surveys of the academic profession in the United States of America since 1969. These surveys had addressed the attitudes, values and professional orientations of the professoriate, had reviewed the working and employment situation and had provided an account of the demographic profile. These studies had made clear that the public debate had often focused too much on the sector of the prestigious research universities and had overlooked the changes of the overall higher education system in the process of rapid expansion and changing social functions. According to the surveys undertaken in the 1980s, the academic profession in the US could be described as a profession "under pressure". The expansion of higher education and its obviously growing importance in society had not seemed to lead to a more highly respected academic profession, working under improved conditions, but rather to a loss of status, tight resources, rising pressures "to do more with less", loss of power of the academic guild, and often being blamed for not providing the services expected.

The Carnegie Foundation initiated international collaboration in 1990 – chaired by Ernest L. Boyer (US) – to explore the extent to which the conditions, the views

and the activities of academics are similar across the globe, what variations exist and how the extent of similarity and difference could be explained. Obviously, the design of the study and the analysis of findings has been significantly influenced by the question of whether such phenomena of academics as a profession under pressure are common in many parts of the world.

In actuality, 15 countries joined this project – subsequently called Carnegie Study – that lasted from 1990 to 1996, with a comparative survey undertaken in 1992 (Boyer et al. 1994; Altbach 1996). Four European countries have been among the 13 higher education systems for which satisfactory data could be collected: Germany, the Netherlands, Sweden and the United Kingdom (see Enders and Teichler 1995).

The findings of the Carnegie Study are summarized as follows: "One cannot but be struck by the many similarities among the scholars and scientists in diverse countries […] The professoriate worldwide is committed to teaching and research, and in varying degree to service. While there is a feeling that higher education faces many difficulties and that conditions have deteriorated in recent years, most academics are committed to the profession and to its traditional values of autonomy, academic freedom, and the importance of scholarship, both for its own sake and for societal advancement. Academics are not especially supportive of senior administrators, yet they express remarkable loyalty to the profession and to other academics. They seem prepared to respond to the call that higher education contribute more tangibly to economic development and social well-being. They believe that they have an obligation to apply their knowledge to society's problems." (Altbach and Lewis 1996, p. 47–48).

After pointing out some difference between countries, the authors continue: "Resiliency, determination, and a focus on the core functions of higher education characterize the academic profession … While the vicissitudes experienced by the profession in recent years have been considerable, the professoriate is by no mean demoralized … The portrait of the professoriate depicts a strong, but somewhat unsettled profession. Academics around the world are inspired by the intellectual ferment of the times. The intrinsic pleasures of academic life obviously endure. Academe is facing the future with concern but with surprising optimism." (Altbach and Lewis 1996, p. 48).

Some additional aspects have been put forward in the overview of the major results presented by Teichler, where he has concentrated his analysis on six economically advanced countries and he has analysed the responses separately of university professors, junior academic staff at universities, and academics at other institutions of higher education. In summarizing the findings of the Carnegie Study, Teichler (1996, p. 59) first points out, that the academic profession "is more satisfied with their profession than the prior public debate suggested". He underscores, though, that satisfaction is higher among university professors than the other two groups, and the areas for which dissatisfaction is expressed vary substantially by country.

In addition, a clear link between teaching and research seems to have persisted for university professors. "Neither is research endangered because of teaching and administrative loads nor is teaching put aside to research-oriented motives and

research-oriented assessment." (Teichler 1996, p. 60) However, individual options vary strikingly among university professors, and the link between teaching and research is less obvious for large proportions of junior staff and, as one has to expect, for academics at other higher education institutions. Finally, summarizing the findings of the surveys shows that academics, though in the majority clearly defending the right to pursue research for its own sake, do not present themselves as an "ivory tower profession". Rather, they expect research and teaching to help in resolving basic social problems.

In 2004, higher education researchers from various countries – among them some who had participated in the Carnegie Study of the early 1990s – met as part of an initiative of William K. Cummings (US) in close cooperation with Akira Arimoto (Japan) and Ulrich Teichler (Germany). They agreed to prepare a second major comparative study on the academic profession (Teichler et al. 2013). Eventually, 19 countries succeeded in raising funds nationally and joined the project "The Changing Academic Profession" (CAP) – or more precisely 18 countries and the Special Administrative Region Hong Kong. The survey eventually was undertaken in most countries in 2007, but in one case not earlier than 2010. Actually, seven European countries participated: Finland, Germany, Italy, the Netherlands, Norway, Portugal and the United Kingdom. Germany, the Netherlands and the United Kingdom were included both in the Carnegie and the CAP survey, while Sweden participated only in the Carnegie survey.

Subsequently, the European Science Foundation decided in 2009 to support a project "The Academic Profession in Europe" (EUROAC) coordinated by Ulrich Teichler. In the framework of this study, some other European countries (Austria, Croatia, Ireland, Poland, Romania and Switzerland) employed a slightly modified version of the CAP questionnaire (Teichler and Höhle 2013); moreover, scholars from the these countries as well as Finland and Germany undertook in-depth interviews. The survey findings of the countries participating in the EUROAC study are not reported in this article.

The CAP Study took some questions regarding the career and regarding teaching and research from the Carnegie Study, thus providing the opportunity to measure change over time for some themes. The latter two studies also addressed the key theme of the Carnegie Study, whether the target group (i.e. the academic profession) could be understood as a "profession under pressure". However, more attention was paid in the CAP survey to the question of how much the academic profession is shaped today by three major changes outside and inside higher education in recent years, namely (1) the growing expectation to provide visible evidence of the relevance of higher education, (2) the increasing internationalisation of higher education and its context, and (3) the growing power of management (see Kogan and Teichler 2007a; Locke and Teichler 2007). Certainly, these issues are important currently for the academic profession beyond the explanation of the thrusts of the recent surveys.

"Relevance: Whereas the highest goal of the traditional academy was to create fundamental knowledge, what has been described as the 'scholarship of discovery', the new emphasis of the knowledge society is on useful knowledge or the 'scholarship of application'. This scholarship often involves the pooling and melding of

insights from several disciplines and tends to focus on outcomes that have a direct impact on everyday life. One consequence is that many future scholars, though trained in the disciplines, will work in applied fields and may have options of employment in these fields outside of the academy. This provides new opportunities for more boundaryless forms of academic career and knowledge transfer while it may also create recruitment difficulties in some places, and especially in fields such as science, technology and engineering.

There are strong interdependencies between the goals of higher education, the rules for distributing resources, and the nature of academic work. The changes associated with movement from the 'traditional academy' with its stress on basic research and disciplinary teaching to the 'relevant academy' are largely uncharted and are likely to have unanticipated consequences. The task of the project is therefore to understand how these changes influence academic value systems and work practices and affect the nature and locus of control and power in academe.

Internationalisation: National traditions and socio-economic circumstances continue to play an important role in shaping academic life and have a major impact on the attractiveness of jobs in the profession. Yet today's global trends, with their emphasis on knowledge production and information flow, play an increasingly important role in the push towards the internationalisation of higher education. The international mobility of students and staff has grown, new technologies connect scholarly communities around the world, and English has become the new lingua franca of the international community.

The economic and political power of a country, its size and geographic location, its dominant culture, the quality of its higher education system and the language it uses for academic discourse and publications are factors that bring with them different approaches to internationalisation. Local and regional differences in approach are also to be found. Therefore, questions are raised about the functions of international networks, the implications of different access to them and the role of new communication technologies in internationalising the profession.

Management: In academic teaching and research, where professional values are traditionally firmly woven into the very fabric of knowledge production and dissemination, attempts to introduce change are sometimes received with scepticism and opposition. At the same time, a greater professionalisation of higher education management is regarded as necessary to enable higher education to respond effectively to a rapidly changing external environment. The control and management of academic work will help to define the nature of academic roles – including the division of labour in the academy, with a growth of newly professionalised 'support' roles and a possible breakdown of the traditional teaching/research nexus. New systemic and institutional processes such as quality assurance have been introduced which also change traditional distributions of power and values within academe and may be a force for change in academic practice. The project will examine both the rhetoric and the realities of academics' responses to such managerial practices in higher education.

A number of views can be discerned about recent attempts at the management of change in higher education and the responses of academics to such changes. One

view would see a victory of managerial values over professional ones with academics losing control over both the overall goals of their work practices and their technical tasks. Another view would see the survival of traditional academic values against the managerial approach. This does not imply that academic roles fail to change, but that change does not automatically mean that interests and values are weakened. A third view would see a 'marriage' between professionalism and managerialism with academics losing some control over the goals and social purposes of their work but retaining considerable autonomy over their practical and technical tasks. The desirability of these three different positions is also subject to a range of different views." (Kogan and Teichler 2007b, p. 10–11).

In the subsequent section, we will provide an overview of the key findings of the comparative surveys named above about teaching and research, as well as the relationships between these two core functions of higher education. As a rule, "Europe" refers to the mean for the seven European countries included in the CAP study and to the four European countries included in the Carnegie Study (cf. the overviews of the CAP findings in Research Institute for Higher Education, Hiroshima University 2008, 2009, 2010, Locke et al. 2011; Jacob and Teichler 2011; Teichler et al. 2013).

The analysis focuses on professors and junior staff at universities. The university professors are a prime group of interest, because almost all of them are in charge of both teaching and research, as will be shown below, and because they are the most influential in shaping the relationships between teaching and research. But the respective findings will also be consistently presented for junior academics at universities, because most of them are also involved both in teaching and research and because most of them also experience the potentials and problems of the relationship between teaching and research in their daily working life.

In some instances, information will be presented on academics at other institutions of higher education as well. These academics serve here as comparison group: The survey findings on relationships between teaching and research at universities aiming to be institutions with a close link between teaching and research can be better understood when compared with those academic institutions not necessarily striving for such a close link.

2.5 Teaching and Research in Europe: The Findings of Comparative Studies

2.5.1 Involvement in Teaching and Research

In fact, almost all senior academics at universities in Europe are both in charge of teaching and research. According to the CAP survey conducted recently across seven European countries, on average 93 % of the university professors state that during their working time they are active both in teaching and research. 6 % are only active in teaching and 1 % only in research.

For junior academics at universities, the proportion that are active in only one core function is more than twice as high as among senior academics: 11.0 % are active only in research and 8 % only in teaching, while 81 % are active both in teaching and research.

Among senior academics at other institutions, only 19 % state that they are exclusively active in teaching, while 80 % report that they undertake both teaching and research and 1 % are only active in research. Among junior staff at other higher education institutions, the proportion of those that dedicate themselves to teaching is only somewhat higher: 26 %, while 63 % are active both in teaching and research and 11 % in research only.

2.5.2 Work Time Spent on Teaching and Research

Academics were asked both in the early 1990s and more recently how many hours per week they spend on professional work – in total and individually for teaching and related activities, research and related activities, administration, services and other functions. In order to avoid a typical week during term time being taken to represent typical academic work, the respondents were asked to estimate their work hours separately for the period when classes are in session, and for the period, when classes are not in session.

University professors at universities in Europe reported in 1992 that they spent an average of 51 h per week during the whole year on academic work. The same figure in the CAP survey stood at 46 h. Junior academics reported 45 and 43 h respectively. The decline in the weekly working hours by senior academics is not a country composition effect; we note a decline of five hours also among academics of the three countries participating in both surveys.

Senior academics at other institutions do not work as much beyond usual office hours as university professors do. Rather, their weekly working hours are close to those of junior academics at universities.

In the context of this analysis, the relative time spent on teaching and research is the most relevant factor. Here it has been calculated for each academic surveyed. Table 2.1 shows that for the European countries studied the average proportion of work time spent by university professors on teaching and research over the whole year has not changed substantially over time from the earlier 1992 survey until recently: The respective figures are 29 and 30 % for teaching and 36 and 38 % for research. Only a small increase in research activity can be observed, and both teaching and research have increased slightly, while time spent on other functions has decreased. Altogether, university professors spend about a quarter more time on research than on teaching.

In contrast, involvement in research has increased over time for junior staff at universities: while teaching has declined slightly from 28 to 26 %, research has

Table 2.1 Proportion of work time spent on teaching and research by academics in selected European countries 1992 and 2007–2010 (percent)

	Universities				Other HEIs	
	Senior academics		Junior academics		All	
	1992	2007–2010	1992	2007–2010	1992	2007–2010
a. Teaching						
When classes are in session	37	38	36	35	60	50
When classes are not in session	18	18	16	13	31	28
During the whole year[a]	29	30	28	26	50	41
b. Research						
When classes are in session	28	32	38	41	15	24
When classes are not in session	47	51	55	61	38	40
During the whole year[a]	36	38	45	49	24	30

[a]Calculated by counting time when classes are in session as 60 % of the total and when classes are not in session as 40 % of the total annual work time
Source: Carnegie Data Set and CAP Data Set

increased from 45 to 49 %. As a consequence, the time spent on research (which had been about 1.6 times as much as teaching in 1992) reached about 1.9 times as much as teaching in recent years. It should be borne in mind that junior academics at European universities on average only spend moderately less time teaching – while they spend about the same time in some countries, in others they spend clearly less time – compared to senior academics. Their higher proportion of time spent on research is linked to the fact that they spend clearly less time on other activities (administration, services, etc.).

The most substantial change has occurred in the time budget of academics at other institutions of higher education (here not differentiated between senior and junior academics). The share of their time spent on teaching over the whole year has declined from 50 to 41 %. In contrast, the proportion of their time spent on research has increased from 24 to 30 %. The latter has not increased as much as the former has decreased. This shows that time spent by academics at other institutions of higher education on other functions (i.e. administration, services, etc.) has increased in contrast to the development in the university sector where time spent on other functions has decreased.

Thus overall, we note an increase of time spent on research and decrease of time spent on teaching. This change, however, does not hold true for university professors, but rather to a moderate degree for junior staff at universities and to a more substantial extent for academics at other institutions of higher education.

Table 2.2 Preferences for teaching and research by academics in select European countries 1992 and 2007–2010 (percent)

	Universities				Other HEIs	
	Senior academics		Junior academics		All	
	1992	2007–2010	1992	2007–2010	1992	2007–2010
Primarily in research	19	16	27	24	2	14
In both, but leaning towards research	54	58	44	46	27	30
In both, but leaning towards teaching	22	23	20	24	48	32
Primarily in teaching	5	4	9	5	23	24

Source: Carnegie Data Set and CAP Data Set

2.5.3 Preferences for Teaching and Research

In all the surveys addressed, academics have been asked to state their preferences for teaching and research. They have been told to state whether their interest lies (a) primarily in research, (b) in both, but leaning towards research, (c) in both, but leaning towards teaching, or (d) primarily in teaching.

As Table 2.2 shows, most academics in the European countries do not support a clear preference for either research or teaching. Rather, most academics express an interest in both teaching and research. This is most pronounced among university professors: 76 % express an interest in both core functions in 1992, even rising to 80 % in the recent surveys. But also junior academics at universities (64 and 70 %) underscore their interest in both functions. It is worth noting that this holds true equally for academics at other institutions of higher education (75 and 62 % respectively).

A clear preference for research has been stated by less than one fifth of university professors at both moments in time (19 and 16 %) and by about a quarter of junior academics at universities (27 and 24 %). In contrast, the portion of academics at other institutions of higher education stating a clear preference for research was very low in the early 1990s, but has since increased from 2 to 14 % (i.e. to almost the same proportion as among university professors). A clear preference for teaching is an exception among academics at universities: 5 and 4 % among professors as well as 9 and 5 % among junior staff. In contrast, almost one quarter of academics at other institutions of higher education (23 and 24 %) express a prime interest in teaching.

In adding together those that showed a clear preference and those leaning towards a particular function, we note that almost three quarters of university professors are more strongly interested in research (73 and 74 %) rather than teaching. The same holds true for junior academics at universities (71 and 70 %). Less than half as many academics at other institutions of higher education are predominantly research-minded (29 and 34 %); taking into account the official differences in the two types of higher education institutions in many European countries, we consider the share of academics at these institutions classing themselves as research-minded to be surprisingly high.

Table 2.3 Links between teaching and research perceived by academics at universities in selected European countries 2007–2010 (percent[a])

	Senior academics	Junior academics
Teaching and research are hardly compatible with each other	21	27
Your research activities reinforce your teaching	82	71

[a]Responses 1 and 2 on a scale from 1 = Strongly agree to 5 = Strongly disagree
Source: CAP Data Set

2.5.4 Links Between Teaching and Research

The recent survey has been interested in establishing the extent to which the Humboldtian ideal of "unity of research and teaching" works: that involvement in research enhances the quality of teaching, and teaching is expected to provide positive feedback for research. The former link has been explicitly addressed in the questionnaire. But also the opposite assumption has been addressed, according to which it is a difficult task to coordinate the different demands of research and teaching in a productive way.

Indeed, on the one hand most academics do believe that their research activities reinforce their teaching: This is supported by 82 % of university professors and 71 % of junior academics, as Table 2.3 shows. Taking into consideration that more junior academics than senior academics are in charge of just one of the functions, we can interpret the responses of senior and junior academics as quite similar.

On the other hand, an average of 21 % of university professors and 27 % of junior academics at universities in the European countries surveyed has come to the conclusion that "teaching and research are hardly compatible with each other". It is somewhat surprising that more junior academics than senior academics note such a tension, although – as discussed above – fewer of them are actually involved in both tasks.

Altogether, the responses to these two statements suggest that most academics at universities in Europe believe that a link between teaching and research within universities is not only appreciated by themselves. But they are also convinced that this link works operationally and functionally.

2.5.5 The Issue of Relevance in Teaching and Research

As pointed out above, the recent survey on the academic profession has started off from the assumption that three major changes outside and inside higher education have strongly affected the academic profession in recent years: the growing expectation to provide visible evidence of the relevance of higher education, the increasing internationalisation of higher education and its context, and finally the growing power of management within institutions of higher education. Therefore, it makes

sense to examine the survey data, to see whether they indicate that teaching and research is similarly affected by these trends or whether these trends play a clearly distinct role for each of teaching and research.

As regards relevance, the more recent questionnaire only covered the institutional expectations with respect to the research function:

- 30 % of university professors and 38 % of junior academics across the European countries addressed state that their institutions emphasize commercially oriented or applied research.
- 56 % of the university professors and 54 % of junior academics respond affirmatively to the statement: "High expectations of useful results and application are a threat to the quality of research".

The attitudes of the respondents themselves as regards relevance, however, have been addressed in the survey as well, both for teaching and research:

- Regarding teaching: 56 % of university professors and 59 % of junior academics state they emphasize practically oriented knowledge and skills in their teaching.
- Regarding research: 64 % of the professors and 63 % of the junior academics at universities characterize their primary research as applied or practically oriented, 16 and 19 % as commercially and transfer-oriented, as well as 39 and 36 % as socially oriented and intended to help better society.

The respective questions and statements regarding teaching and regarding research are not directly comparable. By and large, however, the findings suggest that the issue of relevance does not affect teaching and research in a completely different manner.

2.5.6 Internationalisation of Teaching and Research

The international dimension is quite visible in the academics' teaching activities:

- On average 69 % of university professors and 60 % of junior academics in the European countries addressed state that they emphasize international perspectives or content in their teaching.
- 43 and 29 % percent report that they teach in a language different from the prevailing one at their university.
- Understandably, the figures of teaching abroad within a year are substantially smaller: 22 and 9 % respectively.

But the questionnaire has gone into more depth regarding research and the international dimension:

- Obviously, there are not substantially more academics citing an international scope and orientation for research than for teaching. Some 74 % of university

professors and 61 % of junior academics said their research involved international scope and orientation, but
- International activities are quite common as well, notably international research collaboration (73 and 55 %).
- Also, foreign language use is more widely spread in research than in teaching. 78 % of professors and 75 % of junior academics at universities publish in a foreign language.

Thus, visible internationality in academics' activities is more pronounced in the domain of research than in the domain of teaching. This does not mean, however, the there is a widening gap between teaching and research, as far as the internationality of higher education is concerned, because international activities in the area of teaching might be driven by factors other than the academics' views and activities; for example, student mobility is an important factor – a factor usually out of the academics' control.

2.5.7 Managerial Power Regarding Teaching and Research

As regards teaching, more than 40 % of both professors and junior academics at universities consider themselves strongly exposed to regulations and expectations beyond the usual regulations about teaching, load and curricula: for example, being encouraged to improve their instructional skills and being expected to spend a certain time on student consultation is named by more than four tenths of the academics surveyed. Similarly, somewhat more than 40 % of professors and junior staff each report that the university or the department management have major sway over various teaching issues. Finally, again, more than 40 % each report that their department managers evaluate their teaching performance.

As regards research, no questions had been asked which were similar to the first theme regarding teaching. As regards the second theme, again more than 40 % of professors and junior staff report that the university or the department management hold major sway over various research issues. Finally, again about 40 % each of the academics report that their department managers evaluate their research performance.

According to these findings, the university and departmental management exert power and influence on teaching and research more or less to the same extent. As research has been viewed in the past as being substantially less regulated than teaching, these findings let us draw the conclusion that rules, regulations and supervision as well as incentives and sanctions in the area of research have caught up with regulations concerning teaching in recent years, amidst a growing power of institutional management.

2.6 Concluding Observations

A close relationship between teaching and research can be called the Credo of the academic profession. Ever since the call for a "unity of teaching and research" (Einheit von Forschung und Lehre) as one of the core elements of the foundation of the University of Berlin in 1810, this has been reiterated as the core element of a real university, even though the interpretations of this concept vary dramatically and even more so the realities. This close relationship has created a unique "selling point" for universities, as some PR-oriented actors would say today. It has also been a reason for pride among the academic profession, distinct from research institutes and research and development activities outside universities on the one hand and from predominant teaching institutions on the other hand.

There have been substantial tensions in the relationships between teaching and research from the outset of the emerging popularity of the concept of "unity of research and teaching". And there are many indications that these tensions have grown in recent years. For example as a consequence of a dramatic trend towards specialisation in research (which has not been matched by a corresponding specialisation in teaching); of a growth of research funds amidst economizing pressures in the area of teaching and learning; and of increasing competition for visibility as a world-class university, whereby research achievements are put primarily in the limelight and teaching achievements are hardly registered, etc.

An analysis of the views expressed by university professors and junior staff in a recent comparative survey of the academic profession shows that most academics at universities in various European countries continue to believe in the virtue of a close link, and they also continue to believe that such a close link works properly. There is hardly any difference in this belief between countries, on the one hand, where academics spend one and a half times as much time on research across the whole year and, on the other hand, countries, where time devoted to research hardly surpasses time devoted to teaching and related activities. Only about one quarter of the academics surveyed consider teaching and research as hardly compatible.

What will happen in the future? Will the concept of the unity of research and teaching become a slogan without any substantial basis and eventually erode? Or will academics preserve their credo irrespective of the growing tensions between teaching and research? Or will there be a revival of a close link between teaching and research?

References

Altbach, P. G. (1991). The academic profession. In P. G. Altbach (Ed.), *International higher education: An encyclopedia* (pp. 23–45). New York/London: Garland.

Altbach, P. G. (Ed.). (1996). *The international academic profession: Portraits of fourteen countries*. Princeton: Carnegie Foundation.

Altbach, P. G., & Lewis, L. S. (1996). The academic profession in international perspective. In P. G. Altbach (Ed.), *The international academic profession: Portraits of fourteen countries* (pp. 3–48). Princeton: Carnegie Foundation.

Arimoto, A. (2010). Differentiation and integration of research, teaching and learning in the knowledge society: From the perspective of Japan. In Research Institute for Higher Education Hiroshima University (RIHE) (Ed.), *The changing academic profession in international and quantitative perspectives: A focus on teaching and research activities* (pp. 1–28). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton: Carnegie Foundation.

Boyer, E. L., Altbach, P. G., & Whitelaw, M. J. (1994). *The academic profession: An international perspective*. Princeton: Carnegie Foundation.

Enders, J. (2006). The academic profession. In J.J.F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 5–22). Dordrecht: Springer.

Enders, J., & Teichler, U. (1995). *Der Hochschullehrerberuf im internationalen Vergleich* (The academic profession in international comparison). Bonn: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie.

Jacob, A. K., & Teichler, U. (2011). *Der Wandel des Hochschullehrerberufs im internationalen Vergleich: Ergebnisse einer Befragung in den Jahren 2007/08* (Change of the academic profession in international comparison: Results of the survey of the years 2007–08). Bonn/Berlin: Bundesministerium für Bildung und Forschung.

Kogan, M., & Teichler, U. (Eds.) (2007a). *Key challenges to the academic profession* (Werkstattberichte, Vol. 65). Paris: UNESCO, Kassel: International Centre for Higher Education Research Kassel.

Kogan, M., & Teichler, U. (2007b). Key challenges to the academic profession and its interface with management: Some introductory thoughts. In M. Kogan, & U. Teichler, (Eds.), *Key challenges to the academic profession* (pp. 7–13). Paris: UNESCO, Kassel: International Centre for Higher Education Research Kassel.

Locke, W., & Teichler, U. (Eds.). (2007). *The changing conditions for academic work and careers in select countries* (Werkstattberichte, Vol. 66). Kassel: International Centre for Higher Education Research Kassel.

Locke, W., Cummings, W. K., & Fisher, D. (Eds.). (2011). *Changing governance and management in higher education: The perspectives of the academy*. Dordrecht: Springer.

Perkin, H. (1991). History of universities. In P. G. Altbach (Ed.), *International higher education: An encyclopedia* (pp. 169–204). New York: Garland Publishing.

Research Institute for Higher Education, Hiroshima University (Ed.). (2006). *Reports of changing academic profession project workshop on quality, relevance, and governance in the changing academia: International perspectives* (COE publication series, Vol. 20). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Research Institute for Higher Education, Hiroshima University (Ed.). (2008). *The changing academic profession in international comparative and quantitative perspectives* (RIHE international seminar reports, Vol. 12). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Research Institute for Higher Education, Hiroshima University (Ed.). (2009). *The changing academic profession over 1992–2007: International, comparative, and quantitative perspectives* (RIHE international seminar reports, Vol. 13). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Research Institute for Higher Education, Hiroshima University (RIHE) (Ed.). (2010). *The changing academic profession in international and quantitative perspectives: A focus on teaching & research activities* (RIHE international seminar reports, Vol. 15). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Taylor, J. S., Brites Ferreira, J., Machado, M. L., & Santiago, R. (Eds.). (2008). *Non-university higher education in Europe*. Dordrecht: Springer.

Teichler, U. (1996). The conditions of the academic profession: An international comparative analysis of the academic profession in Western Europe, Japan and the USA. In P. A. M. Maassen & F. van Vught (Eds.), *Inside academia: New challenges for the academic profession* (pp. 15–65). Utrecht: Uitgeverij De Tijdstrom.

Teichler, U. (2008). Diversification? Trends and explanations of the shape and size of higher education. *Higher Education, 56*(3), 349–379.

Teichler, U. (2010). Teaching and research in Germany: Narrowing the gaps between institutional types and staff categories? In Research Institute for Higher Education Hiroshima University (RIHE) (Ed.), *The changing academic profession in international and quantitative perspectives: A focus on teaching & research activities* (pp. 41–60). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Teichler, U., Arimoto, A., & Cummings, W. K. (2013). *The changing academic profession: Major findings of a comparative survey*. Dordrecht: Springer.

Teichler, U., & Höhle, E. A. (Eds.). (2013). *The work situation of the academic profession in Europe: Findings of a survey in twelve countries*. Dordrecht: Springer.

Vessuri, H., & Teichler, U. (Eds.). (2008). *Universities as centres of knowledge production: An endangered species?* Rotterdam/Taipei: Sense.

Chapter 3
A Bastion of Elitism or an Emerging Knowledge Proletariat? Some Reflections About Academic Careers with an Economic Slant

Pedro N. Teixeira

3.1 Introduction

The increasing influence of economic and management ideas in higher education is associated with changing perceptions of the roles that higher education should play. In recent decades, societies and governments have evolved their views about the social role of higher education, with significant implications for the Identity of HEIs and the Organization of the HE Sector (Scott 1995; Geiger 2004). Educational decisions have been increasingly perceived as motivated by economic factors and educational institutions as economic institutions (Bok 2003; Winston 1999). Moreover, the social contribution of the activities of higher education and science organizations has been increasingly linked to a variety of ways of assessing their economic relevance (Slaughter and Leslie 1997). Hence, policy-makers and institutional managers have been exploring ways to steer individual and institutional behaviour through incentives that are consistent with an increasing influence of economic and management ideas in higher education and research.

This changed view about HEIs and the way they should manage their academic resources has had significant implications for the academic reward structure (see Teichler 2007). A major driver of this change has been the growing influence of a number of economic concepts, such as human capital analysis, based upon the view of academics as rational individuals that try to maximise their returns (both financial and non-pecuniary). In this text we reflect on some major trends in the academic profession by adopting a labour market perspective, and explore the contributions and limitations of this perspective for understanding this constituency. We will start by looking at changes in labour economics and the way this field has come to look

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at academic careers. Then we will briefly present some major trends that led to a growing influence and political legitimacy of economic ideas in higher education policy and management. This is followed by a look at the impact of marketization on certain aspects of academic careers. In our analysis we will focus our attention on the attraction of new researchers and the evolution of pecuniary and non-pecuniary returns to academic careers and to what extent these changing perceptions have contributed to an increasing inequality in the financial and working conditions of academics. We will conclude this text with some reflections and speculations about possible future trends.

3.2 Academic Careers and the Economics of the Labour Market

The way economists approach labour issues has changed significantly over time. The developments have tended to emphasise the economic dimensions of labour relations over other legal, sociological, and political aspects (McNulty 1986). Moreover, economists have become increasingly more confident in applying economic tools of analysis in their attempt to explain certain trends and features of labour markets. One of the main issues of debate among labour researchers is to what extent the labour market is a peculiar type of market (Kerr 1993).[1] There are those that believe that the neoclassical model of markets needs to be adjusted in order to take into account the specificities of this commodity and the institutional framework affecting labour relations. Furthermore, there were those that considered that this institutional dimension and the non-economical character of the so-called labour supply and demand pose major limitations to the use of a market framework and question its explanatory effectiveness. This includes the development of unions and other forms of workers' organisations, which have introduced a mixture of economic and political dimensions in labour relations and in employees' behaviour.

The different views of the labour market and its protagonists do necessarily shape the way labour economists see the wage determination process. Whereas some will regard labour markets as analogous to other types of competitive markets and therefore see the process of wage determination as not very different from the one defined by competitive market theory, others express doubts about the competitive assumption underlying the view of wages as a market price. According to the former view, although some forces may, to a minor extent, delay or limit the impact of competitive markets, by no means should this be considered a central aspect in terms of wage determination. This applies to issues such as collective bargaining or

[1] A market mechanism is usually presented in economics as a resource allocation mechanism based on a multiplicity of individual decisions that operates through the interaction of supply and demand forces. A market system is normally associated with a significant degree of competition between individuals, a high degree of freedom for each agent, and a strong economic motivation of individuals to obtain gains from those activities.

labour market legislation, which are recognised as interfering with wage-setting (and other aspects of the labour market), though without challenging the competitive market as the benchmark for wage determination, and hence for labour research.

Hence, the prevailing view among most economists is one that may identify certain common features across labour relations by using a market analytical framework (supply-demand-price) (see for instance, Ehrenberg and Smith 2003; Borjas 2010). Moreover, and despite some variations, labour markets are regarded as essentially competitive, meaning that the so-called imperfections of real labour markets are not crucial for the determination of the general picture of the labour market and do not challenge the main predictions of the competitive labour model. Accordingly, one would start from a basic market model and successfully introduce certain peculiarities of certain types of labour markets, aiming to reach a balance between analytical simplicity and relevance.

This view is somehow challenged by an alternative view that emphasises the variety and the peculiarities of specific labour markets. According to this view, the analysis of labour relations should talk about labour markets, rather than a single labour market (see Reynolds et al. 1991). This would accommodate and underline the national, regional, and sectorial particularities of specific labour markets. Although many would recognise the usefulness of a market as an analytical simplifying device, they also point out that in reality there is a multiplicity of markets divided by occupation, skills, location, and regulations (Kaufman and Hotchkiss 1999). This view, normally closer to industrial relations and to economic sociology, underlines the fragmentation of the labour market and expresses a more cautious view of the possibility of generalizing the study of labour markets, especially if one is interested in paying attention to those aspects that make each market particular and distinct.

The analysis of academic careers is a clear example of this aforementioned tension. On the one hand, the issue of academic labour markets has become one of increasing interest and visibility for labour and educational economists (see Ehrenberg 2002). The expansion of higher education professionals and the political and organizational changes pervading higher education has given greater prominence to the use of economic analysis in the study of academic careers (more on this below). This has certainly legitimised an economic approach to academic careers by taking into account the basic market framework. On the other hand, higher education researchers studying the academic profession have tended to emphasise the peculiarities and the regulatory features of this professional group and the non-competitive and non-market features governing academic employers' and employees' decisions and behaviour.

The purpose of this text is not to settle this debate, but rather to illustrate some of the insights that can be drawn by adopting certain tools of economic analysis for studying academic careers. The analysis will attempt to show the extent to which certain major features are an effect of the increasing legitimization of market rationales in higher education, which tended to play down the specificities of this occupational group and to make it more similar to other groups of workers analysed by labour economics. On the other hand, the analysis will point out some of the obvi-

ous limitations of relying exclusively on an economic market approach, notably if one envisages capturing the multidimensional and complex nature of academic labour markets (see Musselin 2005). In the next section we analyse the growing role of market forces in higher education, while the subsequent section addresses the impact that these market rationales have had on certain major dimensions of academic careers.

3.3 Markets in Higher Education and Changes in the Academic Profession

In many countries, particularly in Europe, higher education has been regarded as a bastion of public service and a priority for government intervention in the areas of public funding, regulation, and provision. Regardless of the current financial difficulties (be it those linked to the current financial crisis or to more structural financial imbalances), one could arguably say that this remains the case among most policy-makers and the public opinion at large. These views are usually strengthened by the widespread perception that this has long been the case in European history, where universities have traditionally been regarded for as a public responsibility. Thus, many Europeans regard with scepticism the possibility that market forces and private ownership could potentially make significant inroads in this sector.

Despite significant social and political resistance, European higher education has been experiencing growing influence from marketization forces (Teixeira et al. 2004; Teixeira and Dill 2011).[2] For instance, they have seen competition strengthen (nationally and internationally) for students, for financial resources, and for academic staff. This strengthening of competition was often stimulated by regulatory forces and has been associated with an increasing institutional autonomy, in a drive to make European HEIs more capable of responding to those competitive challenges. On the other hand, the influence of marketization has also resulted from an increasing privatization of higher education. This privatization has been taking place not only as a result of the development of private sectors, but also and quite significantly through the adoption of private-like rules and practices in public HEIs, driven by a desire to increase flexibility while at the same time improve efficiency.

The recurring use of market forces in European higher education has been the result of some important trends associated with the massive expansion of higher education over the latter part of the twentieth century. The so-called massification of higher education has created huge challenges to which institutional leaders and policy-makers tried to respond in multiple ways, not least by trying to find the additional financial and human resources necessary to adequately keep fulfilling the missions allocated to higher education. The massification of higher education has

[2] Since some of the main elements of a market system are complex to be applied to higher education, one usually speaks of quasi-markets, meaning the partial presence of market elements in a specific higher education context (see Teixeira et al. 2004).

meant that it was necessary to attract a growing portion of the labour force to academic and research positions and efforts had to be made to fund those positions in such a way that those careers were sufficiently attractive, both in terms of financial rewards and employment conditions.

On the other hand, the expansion of higher education has led to a move from an expanding sector to a mature industry (Levine 2001). In an expansion phase, growth is seen as a sign of improvement and HE manages to keep public and social actors satisfied by managing to accommodate larger numbers of students. In a mature phase, the external stakeholders become more demanding and will not be satisfied just by adding more activities or expanding existing ones. The rising costs of higher education caused concern among policy-makers and public opinion and attracted increased political and social scrutiny (Clotfelter 1996; Geiger 2004). Thus, the pressure has mounted for HEIs to find ways to reduce costs and since personnel represents, by far, the largest share of costs, institutions have been under pressure to find ways to make savings in their costs with academic and research staff.

The increasing influence of the marketization of European higher education is associated with changing perceptions of the roles that higher education should play. In recent decades, societies and governments have evolved their views about the social role of higher education, with significant implications for the identity of higher education institutions and the organization of the higher education sector. Educational decisions have been increasingly perceived as motivated by economic factors and educational institutions as economic institutions. Moreover, the social contribution from the activities of higher education and science organizations has been increasingly linked to a variety of ways of assessing their economic relevance (Bok 2003). Hence, policy-makers and institutional managers have been exploring ways to steer individual and institutional behaviour through incentives that are consistent with an increasing influence of economic and management ideas in higher education and research.

These aforementioned trends of increasing marketization of the European higher education landscape have had very important consequences both at the system and institutional levels. One of the major impacts has been in academic careers. Although the academic profession continues to be significantly regulated by government and professional forces, there have been important advances in the influence of market forces, though its impact has varied across countries, institutions, disciplines, and professional status. In the following section we focus our attention on the influence that those market forces have been playing in the academic profession in Europe.

3.4 Market Forces and Changes in the Academic Profession

The influence of market forces may be felt in several instances of the academic profession. One of the first aspects to analyse is the way the profession is attracting new academics and the extent to which economic factors are relevant in explaining patterns of attractiveness and recruitment in the academic profession. The second

aspect deserving attention refers to the pecuniary and non-pecuniary rewards to academics and the extent of which an increasing influence of market forces may shape the evolution in the salaries and other employment conditions of academics, especially vis-à-vis other occupational categories. Finally, we will analyse the extent to which marketization has been stimulating a greater differentiation in the reward structure of academics. The analysis will inevitably be very general, to some extent even superficial, and mostly concerned with identifying a number of emerging trends associated with a growing influence of market forces in academic careers.

3.4.1 The Labour Market Conditions for New Academics

A labour market approach to individual choices regarding the capacity of a sector to attract new candidates is largely focused on the potential rewards associated with that occupational choice vis-à-vis the costs incurred. Contemporary economic views regarding advanced training and occupational careers have been significantly influenced by the development of human capital theory (Becker 1993). Accordingly, individual decisions are largely determined by an analysis of expected costs and benefits, most of which will occur over several years. Thus, individuals have rather imperfect information about several of those elements and their calculus is performed under conditions of significant uncertainty which can affect it (Ehrenberg 1992), either by underestimating or overestimating several of those expected costs and benefits. Among the major costs are not only the direct costs borne by prospective doctorates, but also the opportunity costs of pursuing an advanced degree instead of entering the labour market.

These choices have become even more complex in recent years due to the development of cost-sharing in higher education and the development of loan mechanisms in many higher education systems (Teixeira et al. 2006). This means that many bachelor and master graduates will conclude their education with significant levels of debt that need to be repaid. This may become an important deterrent for potential candidates to a doctoral degree, especially since we are dealing with degrees that are often viewed as being an uncertain investment due to high drop-out rates and long average times to completion. The continuation of training at an advanced level will also be affected by mechanisms of financial support available for doctoral students. For instance, evidence for the US has pointed out that students who receive financial assistance (fellowships, research assistanceships) have higher completion rates and take, on average, less time to complete their doctoral degrees (Ehrenberg and Mavros 1995).[3]

[3] The discussion on financial support to doctoral students in the framework of the EHEA raises additional issues such as the issue of portability of financial assistance within the area. Currently, most European countries seem to take a rather cautious approach, namely regarding direct mechanisms of support (Vossensteyn 2004). With the expected increasing integration of higher education systems and greater inter- and intra-degree mobility of doctoral students, it will be interesting to

Despite the interest of cost-benefit analysis, most of the studies have been focused on undergraduate higher education. Not many studies cover the rates of return to doctoral education, and the few that do exist have mostly been applied to non-European labour markets and often do not refer to recent data. Moreover, most of the studies do not provide detailed information on the differences per field and on the impact of institutional and individual characteristics (Ehrenberg 1991, 1992). Despite those limitations, the results of the available studies converge in obtaining a positive rate of return, though lower than that found for undergraduate education. The existing studies tend to focus on science and engineering, where the public and private demand for doctoral graduates is likely to be more significant. It would be important to analyse data for doctorates in social sciences and humanities, where in several cases it is admissibly possible that very low or even negative rates of return may exist for graduate education.

The attractiveness of academic careers should not be assessed on the grounds of pecuniary returns. If, on the one hand, financial incentives do not seem to be particularly strong, the results obtained by rate of return studies indicate that the economic analysis implicit in the decision-making process of future PhDs is not restricted to pecuniary issues. In fact, it has for a long time been assumed in economic and social analyses of the economic profession that non-pecuniary issues may be particularly relevant as determinants of decisions to enrol in a doctoral degree and in pursuing a research career (Williams et al. 1974). Hence, any reflection upon the attraction of new academics needs to pay attention to the evolution of issues such as workload, flexibility, and degree of autonomy, especially when compared with other highly qualified professions.

Moreover, the expansion of doctoral training across many higher education sectors in Europe (and elsewhere) suggests the existence of no lack of potential candidates for doctoral training and, at least in part, for an academic career. In fact, from a labour market point of view, this steady expansion of new doctors has the potential to reduce their market value when considering an academic career, unless there is a significant expansion in the number of positions available. Although some countries expect a certain degree of renewal in their academic structures due to the fact that the early generations of academics from the massification phase are approaching retirement, the current restrictions existing in the recruitment of new workers in the public sector (which dominates the provision of higher education in many countries) make that less likely to happen. This could be compensated by an expansion of new non-public higher education institutions, though these are not expected to compensate for the decline in the public sector due to the fact that the former does not have either the size or the disciplinary breadth of the public sector (Teixeira 2009).

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see if governments will take a more flexible stance and prioritise the funding of the students regardless of the nationality of institutions in which they enrol, or rather if the financial restrictions will prevail on a more reductionist approach. On the other hand, and as regards the attractiveness of academic careers beyond Europe, there is the additional issue of under what conditions are non-European candidates eligible for financial support provided by national and European agencies.

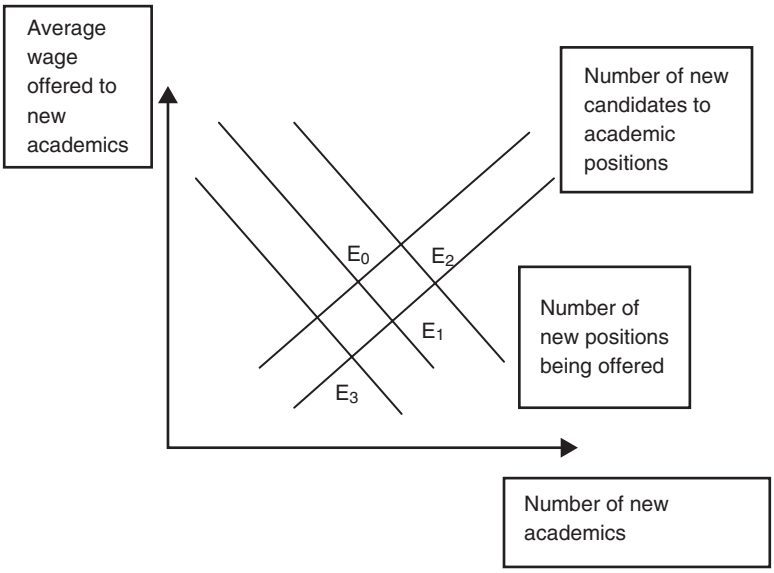

Fig. 3.1 Scenarios regarding the evolution of the Labour Market conditions for new academics under market flexibility

Figure 3.1 presents a simplified graphical analysis of several potential scenarios facing new entrants to the academic profession. The basic conditions are that the higher the average salary being offered, the larger the number of new potential candidates to a new position (though, as we have already mentioned, other factors will also motivate those candidates, especially when considering other employment alternatives). In contrast, the lower the salary, the larger the number of new positions that higher education institutions are willing to offer. The equilibrium situation would be the one presented by E0. An expansion in the number of individuals finishing doctoral training means, all other things remaining equal, that we have an increase in the number of available candidates for each position. If institutions have the possibility to adjust their offers, this means that they will be able to fill their positions by offering lower financial conditions, due to the tighter competition on the supply side (E1). This negative trend could only be compensated by an increase in the number of positions available and an expansion in the size of faculty (E2). By contrast, a decline in the number of new positions will deteriorate even further the conditions available to new candidates (E3). In many European countries, scenario 1 or even 3 are clearly the most likely, suggesting that the entrance conditions for academic careers are expected to deteriorate significantly in the short term.

Surely, one could argue that this downward adjustment is significantly limited by the fact that academic careers are highly regulated and that many universities are unable to adjust the starting salaries for the academics they are recruiting. Thus, in Fig. 3.2 we present the possible adjustments for a situation in which institutions cannot offer a lower salary in order to profit from a greater number of appli-

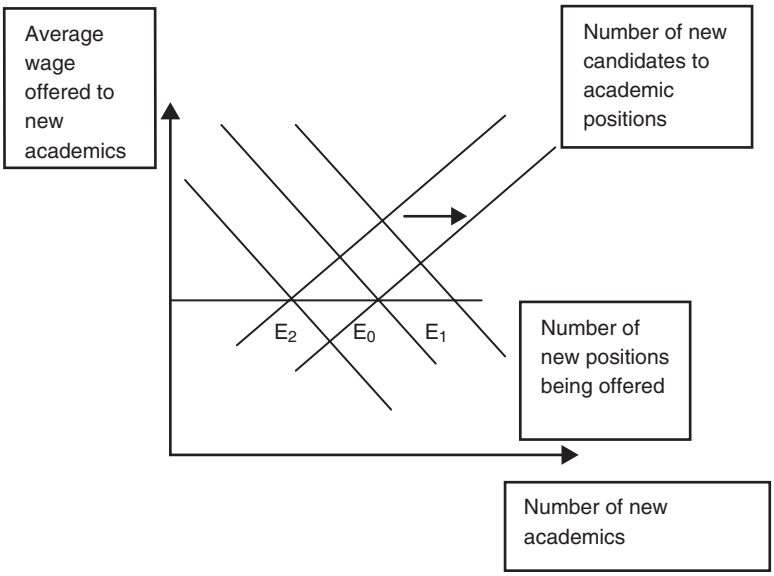

Fig. 3.2 Scenarios regarding the evolution of the Labour Market conditions for new academics under significant rigidity

cants. In this case the academic labour market would be moving from E0 to E2, in which the number of applicants for that wage level clearly exceeds the number of positions institutions are willing to hire, creating an excess of candidates that will not be able to enter into the academic profession. That situation is nowadays highly likely in many areas that have been producing a significant number of doctors but that have not been expanding (for instance due to demographic or scientific retrenchment in those fields).

However, the argument about adjustment through quantity rather than through adjustments in wages carries less weight than it may seem. On the one hand, the strengthening of market regulation and of institutional autonomy has meant that institutions may experience growing autonomy in this respect, therefore being capable of greater autonomy in managing their human resources policies (and their recruitment procedures and conditions). On the other hand, we also know that institutions may have more subtle ways of making this adjustment even in more regulated labour markets. For instance, the adjustment may be performed by hiring new academics through less traditional routes that are less regulated and/or less well paid than traditional ones (such as non-permanent posts or teaching positions) (see for instance, Altbach 2003). In any case, the market trends paint an unfavourable picture regarding entry conditions into the academic labour market, especially if

marketization trends are reinforced and/or if retrenchment continues to prevail in many higher education sectors.[4]

3.4.2 Working Conditions in Academic Careers

The less attractive scenario that has been drawn regarding new entrants into the academic profession has some implications for the academic profession as a whole, though most of its current members are somehow protected from this situation in what labour economists would call the covered or protected sector of the academic labour market. Thus, an expansion in the number of newly trained academics has a limited impact on the salary and working conditions of existing academics. Nonetheless, the marketization trends may help disseminate some of those effects even among the established members of the academic profession, notably through public sector reforms and the associated overhaul of the existing labour agreements and regulations that has been taking place in many areas of the public sector.

Much of the economic literature on academic labour markets assumes that faculty needs to be incentivised to perform research and that the reward structure needs to steer them towards greater productivity (especially in research dimensions). Moreover, the increasing influence of economic rationality and managerial practices in higher education institutions has given increasing visibility to the idea that productivity needs not only to be stimulated and rewarded, but also monitored. This contrasts with those holding the view that there is an intrinsic motivation among academics that leads them to commit to research, based on values associated with personal fulfilment (Reskin 1977) derived from knowledge discovery and solving problems, and that this motivation may be more relevant than financial and other extrinsic rewards. This is one of the main reasons that have historically justified a great degree of autonomy in the development of research work.[5]

[4] The analysis would have to be further complicated by the fact that the academic labour market is to a large extent a series of non-competing groups, since the qualifications and the stock of human capital accumulated by a candidate in a certain field hinders their capacity to compete with other potential candidates. Thus, we may have very different situations across disciplines, with insufficient supply in some fields and excess of new candidates in other fields, with the academic labour market largely unable to internally reallocate those candidates from a field in which there is an excess to another where there is scarcity. This information may be relevant for subsequent cohorts, but it will also take time to adjust since a lengthy period is necessary to train (or retrain) highly specialised human capital.

[5] There is limited quantitative empirical work in this regard. One of the aspects that has been explored is the extent to which the pattern of research productivity is affected by the approach of points in the academic career where faculty is assessed, for instance the assessment point for tenure or promotion. If research output increases significantly before those moments and declines visibly afterwards, then the idea that external incentives are more important than intrinsic values and motivations will gain additional strength. Some work has been carried out on this front, though the evidence seems to be inconclusive regarding the relative importance of either (Tien and Blackburn 1996). However, this may indicate that incentives play a necessary role in promoting higher

One of the critical issues regarding the attractiveness of academic and scientific careers refers therefore to the financial rewards, both in absolute and in relative terms. On the one hand, universities and research organizations aim to attract highly qualified and competent individuals. On the other hand, they are likely to be increasingly competing with other public and private organizations that may offer them attractive financial packages. This may be particularly felt in certain disciplines. Thus, we need to find evidence of the evolution of academic and scientific salaries and their relative positions in the labour market, though unfortunately we know relatively little about the latter.[6] Over the last two decades we have seen a significant increase in the wage premium for more educated workers in most western labour markets (Levy and Murnane 2004). Although academic salaries may have benefited at least in part from this trend (Archibald and Feldman 2010), there are signs of deterioration of the academic financial position in relative terms (Huisman et al. 2002).

The evidence available for some countries suggests that faculty salaries do not seem to follow the increases in other highly qualified professions (Martinello 2006) and that the increase was more concentrated in certain groups of academics. In a recent study for the UK, Walker et al. (2010) compared academic salaries for a range of occupational groupings considered as similar, in terms of unobserved characteristics, to academics. These authors concluded that higher education teaching professionals had lower earnings than most public sector graduates and that the former did particularly poorly compared to most other comparable professionals, though they did better than some groups of public sector workers. Although their results cannot be easily generalised to the rest of Europe, it should be noted that the study refers to that system in the European higher education system that has arguably faced the longest and deepest marketization trends over recent decades and therefore may be signalling forthcoming trends in other systems.

Monitoring the evolution of academic and research salaries becomes even more important in view of the current economic crisis and the impact that current and future restrictions in public expenditure may have for them. The evidence from some countries suggests that faculty salaries tend to be positively correlated with government expenditure in higher education. This is hardly surprising. Since in most countries the majorities of academics are hired by public institutions and that personnel expenditures represent a large chunk of universities' costs, the expansion of public funding for higher education is likely to allow more generous financial conditions for academics. In contrast, academic salaries seem to be negatively correlated with the expansion of other sources of funding, since institutions do tend to feel a stronger pressure to diversify their funding base in times of financial retrenchment and stronger restrictions to public expenditures (Johnstone 2006). Thus, the

research productivity, though they are not a sufficient explanation for it and do not capture the complex array of motivations that explain differences in productivity in research careers.

[6] For a recent international comparison of academic salaries see Rumbley et al. (2008), though unfortunately they provide very little data about the relative positioning of those salaries within each national context, especially as regards to other qualified occupations.

current trends towards diversification of funding may represent a context of increasing financial rigour and cost containment that could reflect negatively on academic salaries.

Another critical issue when discussing the financial rewards of academic careers refers to potential differences across disciplines. For some time differences in the reward structures of disciplines have been documented in several instances, namely in the US (Tuckman et al. 1977). These differences seem to be particularly relevant regarding women, whose less favourable position is the result of several significant trends (Bellas 1994).[7] There is limited information about the differences regarding different disciplines, though this information is particularly relevant and may indicate the existence of more acute problems in certain fields or in certain countries where the competition from non-academic careers is felt more strongly (Huisman et al. 2002). Analysing data for the US higher education sector, Ehrenberg et al. (2006) observed that average faculty salaries differ widely across fields and that the magnitudes of these differences in salaries have been growing over time.[8]

As mentioned above, the analysis of the benefits associated with academic and research careers should not be restricted to pecuniary issues, but also include the evolution of non-pecuniary advantages associated with that type of occupation. In addition, the outlook is not very favourable on this front for the attractiveness of academic careers. There are some indications that the workload is increasing (Huisman et al. 2002) and that a part of that is related to increasing bureaucratization and assessment of academic work. Furthermore, the degree of autonomy enjoyed by academics seems to be declining, not only due to more explicit mechanisms of assessment, but also to the influence from research priorities and strategies of economic motivations and funding concerns.[9] The decline in academics' autonomy seems to mirror wider trends in the labour market to which several labour economists have been paying increasing attention. In a recent study, Green (2005) found that in several Western countries the decline in workers' autonomy was indicated by respondents as by far the largest source of dissatisfaction among them. This clearly superseded concerns with employment stability or even financial rewards.

[7] First, disciplines where more women are present tend to be associated with salaries below the average for academic work. Second, women are concentrated in disciplines with worse labour market conditions. Finally, women have lower human capital in characteristics that are valued in the labour relationship such as education, experience and publication output. However, these factors do not explain all the wage differences, thus suggesting that, like in the labour market as a whole, there is persistent discrimination in the academic labour market.

[8] In their study they have also found that differences in the quality of faculty present in different fields at a university, measured by differences in national ratings of graduate programs, were important predictors of the field differences in average faculty salaries that exist at the full professor level.

[9] For an illustration of those trends, even in a context of dominant public provision of higher education and highly regulated academic labour markets, see the analysis of Teichler (2007) and Vabo (2007) covering the German and Norwegian experiences respectively.

The apparent negative evolution as regards non-pecuniary dimensions of the labour relationship in academia is even more striking bearing in mind the considerations made above regarding their role in explaining the attractiveness of these occupations. If the cost-benefit studies that point out that a large part of the attractiveness of academic positions are to be taken seriously, then a decline in the non-financial rewards such as autonomy, flexibility, or prestige, is even more relevant in the context of academia then in other occupations. The significance attached to those by academics means that deterioration in those aspects will be felt more strongly in academia and may be a major force in explaining signs of dissatisfaction among academics.

3.4.3 A More Unequal Academic Labour Market? – Trends and Challenges

Several of these trends signal an increasing differentiation of academic positions, especially in those contexts where the degree of marketization has been stronger and been developing over a longer period.[10] There are reports that Europe has reflected the trend observed for some time in North-America, with growth in temporary and non-tenured positions (Ehrenberg 2002). However, whereas in the US these positions tend to be mostly used for teaching purposes, it seems that in Europe they are being extensively used for research work (Huisman et al. 2002). Moreover, these positions are becoming a common entry point for many young academics and researchers (Robin and Cahuzac 2003). However, there are indications that some can stay in that kind of situation for long periods, suggesting the existence of significant barriers in moving to more stable employment relationships in academic and research work (Musselin 2005). These trends indicate the possibility of increasing segmentation of academic and research labour markets, following the work of some labour economists for the labour market at large (Cain 1976). Thus, we need to obtain much more information not only about the relative magnitude of this type of more precarious contract, but also on the professional paths of those that entered the research labour market under such circumstances.

This trend towards increasing diversity of staff contracts is the result of some already implicit tendencies resulting from the influence of economic and management rationales in higher education institutions. The search for greater economic and administrative flexibility is largely responsible for that, since it helps institutions to adjust to changes in external demands (Bland et al. 2006). This differentiation of employment arrangements within the institution also belies an attempt to contain costs. Since the dominant portion of the costs supported by higher education institutions are those related to personnel with academic staff representing a very large portion of that group many institutions have been trying to make savings on

[10] For analysis of the UK experience in this respect, see Brennan et al. (2007).

that front, especially when faced with the many signs indicating that emphasis on research intensity does seem to contribute to rising costs (Geiger 2004; Clotfelter 1996). Faced with significant financial pressures, institutions are using their increasing administrative flexibility and autonomy to differentiate employment and salary arrangements.

This widening of salary conditions is also relevant to the upper end, since it highlights the competition of institutions for the best staff. This trend has been observed in systems where the influence of marketization trends has been felt for longer (Ehrenberg 2002) and is likely to become more visible in Europe as well, especially with the emphasis on research productivity in institutional profiles and academic careers. One of the possible explanations has to do with institutional concerns with prestige and the contribution that each academic may give in that respect (Melguizo and Strober 2007). In a context of increasing institutional competition, the fact that institutions are willing to reward those faculty members that contribute more significantly to the institution's external reputation and research (yet again…) seems to be highly significant in this respect. Moreover, it seems that this pattern, which tends to be sustained by more research intensive institutions, tends to be emulated by those parts of the system less focused on research, thus steering a large part of the higher education sector in this direction.

The widening ranges of salaries at the upper level is also consistent with the well-known reinforcement hypothesis developed by several sociologists of science, suggesting that there is increasing inequality with age in the distribution of publications and citations (Allison and Long 1974; Reskin 1977).[11] This cumulative advantage of the best scientists in each field, also known as the Mathew effect (Merton 1973), is certainly favoured by particular departmental characteristics (Allison and Long 1990), such as the facilities and resources available and the pecuniary and non-pecuniary rewards of certain intellectual environments. This will tend to favour disproportionately the best and wealthiest institutions which cannot merely attract the best scientists and retain them through better salary and working conditions. Hence, the strengthening of marketization will tend to promote increasing individual and institutional inequality among science rewards and outcomes.

This increasing diversity of labour relations within universities and research organizations has some important consequences. One of the most important effects of this use of different types of appointment relates to the degree of commitment and the productivity of the staff hired through these less traditional routes. There is evidence that tenure seems to have a very significant impact on the level of commitment of faculty to an institution (Bland et al. 2006) and this will have spillover effects onto long-term research performance. The comparison of non-tenured faculty with full-time faculty with tenure or on tenure track show significant differences regarding levels of productivity, not only in research but also in teaching. The

[11] It should be noted that although citations are often regarded as a kind of non-pecuniary reward, providing prestige and reputational rewards, it is also seen as a proxy for output (Diamond 1986). Hence, it is often taken into account by institutions both for attracting scientists and academics and also for promotion and for salaries.

latter group is not only more productive, but also more committed to the institution and works longer hours.[12] Thus, it may be that institutions will in the long term pay dearly for some of the savings they are making in the short term.

If many would doubt that current practices regarding incentives would have a major positive effect on faculty's productivity, especially regarding research activity and publications, this increasing correlation between academic performance and payment raises other types of concerns.[13] The increasing willingness of academic institutions to adjust financial rewards to productivity, especially research institutions, leads to growing wage inequality among faculty. The possibility to do this is still very diverse across Europe, though the trend towards greater privatization and administrative institutional autonomy will create more opportunities to differentiate academic salaries. This will certainly create tensions among academics, depending on the perceptions of fairness and how these new reward systems will be consensualized within the institution.

Higher education institutions should also devote more attention to this widening of salaries and employment because of its potential impact on individual and institutional behaviour and the ways it may affect the organizational and social capital of their institutions. For instance, some research has indicated that an environment of greater pay inequality will lead to a reduction in faculty's degree of satisfaction and collaboration (Pfeffer and Langton 1993). This will tend to affect more those employees without tenure, those that earn less and those that work in more recent fields where issues of prestige and reputational rewards are less consolidated. Public universities tend to be more affected by these negative effects since they run against deeply entrenched organizational values and practices of homogenous pay scales. Large universities also tend to be more affected by these effects, since knowledge about pay scales is more transparent and more widespread.

Moreover, the concern with linking performance and rewards may create significant institutional challenges. There is some evidence questioning the ability of academics to excel in both research and teaching and the detrimental effect to individual and institutional performance of institutional or national policies that incentivise both teaching and research and/or that promote the same profile across faculty members. As Fairweather notes, "policies meant to encourage teaching productivity and effectiveness might adversely affect individual research productivity, and vice versa. More complex and potentially successful policies might reward teaching and research productivity differently at distinct points in the faculty career. Alternatively, rather than having a single broad institutional expectation for faculty work, academic policies might differentiate individual faculty responsibilities and allocate rewards accordingly. In its most radical form, this alternative might lead to the 'unbundling' of faculty work responsibilities with differential work assignments, expectations, and rewards. For most academic departments, the key to increasing teaching and research productivity may lie in looking for group solutions rather than

[12] However, more studies need to be developed to assess if these groups are comparable or not, or if institutions are sorting according to research potential.

[13] For a critical review of productivity rewards see Rhoades (2001).

on relying on each faculty member to increase productivity levels in teaching and research. Viewing faculty productivity as an aggregate across faculty members permits department chairs and departmental committees to combine the efforts of their individual members to achieve acceptable levels of productivity." (2002, p. 44). Thus, higher education institutions need to develop more policies that may support both individual and institutional performance in a sustainable and effective way if they want to thrive in an increasingly market-oriented higher education sector.

3.5 Concluding Remarks

The increasing influence of marketization has been pervading our views about higher education and has had a growing influence on the labour arrangements that European higher education institutions establish with academics and researchers. Three major effects may be highlighted. First, and under the pressure of managerial and financial concerns, higher education institutions have been increasingly differentiating the types of contracts offered to academics, especially new ones, which tend to be characterised by a much weaker institutional commitment. This trend tends to be enhanced by the combination of a growth in the number of candidates and an attempt to circumvent existing regulations. Second, institutions are more attentive to patterns of productivity and tend to integrate this in their management of academic resources. Third, institutions, (especially research institutions) have been focusing on the financial rewards provided to academics and the way this may reflect different patterns of output.

The influence of these trends seems to be contributing to the emergence of a very different labour market for academics. On the one hand, there are signs of increasing segmentation in the market, though we do not have strong evidence of how fluid or how segmented mobility is between different employment situations and this may vary across disciplines, types of institutions, and higher education systems. On the other hand, Europe is likely to be replicating trends observed elsewhere with increasing inequality among researchers – inequality not only with respect to stability of employment, but also salaries and other non-pecuniary benefits. Although European academic labour markets are still more regulated than those existing in other regions of the world (see Altbach 2003), the trend towards greater institutional autonomy and managerial flexibility will create more favourable conditions for the emergent inequalities, entrenching their position. Hence, academic careers may be evolving towards a situation where we will observe a growing coexistence of the protected labour relations that characterise elite professions, with more precarious and less favourable ones that one could ironically characterise the careers of what could be termed a kind of intellectual proletarians.

Although the trends point to the strengthening of market forces and to the reduction in some government regulation, the overall picture may be more complex. Two issues that deserve significant attention are, on the one hand, to what extent marketization trends in other aspects of higher education will reinforce each other and, on

the other hand, how significant will national differences remain. The growing pervasiveness of marketization and privatization in aspects such as funding sources is likely to have a major impact at the organizational level and in the management of human resources, thus reinforcing those trends therein. Likewise, a more market-oriented academic workforce is likely to enhance greater diversification of funding streams.

The impact of these trends is likely to be shared to different degrees across the EHEA. Moreover, the strong national identity of HE systems and the persistent levels of government regulation should ensure that this would remain the case. However, the growing integration within the EHEA will spur these trends across national borders, especially for those institutions that have a higher degree of international integration (which are also often among the most prestigious in each country). Hence, despite national specificities, one may expect in the near future a growing homogeneity in the degree of influence of marketization forces across the EHEA. Overall, we hope that this text has helped draw more attention to the effect that market forces are having in moulding the European academic labour markets.

References

Allison, P. D., & Scott Long, J. (1974). Productivity differences among scientists: Evidence for accumulative advantage. *American Sociological Review, 39*(4), 596–606.

Allison, P. D., & Long, J. S. (1990). Departmental effects on scientific productivity. *American Sociological Review, 55*(4), 469–478.

Altbach, P. (Ed.). (2003). *The decline of the guru*. New York: Palgrave Macmillan.

Archibald, R. B., & Feldman, D. H. (2010). *Why does college cost so much?* Oxford/New York: Oxford University Press.

Becker, G. (1993). *Human capital*. Chicago: Chicago University Press.

Bellas, M. L. (1994). Comparable worth in academia: The effects on faculty salaries of the sex composition and labor-market conditions of academic disciplines. *American Sociological Review, 59*(6), 807–821.

Bland, C. J., Center, B. A., Finstad, D. A., Risbey, K. R., & Staples, J. (2006). The impact of appointment type on the productivity and commitment of full-time faculty in research and doctoral institutions. *The Journal of Higher Education, 77*(1), 89–123.

Bok, D. (2003). *Universities in the marketplace*. Princeton: Princeton University Press.

Borjas, G. (2010). *Labor economics* (5th ed.). New York: McGraw-Hill.

Brennan, J., Locke, W., & Nadoo, R. (2007). United Kingdom: An increasingly differentiated profession. In W. Locke & U. Teichler (Eds.), *The changing conditions for academic work and careers in select countries* (pp. 163–176). Kassel: Incher.

Cain, G. (1976). The challenge of segmented labor market theories to orthodox theory: A survey. *Journal of Economic Literature, 14*(4), 1215–1257.

Clotfelter, C. (1996). *Buying the best – Cost escalation in higher education*. Princeton: Princeton U Press.

Diamond, A. M., Jr. (1986). What is a citation worth? *The Journal of Human Resources, 21*(2), 200–215.

Ehrenberg, R. G. (1991). A stock flow model of academic labor supply, NBER chapters. In: *Economic challenges in higher education* (pp. 153–173). National Bureau of Economic Research, Inc.

Ehrenberg, R. G. (1992). The flow of new doctorates. *Journal of Economic Literature, 30*(2), 830–875.

Ehrenberg, R. G. (2002). Studying ourselves: The academic labor market. *Journal of Labor Economics, 21*(2), 267–287.

Ehrenberg, R. G., & Mavros, P. G. (1995). Do doctoral students' financial support patterns affect their times-to-degree and completion probabilities? *The Journal of Human Resources, 30*(3), 581–609.

Ehrenberg, R. G., & Smith, R. S. (2003). *Modern labor economics* (8th ed.). Boston: Addison Wesley.

Ehrenberg, R. G., McGraw, M., & Mrdjenovic, J. (2006). Why do field differentials in average faculty salaries vary across universities? *The Economics of Education Review, 25*, 241–248.

Fairweather, J. S. (2002). The mythologies of faculty productivity: Implications for institutional policy and decision making. *The Journal of Higher Education, 73*(1), 26–48.

Geiger, R. (2004). *Knowledge and money*. Stanford: Stanford University Press.

Green, F. (2005). *Demanding work: The paradox of job quality in the affluent economy*. Princeton: Princeton University Press.

Huisman, J., de Weert, E., & Bartelse, J. (2002). Academic careers from a European perspective: The declining desirability of the faculty position. *The Journal of Higher Education, 73*(1), 141–160.

Johnstone, B. (2006). Cost-sharing and the cost-effectiveness of grants and loan subsidies to higher education. In P. Teixeira, B. Johnstone, M. J. Rosa, & H. Vossensteyn (Eds.), *A fairer deal: Cost-sharing and accessibility in Western higher education* (pp. 51–77). Dordrecht: Springer Science.

Kaufman, B. E., & Hotchkiss, J. L. (1999). *The economics of labor markets* (5th ed.). Forth Worth: Harcourt.

Kerr, B. (1993). The evolution of thought on the competitive nature of labor markets. In C. Kerr & P. Staudohar (Eds.), *Labor economics and industrial relations: Markets and institutions (1993)* (pp. 145–188). Cambridge: Harvard University Press.

Levine, A. (2001). Higher education as a mature industry. In P. Altbach, P. Gumport, & B. Johnstone (Eds.), *In defense of American higher education* (pp. 38–58). Baltimore: John Hopkins Press.

Levy, F., & Murnane, R. (2004). *The new division of labor – How computers are creating the next job market*. Princeton: Princeton University Press/Russell Sage Foundation.

Martinello, F. (2006). University revenues and faculty salaries in Ontario: 1970/71–2003/04. *Canadian Public Policy/Analyse de Politiques, 32*(4), 349–371.

McNulty, P. J. (1986). *The origins and development of labor economics*. Cambridge, MA: MIT Press.

Merton, R. (1973). *The sociology of science*. Chicago: The University of Chicago Press.

Melguizo, T., & Strober, M. H. (2007). Faculty salaries and the maximization of prestige. *Research in Higher Education, 48*(6), 633–668.

Musselin, C. (2005). *Le Marché des universitaires*. Paris: Presses Science Po.

Pfeffer, J., & Langton, N. (1993). The effect of wage dispersion on satisfaction, productivity, and working collaboratively: Evidence from college and university faculty. *Administrative Science Quarterly, 38*(3), 382–407.

Reskin, B. F. (1977). Scientific productivity and the reward structure of science. *American Sociological Review, 42*(3), 491–504.

Reynolds, L. G., Masters, S. H., & Moser, C. H. (1991). *Labor economics and labor relations* (10th ed.). Englewood Cliffs: Prentice-Hall.

Rhoades, G. (2001). Managing productivity in an academic institution: Rethinking the whom, which, what, and whose of productivity. *Research in Higher Education, 42*(5), 619–632.

Robin, S., & Cahuzac, E. (2003). Knocking on academia's doors: An inquiry into the early careers of doctors in life sciences. *Labour, 17*(1), 1–23.

Rumbley, L., Pacheco, I., & Altbach, P. G. (2008). *International comparison of academic salaries: An exporatory study*. Boston College Center for International Higher Education: Chestnut Hill.

Scott, P. (1995). *The meanings of mass higher education*. Milton Keynes: Open University Press.
Slaughter, S., & Leslie, L. (1997). *Academic capitalism*. Baltimore: The Johns Hopkins University Press.
Teichler, U. (2007). Germany and beyond: New dynamics in the academic profession. In W. Locke & U. Teichler (Eds.), *The changing conditions for academic work and careers in select countries* (pp. 15–38). Kassel: Incher.
Teixeira, P. (2009). Economic imperialism and the Ivory tower: Economic issues and policy challenges in the funding of higher education in the EHEA (2010–2020). In J. Huisman, B. Stensaker, & B. M. Kehm (Eds.), *The European higher education area: Perspectives on a moving target* (pp. 43–60). Rotterdam: Sense Publishers.
Teixeira, P., & Dill, D. (Eds.). (2011). *Public vices, private virtues – Assessing the effects of marketization in higher education*. Rotterdam: Sense Publishers.
Teixeira, P., Dill, D., Amaral, A., & Jongbloed, B. (Eds.). (2004). *Markets in higher education*. Amsterdam: Kluwer.
Teixeira, P., Johnstone, D. B., Rosa, M. J., & Vossensteyn, J. J. (2006). *A fairer deal? Cost-sharing and accessibility in Western higher education*. Dordrecht: Springer-Kluwer.
Tien, F. F., & Blackburn, R. T. (1996). Faculty rank system, research motivation, and faculty research productivity: Measure refinement and theory testing. *The Journal of Higher Education, 67*(1), 2–22.
Tuckman, H. P., Gapinski, J. H., & Hagemann, R. P. (1977). Faculty skills and the salary structure in academe: A market perspective. *The American Economic Review, 67*(4), 692–702.
Vabo, A. (2007). Norway: The principal-agent relationship and its impact on the autonomy of the academic profession. In W. Locke & U. Teichler (Eds.), *The changing conditions for academic work and careers in select countries* (pp. 177–194). Kassel: Incher.
Vossensteyn, J. J. (2004). *Portability of student financial support. An inventory in 23 European countries. Main Report*. Enschede: CHEPS.
Walker, J., Vignoles, A., & Collins, M. (2010). Higher education academic salaries in the UK. *Oxford Economic Papers, 62*, 12–35.
Williams, G., Blackstone, T., & Metcalf, D. (1974). *The academic labour market – Economic and social aspects of a profession*. Amsterdam: Elsevier.
Winston, G. (1999). Subsidies, hierarchy and peers: The awkward economics of higher education. *Journal of Economic Perspectives, 13*(1), 13–36.

Chapter 4
Academic Strategy in the Emerging University – A Transformational Perspective

Maria de Lourdes Machado-Taylor and Marvin Peterson

4.1 The Emergence of Transformational Change in Higher Education Institutions

Emphasis is often placed on the environmental changes and the challenges that HEIs are facing today (see Clark 1998; De Wit 2010; Dill 2003; Peterson et al. 1997; Simon and Pleschová 2012; Sporn 2001; Teichler 2006; Trowler 2002, among others). The current changes and challenges are numerous and complex and include changing demographics; reduced funding; internationalisation; the Bologna Declaration; the European Higher Education area; a mixed profile in the student population; the emergence of new post-secondary institutions; new competitors; the invasion of market forces in higher education; the global knowledge economy; a technology-driven society; increased scrutiny from the public, and increasing external demands coupled with turbulent environments (see Altbach and Teichler 2001; Clark 2005; De Wit 2010; Dill 2003; Johnstone 2004; Newman 2001; Peterson and Dill 1997; Simon and Pleschová 2012; van der Wende 2001, 2003; Weber and Duderstadt 2008). Other authors, such as Slaughter and Rhoades (2004), have warned that higher education reflects a larger societal trend toward neoliberal philosophies. Nevertheless, a highly competitive and ever increasing global environment that is in a constant state of flux may impact the work of academics and their careers as well. According to Altbach, Reisberg, and Rumbley (2009, p. xvii–xviii) the trends for the period until 2030 are:

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- "the activities and roles of the academic profession will be more diversified and specialized and subject to varied employment contracts;
- for many developing countries, the need for ever-expanding numbers of university teachers will mean that overall qualifications, now rather low, may not improve much, and current reliance on part-time staff in many countries may continue; and
- […] Cost-cutting practices at many universities will result in a deterioration of quality. More part-time faculty are likely to be hired, class sizes increased, and additional actions taken."

Therefore, authors such as Coates & Goedegebuure (2010, p. 1) contend the reconceptualization of the academic workforce and stated:

> […] partly because of the growing significance of academic work, and partly because of diverse pressures facing universities and its professional workforce. The growing significance of the academic profession is juxtaposed, almost in perfect counterpoint, by its shrinking capacity.

Nevertheless, the authors stress:

> Traditional approaches to academic work are being battered by new approaches to funding, new epistemologies and ontologies, increasing competitiveness and internationalisation, policies seeking to measure research performance, institution-specific funding compacts, reshaped tertiary architectures, stronger forms of quality control, and broader technological advances and changes in the nature of professional work. Coates & Goedegebuure (2010, p. 6).

The findings from the Changing Academic Profession (CAP) study point out the following issues surrounding the academic profession:

- a growing percentage of academic staff with higher degrees, especially doctorates;
- an increased introduction of fixed-term appointments;
- high job satisfaction;
- increased cumbersome administrative processes and a top-down management style;
- increased pressures on faculty, especially on young faculty in the research arena; and
- feminisation, especially in countries such as the USA, the UK, Japan and Mexico (Huang 2008; RIHE 2008).

Recent works on strategic planning and institutional strategy suggest an evolutionary shift in how institutions are responding to their rapidly changing external environments (Taylor et al. 2008). These changes, in turn, suggest that the academic structure, work and academic careers are changing or may need to change in significant ways. This chapter looks at those institutional changes, their implications for the academic structure and for academic work and careers.

The evolution of the literature on colleges and universities as organisations provides a context for this argument and reflects the changing nature of our institutions in the relationship with their environment. Peterson (2007), in his analysis of the evolutionary nature of our models of colleges and universities as organisations, documents two important interrelated changes over the past half century. He argues that the nature of our industry and our primary models of colleges and universities as organisations have changed and that they are largely reflections of or are impacted by the nature of our environment. During that period we have moved from our traditional view of a "higher education" industry in which colleges and universities were essentially closed to environmental influences; to "mass higher education", where colleges and universities selectively responded to environmental pressures; to "postsecondary education", where institutions adopted an interactive or adaptive response to the environment; and to what now is an emerging "postsecondary knowledge industry", in which institutions are interdependent with their environment and respond to it in more proactive or entrepreneurial ways.

This analysis compares our current "postsecondary knowledge environment" to earlier eras and characterises it as one that is subject to more rapid change, turbulence and unpredictable expectations (Taylor et al. 2008). Different authors have identified numerous pressures in this environment, but they typically include elements such as: stress on student diversity, telematics (information and communication revolution), new non-traditional learning markets, external demand for quality, contributions to economic productivity and globalisation, among others (see Peterson 1999, 2007; Taylor et al. 2008).

During this transition, our views of the nature of our industry, our environment and our models of institutions as organisations have not only shifted but so have our views of planning – going from "planning" (creating plans of what we want to become); to "long range planning", where institutions plan for some predictable future; to "strategic planning", where institutions strategically interact with the environment; and now to "contextual planning", in which institutions partner with segments of their environment or even try to exert external influence on it. According to Peterson (1999), contextual planning incorporates strategic planning, but goes further. The author defines contextual planning as

> […] a new strategy for or approach to planning that may be more appropriate for a turbulent environment in which the character of the postsecondary system or industry is also in a state of flux. Contextual planning deals with redesigning the *context*, both in the external environment and within the organization (Peterson 1999, p. 60).

The research studies on "adaptive universities" by Barbara Sporn (1999a, b, c, 2001) and on "entrepreneurial universities" by Burton Clark (1998, 2005) characterise the nature of new emerging models of universities that are highly responsive to and interact proactively with their environment. In studying institutions that have successfully adapted to the new postsecondary knowledge environment the authors have identified some key organisational characteristics.

Sporn (1999c, 2001) argues that there is a link between the organisation and its environment. In this relationship, colleges or universities are shaped and adapted.

> One common response is to restructure, aiming at increased flexibility, efficiency and effectiveness. This involves new procedures to manage the relationship with the environment (e.g., fundraising, alumni relations, technology transfer), new authority structures within universities, and new ways of resource allocation (Sporn 2001, p. 122).

Moreover, this author states

> An adaptive university would consists of academic units like departments or institutes with redefined and differentiated roles and responsibilities. Academic freedom would be used to meet needs and expectations of external and internal constituencies, and serve the institution rather than the discipline. Through shared governance, professional management and committed leadership, a 'triangle of partnership' could be formed between administration and faculty. Administration increasingly uses management techniques to run the institution and to support core academic activities. Through wide-ranging participation of all major groups in a model of shared governance, important and critical decisions can be made and implemented more easily. Committed leaders provide necessary financial and visionary support for change and adaptation (Sporn 2001, p. 132).

In his renowned book, *Creating Entrepreneurial Universities: Organizational Pathways of Transformation,* Burton C. Clark (1998) identified five elements necessary for the transformation to an entrepreneurial and really innovative university. These are: a strengthened steering core; an expanded developmental periphery; a diversified funding base; a stimulated academic heartland; and an integrated entrepreneurial culture.

Other authors, such as Slaughter and Leslie (1997), see universities functioning increasingly as market organisations with the academics becoming entrepreneurs. The authors argue that globalisation is destabilising patterns of university professorial responsibilities and state that "academics, at least in publicly funded universities, are employed by the public sector but they are actually performing the role of capitalists who strike for extra resources for their working institutions. In this sense, therefore, academics are simultaneously state-subsidized entrepreneurs." (Slaughter and Leslie 1997, p. 8). The authors continue to state that the faculty see entrepreneurial work as an "[…] extension of the research in which they were traditionally engaged or, in the case of intellectual property, as a justifiable extension of that work." (Slaughter and Leslie 1997, p. 20).

Interestingly, most of the above analysis and the research of Sporn and Clark have only marginally touched on the implications for the academic structure, work and careers. The change and the pressures that HEIs are facing today suggest the need for some reflections on the analysis of academic careers. For instance, Slaughter and Leslie (1997, p. 1) argue that "[…] higher education as an institution and faculty as its labour force face change unprecedented in this century." However, it is possible to examine these changes and to infer some important changes in these areas that are already emerging. The next two sections address these areas.

4.2 Transforming the Academic Structure

Examining the nature of our new postsecondary knowledge environment and changes already occurring in our institution allows us to identify several dimensions of the academic structure that are changing or may be substantially different from our traditional views of the academic structure. The following table identifies some of these dimensions (Table 4.1).

4.2.1 Knowledge Structure

The global trends are forcing higher education at the national and institutional levels to adapt and evolve in order to respond to pressures.

According to Arimoto (2008, p. 3), there is "a transition from knowledge-based society 1 (KBS1), where university and society were clearly separated from each other, to kbs2, where university and society have become borderless on the basis of a shift from mode 1 to mode 2". The transition implies a 'strategic reconstruction' (see Fig. 4.1).

There are new providers of higher education; the new ways to deliver higher education and new interconnections and networks between divergent institutions are leading to the transformation of HEIs and, consequently, their faculty roles (Peterson 1999; Peterson and Dill 1997).

An increasing mobility of scholars and students attempt for internationally recognised standards between the national higher education systems. At the same time, one cannot ignore today the greater mobility of human resources and the natural appetite that individuals have for knowledge, which translates into various types of demands from young people (traditional students), and others such as adults, businesses seeking for permanent training of their staff members, governments looking

Table 4.1 New perspectives of academic structure

Academic area	Traditional	Adaptive/entrepreneurial
Knowledge	Disciplines	Interdisciplinary areas
Structure	Professions	Problems/challenges
Educational	Teaching	Learning outcomes
Process	Content Mastery	and Skills
Research Role	Disciplinary	Cross disciplinary emphasis
and Emphasis	Theory/Methods	and Integration
Educational	Objective Student	Learning improvement
Performance	and Program	Outcomes assessment
	Measures	
Faculty academic	Individualised	Team/Interdisciplinary
Performance	Traditional	Flexibility
	Measures	Initiative

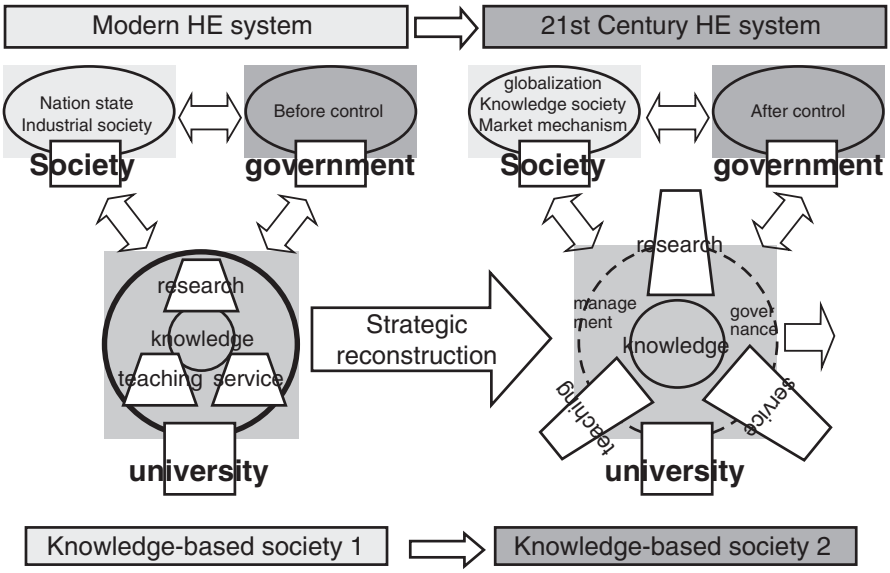

Fig. 4.1 Knowledge, society and university (Source: Arimoto, A. (2008). International Implications of the Changing Academic Profession in Japan. In RIHE, The Changing Academic Profession in International Comparative and Quantitative Perspectives. *RIHE International Seminar Reports*, no. 12. Hiroshima University: Research Institute for Higher Education)

for new information and individuals who are going to other countries for specific specialisations.

As stated by Winckler (2008, p. 73),

> Universities are key players in Europe's future and for the successful transition to a knowledge-based economy and society. The knowledge-based economy will also dramatically change the role and the manner of research and teaching: scientists will be able to work worldwide, not necessarily located at a particular university and a large amount of data and research tools will be freely available through the net (a good example for ongoing developments are free economic and census data as well as free analysis programmes). In the framework of these ongoing developments, the role and the definition of a scientist will change. More people will be engaged in the "production of knowledge". Universities are well advised to take these developments into account.

According to Kezar and Maxey (2015), HEIs are under increasing public pressure facing economic challenges and uncertain revenue. Nevertheless, the student population is becoming more diverse. Therefore, academic leaders want greater assurances that faculty members conduct academic work in ways that meet institutional missions and goals. As a result, a tendency to search for human resources with superior academic degrees and high qualifications is anticipated.

4.2.2 Educational Process

The necessities of the employment market in modern times demand education programs, which are more directed toward a reality where information is increasingly available, a reality of new structures of learning, new models of evaluation and change in didactic methods (Simon and Pleschová 2012). Given the tendency towards a more diversified student population in search of continuing education, HEIs tend to refresh courses, improve and deepen distance learning methods. The initial scientific, technical and cultural education needs to address the degree to which the expectations of the students with diplomas were satisfied after their integration into the labour market. In the adaptive/entrepreneurial university, the opinion of the employers should be taken into consideration with regard to curriculum structures. Courses and learning services should be appropriately innovative, reviewed, validated and developed to meet stakeholders' requirements. As stressed by Altbach, Reisberg and Rumbley (2009, p. xv),

> It has been said that the traditional university will be rendered obsolete by information technology, distance education, and other technology-induced innovation. The demise of the traditional university will, in our view, not take place any time soon. In many developing countries new technologies are often considered the key for increasing access to higher education.

Another educational process is the distance education, which "[…] represents an area of enormous potential for higher education systems around the world struggling to meet the needs of growing and changing student populations" (Altbach et al. 2009, p. xvi).

Today, quality issues are on the policy agenda in many national higher education systems. Postsecondary education has to prepare graduates with new skills, a broad knowledge base and a range of competencies to enter a more complex and interdependent world. The globalisation drives more and more students to require from the "post-secondary" education the compatibility of educational qualifications.

An increasingly diverse student body also creates pressure to put in place new systems for academic support and innovative approaches. There is a progressive seeking from the active population coming back to 'college'. Moreover, one can observe an increasing international mobility of international students (Altbach et al. 2009; Gürüz 2008).

Furthermore, as stressed by Winckler (2008, p. 72),

> The Bologna Process should also enhance the vertical mobility of graduates in the sense that one earns a Bachelor's degree in country A, a Master's degree in country B and a Ph.D. in country C. The cross-border employability of graduates has to follow the increased internationalization of economies in Europe which can be witnessed by increased foreign direct investment and the high export and import ratios of GDP.

4.2.3 Research Role and Emphasis

The expenditure in research in the European Union has increased over the last years. However, according to Altbach et al. (2009, p. xiv),

> The three missions of the modern university – teaching, research and public service – live in constant tension with each other at different levels. Universities, to the extent that they enjoy autonomy to develop their own plans and programs, must make hard choices in setting priorities and allocating resources.

There is a shift from disciplinary based research to interdisciplinary examples – either examples of how different interdisciplinary researches are or what different types of units are emerging – e.g., studying climate change requires academics from very different disciplines to work together – probably in research teams from different departments or new interdisciplinary units dedicated to climate change research.

4.2.4 Educational Improvement Performance

In Macfarlane's book (2012) *Intellectual leadership in higher education: Renewing the role of the university professor,* the author observes that academic identity is more aligned with subject discipline, rather than with institutional objectives.

> While it is difficult to generalize globally, the mission of most institutions in most countries today is to teach less of the basic disciplines and offer more in the way of professional programs to a far wider range of students than in the past. Questions about curriculum and higher education's purpose are particularly salient in developing regions where emerging economies require both specialists trained for science and technical professions as well as strong leaders with generalist knowledge who are creative, adaptable, and able to give broad ethical consideration to social advances (Altbach et al. 2009, p. viii).

The previous paragraph speaks of the shift from disciplines to applied or professional programs. However, is there a concern for focusing on what students learn (outcomes) and on assessment of that learning, and not just on content or on what they study?

A significant concern about the involvement of faculty-students and students' has increased (Pascarella and Terenzini 1995). To foster good student development faculty need to create conditions for an active learning and to become more involved than ever (Colby et al. 2003; Sorcinelli et al. 2006).

4.2.5 Faculty Academic Performance

What is changing in what faculty does?

Faculty cannot operate just as individuals in much of their work, but rather as parts of teams, i.e., they cannot be just experts in their own disciplines who primarily

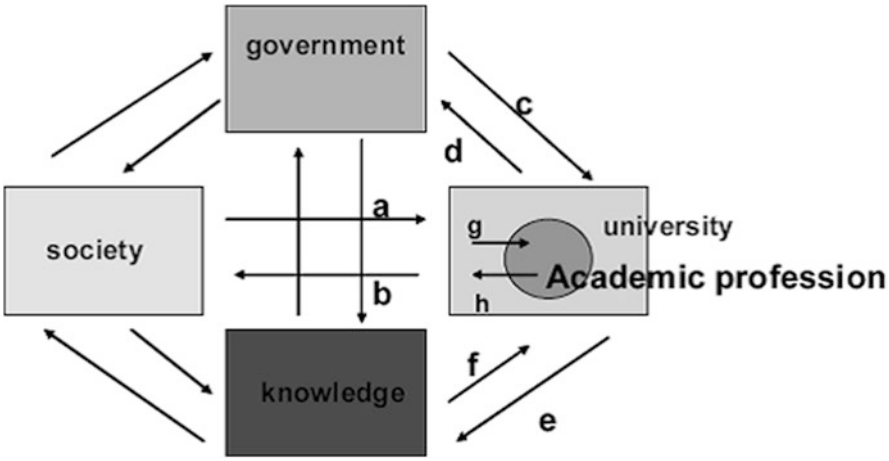

Fig. 4.2 Environmental change of the academic profession (Source: Arimoto, A. (2008). International Implications of the Changing Academic Profession in Japan. In RIHE. The Changing Academic Profession in International Comparative and Quantitative Perspectives. *RIHE International Seminar Reports*, no. 12. Hiroshima University: Research Institute for Higher Education) (*Arrow a* – to identify (the development of knowledge-based society orientation, globalisation, and marketization in the international, national and regional societies); *Arrow b* – the functions that the academic profession contributes to society; *Arrow c* – to identify the effects that national government (mainly through higher education policy and plans on budgets, academic affairs, evaluation, etc. and on the governance of the university) impose on the academic profession; *Arrow d* – the functions that the academic profession contributes to the government. *Arrow e* – to identify the effects that knowledge (differentiation and integration of knowledge, reconstruction of knowledge, the international scientific community and research network related to individual discipline) provides for the academic profession; *Arrow f* – the contributions that the academic profession makes to knowledge through academic work; *Arrow g* – to identify the effects that university (system, sector, section, hierarchy) has on the academic profession; *Arrow h* – the functions that the academic profession gives to the university)

interact with their own types, but need to have an openness to other ways of structuring knowledge and of using different disciplines in an interdisciplinary manner to address both teaching topics and research topics.

Several authors emphasise the effects of changes that are occurring and the need for academics to reconstruct roles and functions (see Arimoto 2008, Fig. 4.2).

Moreover, as stressed by Altbach et al. (2009, xiii), "In terms of accountability and assessment, the professoriate has lost much of its autonomy. The pendulum of authority in higher education has swung from the academics to managers and bureaucrats, with significant impact on the university". Macfarlane (2012) sees the pressure on academics to perform and be judged by a set of metrics that is leading to the "commercialization and corporatization of academic labor."

On the other hand, research on faculty job satisfaction, motivation and well-being is perceived to play a major role in faculty productivity and commitment with institutional objectives (Blackburn and Lawrence 1995; Machado-Taylor et al. 2013; Santiago et al. 2014).

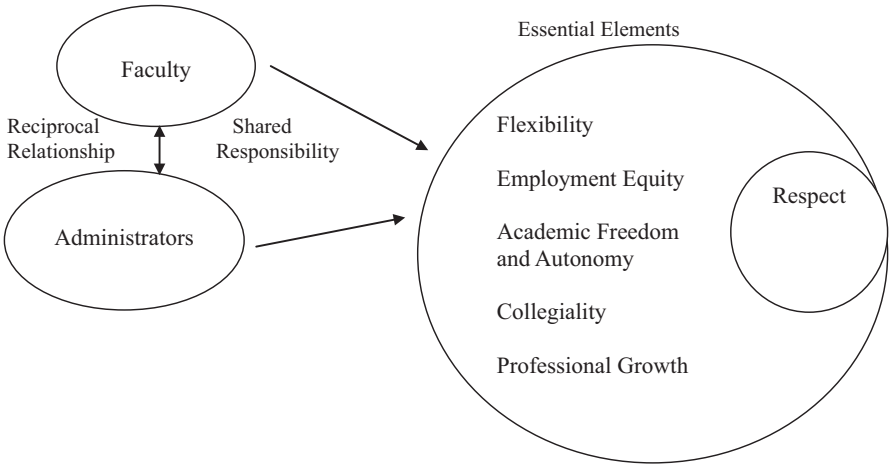

Fig. 4.3 Impact of faculty and institutional characteristics on the essential elements (Source: Gappa, J. M. (2010). Rethinking Faculty Work and Workplaces. In Gordon, G. & Whitchurch, C. (Eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*, New York and London, Routledge)

According to Gappa (2010, p. 216), there are five essential elements of faculty work:

- "Employment equity;
- Academic freedom and autonomy;
- Flexibility;
- Professional growth;
- Collegiality" (see Fig. 4.3).

Nevertheless, according to authors such as Dill and Helm (1999) faculty participation in strategic policy making is desirable and should be incremented. When all the essential elements are incorporated, academics tend to have greater commitment. On the other hand, institutions that incorporated the essential elements should expect to attract and retain excellent and diverse academics. (see Gappa 2010).

Clearly the emerging adaptive and entrepreneurial forms of academic structure suggest very different modes of organising and viewing the academic offerings of an institution and suggest a different agenda for academic planning.

4.3 Some Implications for Academic Work and Careers in the Transformed Institution

The emergence of a transformed structure in entrepreneurial and adaptive HEIs clearly has important implications for academic work and careers of faculty. Several are either explicit or implicit in the preceding discussion.

4.3.1 While Disciplinary Departments are Likely to Continue, Many Faculty are More Likely to Work in Academic Structures, Centres or Programs that are Problem Centred

The management of human resources constitutes one of the principal keys to the performance of the HEI. Academic staff unequivocally forms the nerve centre of an organisation. The functioning and results of an institution depend, in the final analysis, on the manner in which academics respond to what is expected of them and their contribution to the pursuit of determined goals. The primary task of all faculty should be to satisfy the stakeholders by meeting their requirements and exceeding their value expectations.

Gappa et al. (2007), in their book *Rethinking Faculty Work: Higher Education's Strategic Imperative*, emphasise that promoting recruitment and retaining talented faculty members optimises the utilization of human and intellectual capital. Moreover, the authors believe that improving faculty work conditions, such as equity, academic freedom, ensuring flexibility, promoting collegiality and the professionalism of faculty helps to promote institution's goal attainment.

As stressed by Kezar and Maxey (2015, p. 8),

> The erosion of a strong and well established academic profession, in the absence of new visions to replace the status quo, has implications for a broader deterioration of the higher education enterprise as a whole; how can our institutions continue to produce high-quality research, learning outcomes, and leadership for society without maintaining and supporting a robust academic profession?

4.3.2 The Focus on Learning, Rather than on Teaching, will Alter the Nature of Academic Work

The focus on learning, rather than on teaching, will alter the nature of academic work and requires more emphasis on how students learn and guide their learning, rather than more common directive teaching methods.

Authors such as Trigwell and Prosser (1997, p. 250) stated that "teachers do not experience the same world, and students do not experience the same world as that which teachers have designed". Other authors, such as Barnett (2000, p. 157), stressed that we need to prepare our students for an "unstable" world, "where one's assumptions are challenged daily" and where "changing standards and the globalization of problems dislodge any felt security over one's inner frameworks".

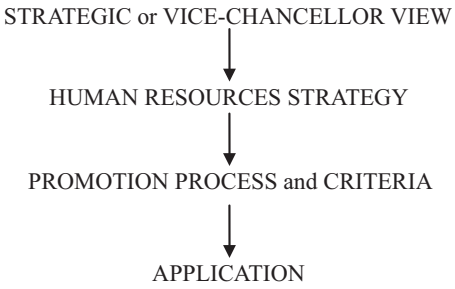

Fig. 4.4 Strategic construction of an academic career (Source: Strike, T. (2010). Evolving Academic Career Pathways in England. In Gordon, G. & Whitchurch, C. (Eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*, New York and London, Routledge)

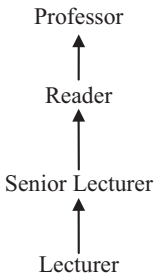

Fig. 4.5 First emergent academic career model: Unitary, exclusive, linear traditional career model (Source: Strike, T. (2010). Evolving Academic Career Pathways in England. In Gordon, G. & Whitchurch, C. (Eds.), *Academic and Professional Identities in Higher Education: The Challenges of a Diversifying Workforce*, New York and London, Routledge)

In turn, Newby (2008, pp. 57–58) reminds us that

> Today's universities are expected to engage in lifelong learning (not just "teaching"), research, knowledge transfer, social inclusion (via widening participation or "access" for non-traditional students), local and regional economic development, citizenship training and much more inclusion (via widening participation or "access" for non-traditional students), local and regional economic development, citizenship training and much more.

4.3.3 The Making of Formal Procedures to Hire Academics

In the strategic model the organisational strategy influences the human resources strategy as developed by the human resources director. The new academic career structure is, then, subject to consultation. Policymakers proceed with assistance from the human resources department (see Fig. 4.4).

However, according to Strike (2010), there are emergent career models such as the one pictured in Fig. 4.5.

4.3.4 *Faculty Educational Performance will More Likely Be Judged Based on Assessment of Student Learning and Improvement than Traditional Grading Practices*

More and more the quality of a HEI is based on the quality of its products, rather than on its reputation or its resources. The quality is closely connected to institutional performance. The quality of the students and the quality of the institution are crucial factors of the reputation of an institution.

Quality needs to be a systematic approach to the search for excellence; it should aim for a continual increase of customer satisfaction, perhaps even exceeding their expectations. Simon and Pleschová (2012) discuss how quality assurance practices influence classroom teaching and tend to influence faculty behavior.

The search for efficiency in the use of resources, the examination of organisational effectiveness, the improvement of the internal functional conditions – all these functions are linked, in some way, to the improvement of productivity, product, processes, and quality of the management of the organisation. The development of accurate measurement of productivity helps the organisation become distinctive and competitive.

4.3.5 *Similarly Faculty Selection*

Similarly faculty selection (and therefore preparation) may emphasise interdisciplinary preparation and experience, capacity to work in teams, study of or knowledge of student development, learning and assessment to a greater degree.

International mobility makes advisable a policy of continuing qualification of the teaching staff. The qualification of the faculty must become a key strategy; for the HEIs faced with the evolution of scientific and technological knowledge, the need of training teachers is most urgent. Also research should be encouraged as a means of generating new knowledge and of positioning the HEI as a permanent production centre of innovation.

Moreover, authors such as Kezar and Maxey (2015, p. 33) contend that, in our days, higher education leaders

> […] developing a plan for redesigning the faculty, involves a more complex process. It entails that campus leaders identify the type of faculty that is needed to meet the outcomes and goals generated through the examination of institutional and community priorities. We believe that this redesign process requires reflecting upon and articulating four main considerations:
>
> 1. Core elements for professionalism in all faculty roles;
> 2. Institutional needs and mission;
> 3. Stakeholder input and institutional accountability; and,
> 4. Consideration of the higher education landscape and context.

4.3.6 Multiple Academic and Institutional Cultures

Clark (1983) refers to the multiple academic and institutional cultures found within a HEI. Sporn (1996, p. 41) commented that "although most authors agree on the influence of culture on academic institutions it is not clear how university culture functions." Furthermore, the author refers to cultural diversity as a challenge for higher education institutional management. More recently, Salminen (2003) distinguished four categories of culture and values: academic, entrepreneurial, bureaucratic and managerial. The author states that

> […] the academic dimension consists of such things as freedom, criticism and substantive rationality. The entrepreneurial culture values profit-making, fair play, and private and individual initiative; the bureaucratic model likes values of legalism, neutrality and formal rationality; and the managerial model embraces values of efficiency, results orientation and goal rationality (Salminen 2003, p. 65).

One of the shifts commonly observed within the cultural and internal environment of HEIs is the tension between academic values and governmental and administration values (Gornitzka et al. 2003).

4.3.7 Globalised Academic Labour Market and Increasing Influx of Academics is Noticed

A "brain drain" from many countries, including many professionals from Europe who are seeking higher salaries in other higher education systems, is a challenge (see Altbach et al. 2009). For instance, Winckler (2008) stressed that "An attractive Higher Education and Research Area has to be created: attracting scientists and students from over the world — avoiding brain drain." Moreover,

> The European education and research system should be diversified at all levels, as well as on the grant system level. The diversification should not be ordered from above, but should be the outcome of a bottom-up process, driven by appropriate incentive schemes (Winckler 2008, p. 73).

4.3.8 The Demographic Developments

HEIs and academic staff should be prepared for a different and diversified body of students. We do have older (not necessarily "elderly") students, more part time students, more practically inclined students, more minority students – all these are issues that faculty face today. The students are no longer the traditional 18–22 year old, full time students. These have implications for what and how faculty teach.

4.4 Conclusion

Higher Education, both on the national and institutional levels, is increasingly confronted with the following dilemma: how to reconcile structures in change, scarce resources and strategies that implement adequate policies in order to respond to diverse demands put on it by individuals, by the economy and by a society with new needs of an economic, political and social nature. Clearly the emergence of a post-secondary knowledge industry and the new challenges and pressures that it brings to HEIs has extensive implications for our institutions' academic structure and for the nature of faculty work and their careers.

Guiding these changes in the decade ahead will require that institutional leaders and policy makers give more attention to faculty academic work and career patterns, as well as to the institutional strategy, and to examine the nature of the academic work force in HEIs institutions. They need to adapt to the new reality by re-examining objectives, structures, functions and strategies related to academic work and careers in order to make a better contribution to economic, social and political development.

The emergence transformational change of HEIs clearly has important implications for academic work and careers of faculty. HEIs will need to respond to this challenge by endeavoring for quality. Though, the importance of faculty role have already been recognized. Faculty is a key resource in strategy delivery and support for activities the HEIs wants to develop. Therefore, HEIs should develop policies to foster faculty career development, which addresses the entrepreneurial agenda and is tailor made for their own key goals.

References

Altbach, P. G., & Teichler, U. (2001). Internationalization and exchanges in a globalized university. *Journal of Studies in International Education, 5*(1), 5–25.

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher education: Tracking an academic revolution* (A report prepared for the UNESCO 2009 world conference on higher education). Paris: United Nations Educational, Scientific and Cultural Organization.

Arimoto, A. (2008). International implications of the changing academic profession in Japan. In RIHE (Ed.), *The changing academic profession in international comparative and quantitative perspectives* (RIHE international seminar reports, Vol. 12). Higashi-Hiroshima: Hiroshima University, Research Institute for Higher Education.

Barnett, R. (2000). *Realising the university in an age of supercomplexity*. Buckingham: Society for Research into Higher Education/Open University Press.

Blackburn, R. T., & Lawrence, J. H. (1995). *Faculty at work: Motivation, expectation, satisfaction*. Baltimore: Johns Hopkins University Press.

Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. Berkley/Los Angeles: University of California Press.

Clark, B. R. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation*. Oxford: IAU Press/Pergamon.

Clark, B. R. (2005). *Sustaining change in universities*. London: Open University Press, McGraw Hill Education.

Coate, H., & Goeedebuure, L. (2010). *The real academic revolution*. Research Briefing- Changing Academic Profession, LH Martin Institute for Higher education Leadership and Management, Carlton, VIC, Australia.

Colby, A., Ehrlich, T., Beaumont, E., & Stephens, J. (2003). *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco: Jossey-Bass.

De Wit, K. (2010). The Networked University: The structure, culture, and policy of universities in a changing environment. *Tertiary Education and Management, 16*(1), 1–14.

Dill, D. (2003). Allowing the market to rule: The case of the US. *Higher Education Quarterly, 57*(2), 136–157.

Dill, D., & Helm, K. P. (1999). Faculty participation in strategic policy making. In M. Peterson (Ed.), *ASHE reader on planning and institutional research* (pp. 439–463). Needham Heights: Pearson Custom Publishing.

Gappa, J. M. (2010). Rethinking faculty work and workplaces. In G. Gordon & C. Whitchurch (Eds.), *Academic and professional identities in higher education: The challenges of a diversifying workforce*. New York/London: Routledge.

Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work: Higher education's strategic imperative*. San Francisco: Jossey-Bass.

Gornitzka, A., Kyvik, S., & Stensaker, B. (2003). Implementation analysis in higher education. In J. C. Smart & W. G. Tierney (Eds.), *Higher education: Handbook of theory and research*. Dordrecht: Kluwer.

Gürüz, K. (2008). *Higher education and international student mobility in the global knowledge economy* (p. 333). New York: State University of New York Press.

Huang, F. (2008). Preliminary findings and discussions about the characteristics of the changing academic profession in fifteen countries and regions: An international, comparative and quantitative perspective. In RIHE (Ed.), *The Changing academic profession in international comparative and quantitative perspectives* (RIHE International Seminar Reports, Vol. 12). Higashi-Hiroshima: Hiroshima University: Research Institute for Higher Education.

Johnstone, B. (2004). Cost-sharing and equity in higher education. In P. Teixeira, B. Jongbloed, D. Dill, & A. Amaral (Eds.), *Markets in higher education: Rhetoric or reality*. Dordrecht: Kluwer Academic Publishers.

Kezar, A. & Maxey, D. (2015) *Adapting by design: Creating faculty roles and defining faculty work to ensure an intentional future for colleges and universities*. Delphi Project on the Changing Faculty and Student Success. www.thechangingfaculty.org.

Machado-Taylor, M. L., Meira Soares, V., Brites Ferreira, J., Brites, R., Farhangmehr, M., & Gouveia, O. M. R. (2013). Job (in) satisfaction among academics in Portuguese higher education institutions. *Journal of the European Higher Education Area, 2*, 69–94.

Marcfalane, B. (2012). *Intellectual leadership in higher education. Renewing the role of the university professor*. New York: SRHE.

Newby, H. (2008). The Challenge to European universities in the emerging global market place. In L. E. Weber & J. J. Duderstadt (Eds.), *The globalization of higher education* (Glion Colloquium Series, Vol. 5, p. 74). London: Economica.

Newman, F. (2001). *The new competitive arena: Market forces invade the academy. The futures project: Policy for higher education in a changing world*. Retrieved September 23, 2002, from www.futuresproject.org.

Pascarella, E. R., & Terenzini, P. T. (1995, fall). The impact of college on students: Myths, rational myths and some other things that may not be true. *NACADA Journal*, *15*(2), 26–33. Edward-Lynne Jones & Associates.

Peterson, M. W. (Ed.). (1999). *ASHE reader on planning and institutional research*. Needham Heights: Pearson Custom Publishing.

Peterson, M. W. (2007). The study of colleges and universities as organizations. In P. J. Gumport (Ed.), *Sociology of higher education: Contributions and their contexts* (pp. 147–184). Baltimore: The John Hopkins University Press. ISBN 0-8018-8615-5.

Peterson, M. W., & Dill, D. (1997). Understanding the competitive environment of the postsecondary knowledge industry. In M. Peterson, D. Dill, & L. Mets (Eds.), *Planning and management for a changing environment* (pp. 3–29). San Francisco: Jossey-Bass.

Peterson, M. W., Dill, D. D., & Mets, L. A. (1997). *Planning and management for a changing environment: A handbook on redesigning postsecondary institutions* (1st ed.). San Francisco: Jossey-Bass.

RIHE. (2008). *The changing academic profession in international comparative and quantitative perspectives* (RIHE international seminar reports, Vol. 12). Higashi-Hiroshima: Hiroshima University: Research Institute for Higher Education.

Salminen, A. (2003). New public management and Finnish public sector organizations: The case of universities. In A. Amaral, V. L. Meek, & I. Larsen (Eds.), *The higher education managerial revolution?* Dordrecht: Kluwer Academic Publishers.

Santiago, R., Sousa, S., Carvalho, T., Machado-Taylor, M. L., & Dias, D. (2014). Teaching and research: Perspectives from Portugal. In J. C. Shin, A. Arimoto, W. K. Cummings, & U. Teichler (Eds.), *Teaching and research in contemporary higher education*. Dordrecht: Springer Netherlands. doi:10.1007/978-94-007-6830-7.

Simon, E., & Pleschová, G. (2012). *Existing programs, program impact, and future trends. Teacher development in higher education*. New York: Routledge.

Slaughter, S., & Leslie, L. (1997). *Academic capitalism: Politics, policies and the entrepreneurial university*. Baltimore: Johns Hopkins University Press.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore: Johns Hopkins University Press.

Sorcinelli, M. D., Austin, A. E., Eddy, P. L., & Beach, A. L. (2006). *Creating the future of faculty development. Learning from the past, understanding the present*. Bolton: Anker Publishing Company.

Sporn, B. (1996). Managing university culture: An analysis of the relationship between institutional culture and management approaches. *Higher Education, 32*, 41–61.

Sporn, B. (1999a). *Adaptive university structures*. London: Jessica Kingsley Publishers.

Sporn, B. (1999b). *Adaptive university structures: An analysis of adaptation to socio-Economic Environments of US and European Universities*. London: Jessica Kingsley Publishers.

Sporn, B. (1999c). Towards more adaptive universities: Trends of institutional reform in Europe. *Higher Education in Europe, 24*(1), 23–33.

Sporn, B. (2001). Building adaptive universities: Emerging organisational forms based on experiences of European and US universities. *Tertiary Education and Management, 7*, 121–134.

Strike, T. (2010). Evolving academic career pathways in England. In G. Gordon & C. Whitchurch (Eds.), *Academic and professional identities in higher education: The challenges of a diversifying workforce*. New York/London: Routledge.

Taylor, J. S., Machado, M. L., & Peterson, M. (2008). Leadership and strategic management: Keys to institutional priorities and planning. *European Journal of Education, 43*, 369–386.

Teichler, U. (2006). Changing structures of the higher education: The increasing complexity of underlying forces. Systems. *Higher Education Policy, 19*(4), 457.

Trigwell, K., & Prosser, M. (1997). Towards an understanding of individual acts of teaching and learning. *Higher Education Research and Development, 16*, 241–252.

Trowler, R. (Ed.). (2002). *Higher education policy and institutional change: Intentions and outcomes in turbulent environments*. London: SRHE.

van der Wende, M. (2001). The international dimension in national higher education policies: What has changed in Europe in the last five years? *European Journal of Education, 35*(4), 431–441.

van der Wende, M. (2003). Bologna is not the only city that matters in European higher education policy. *International Higher Education, 32*(9), 1–3.

Weber, Luc E. & Duderstadt, James J. (Eds.). (2008). *The globalization of higher education* (Glion Colloquium Series, Vol. 5, p. 74). London: Economica.

Winckler, G. (2008). Comprehensive universities in continental Europe: Falling behind? In L. E. Weber & J. J. Duderstadt (Eds.), *The globalization of higher education* (Glion Colloquium series, Vol. 5, p. 74). London: Economica.

Part II
Portuguese Higher Education Academia

Chapter 5
Academic Job Satisfaction and Motivation: Perspectives from a Nation-Wide Study in Public Higher Education Institutions in Portugal

Maria de Lourdes Machado-Taylor, Virgílio Meira Soares, Rui Brites, J. Brites Ferreira, Minoo Farhangmehr, Odília Gouveia, and Marvin Peterson

5.1 Introduction

The work of academics is influenced by global trends such as accountability, massification, deteriorating financial support, scientific progress and managerial controls (Altbach and Chait 2001; Galaz-Pontes et al. 2007; Henkel 2010). Authors such as Kogan and Teichler (2007, p. 9) stressed "[…] the academic profession has come under enormous pressure potentially endangering the survival of the core identity of academics and universities… Increased expectations and work roles from society and notably the perception of knowledge as the most vital resource of contemporary societies have both expanded the role of the academy and challenged the coherence and viability of the traditional academic role". Changes in the

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academic career are emphasized by Henkel (2007, p. 201) "Most academics now work in a multi-functional organizations, in which the definitions of work and responsibilities have expanded and become more varied, for them and for others, and organizational principles have been incorporated." Also Gappa (2010, p. 209) argues "The effects of changes in faculty work, appointments, and demographics in their colleges and universities are being felt by faculty members, who are experiencing declining autonomy in their work, escalating workloads, an increasingly diverse student body, and, for some, a change in the nature of the academic community." Many authors will describe other trends including for instance

- "[…] as a threat to academic autonomy as one of the central tenets of university life" (Brennan 2007, p. 20);
- "Traditions of academic freedom, professional autonomy, and allegiance to disciplinary fields continue to characterize what means to work in higher education. An extensive literature points to the survival of these values as being critical to the future of academic work" (Gordon and Whitchurch 2010, p. XVII);
- "Academic faculty find themselves working with and to a broader range of stakeholders and in more national and international sites than before […]" (Marginson 2009, p. 105);
- "[…] on-going evolution of the academic profession: the transformation of academic activities" (Musselin 2007, p. 185);
- "[…] increasing influence of institutional leaders (be they 'academic' or not) in decision-making processes that affect the individual careers of faculty members" (Musselin 2010, p. 125);
- "democratization of knowledge in "knowledge societies"" (Henkel 2007, p. 191);
- "[…] the authority of academic knowledge is no longer taken for granted" (Henkel 2010, p. 11);
- "From the standpoint of the Academic Estate, the significance of new specialized and technical functions on the margins of academia is central. It engages the crucial issue of how boundaries of Academia may be defined in the future." (Neave 2009, p. 12);
- "But the majority of academics believe that higher education these days is being exposed to excessive instrumentalist pressures." (Teichler 2009, p. 65).

Hence, we assisted to the rapid change of the academic workplace and the necessity to manage the tensions within the academic profession. On this note, Altbach

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(2003) argued that with the era of mass higher education the conditions of academic work have deteriorated everywhere. Moreover Kogan and Teichler (2007, p. 11) argue "One view would see a victory of managerial values over professional ones with academics losing control over both the overall goals of their work practices and their technical tasks".

Thus, HEIs have to manage their resources and human resources in particular in order to be proactively positioned to seize opportunities and confront threats in an increasingly competitive environment. Therefore more and more importance is placed on the satisfaction of the constituent groups of HEIs, namely the academic staff, among others (Machado et al. 2011).

The importance of work for us and for our satisfaction is evident. "Work plays a prominent role in our lives. It occupies more time than any other single activity and it provides the economic basis for our lifestyle. Therefore, job satisfaction is a key research area for numerous specialists and is a heavily researched area in the recent years" (Santhapparaj and Alam 2005, p. 72).

According to Silva (1998), being in the market today is being in a permanent evaluation of competitive ability. It becomes clear in this context the importance of the human factor and its "involvement" in the objectives of the organization.

The centrality of the faculty role makes it a primary sculptor of the institutional culture. The performance of academic staff as teachers and researchers determines much of the quality of the student satisfaction and its impact on student learning and thus the contribution of the HEIs to society (Ambrose et al. 2005; Capelleras 2005; Gappa et al. 2007; Hagedorn 2000; Höhle and Teichler 2011). Therefore the contribution of academic staff within an HEI has implications for the quality of the institution (Altbach 2003; Enders 1999; Teichler 2009). However, HEIs are extremely complex social organizations. One must examine a multitude of factors and their numerous interactions even to approach an understanding of its functions. HEIs are now in a time of globalization, traversed by profound contradictions, uncertainties and doubts. Those concerns are due not only to a lack of resources or quality of resources, but also are conceptual in nature and concern with the extension and amendment of the HEI mission with reflections on the academia (Burbules and Torres 2004; Morgado and Ferreira 2006), with consequences also for the job of professors (Hargreaves 1998, 2003; Tardif and Lassardi 2008).

Serious research reveals that the concept of job satisfaction is a complex collection of variables that interact in a myriad of ways. Furthermore, the precise arrangement of these factors differs across segments of the job market. There are intrinsic variables related to personal growth and development, and extrinsic factors associated with security in the work environment. There are global trends that impact professors and universities – notably accountability, massification, managerial controls, and deteriorating financial support (Addio et al. 2007; Hagedorn 2000; Stevens 2005). There is also ample and somewhat obvious evidence that job satisfaction relates to employee motivation. Job satisfaction is important in revitalizing staff motivation and in keeping their enthusiasm alive. Well motivated academic staff can, with appropriate support, build a national and international reputation for themselves and the institution (Capelleras 2005) in the professional areas, in research and in publishing. Such a profile may have an impact on the quality of

HEI. In this context, institutions and their leaders who understand the intricate tapestry of organizational culture have an opportunity to tap the multiple resources at their disposal and thus manage job satisfaction and employee motivation more effectively (Machado et al. 2011).

Over the recent years, there have been many changes in Portuguese higher education. These include, among others: the implementation of the Bologna Process, which was given particular visibility; the approval of a new legal regime for the HEIs, which paved the way for the existence of the foundational regime and the approval of new statutes relating to the academic career in the public HEIs. Thus, the changes affect and will continue to affect academic careers (Machado-Taylor et al. 2010).

One important point to note about previous studies of satisfaction is reported by Changing Academic Profession (CAP) project. According to this study, Portugal is among the countries with lower levels of overall satisfaction. For instance, only South Africa showed a lower level of overall satisfaction among academics (International Database of the CAP Project (Dias et al. 2013). Also, the EUROAC survey reports that Portuguese junior academics are among the less satisfied (Höhle and Teichler 2011).

This chapter will provide a diverse range of information on multiple dimensions of the faculty job satisfaction in public Portuguese higher education institutions. The findings of a nationwide study on satisfaction and motivation are extensively analyzed.

5.2 The Academic Career in Portugal: Issues and Challenges

In this section we present and analyse the structure of the academic career in Portugal. We start by describing the evolution of the career since 1970, highlighting the changes that took place with the stabilisation of the democratic life after the revolutionary period and other changes that occurred as an adaptation to the recent evolution in European Higher Education including the application of the Bologna Process in Portugal.

First we briefly describe the evolution of the organisation of the Portuguese Higher Education (HE) system since 1970 until 2012. In particular we underline the reforms experienced in 1973, the introduction of the Polytechnic subsystem in the late 70s, the expansion of the HE system, including a brief analysis of the emergence of the private sector.

In the second section the evolution of the academic career is presented and a detailed description of the present legislation regulating is also included.

5.2.1 Evolution and Organization of the Portuguese Higher Education

The higher education system in Portugal is a binary system, including universities and polytechnics, initially planned in the early'1970s. It was mainly from the second half of the 1970 that the growth and the dissemination of higher education

started, after the democratic revolution in 1974. Until the early 1970s the Portuguese HE system was an elite system, it was attended by a small number of members of society, mostly from upper classes. There was a situation of great inequality based on the socio-economic origin (Cabrito 2006). Thus, the HE system was not a democratic one and this fact was the consequence of the very political system itself. After 1974, as a consequence of the democratization of the country the social demand for HE increased very much (Cabrito 2006).

Since then, many changes in higher education took place, namely: the implementation of the binary system; the distribution of higher education institutions (HEI) across the country; the approval of the statutes of the university academic career, in 1979, and of polytechnic academic career, in 1981; the approval of the Education System Act in 1986 (Law 46/86 of October 14); the approval of the laws of autonomy of the universities and polytechnics (Law n° 108/88 of September 24 and Law n° 54/90 of September 5, respectively); the emergence of the private sector in the 80s; and the massification of higher education. More recently, in the last decade, there were also other major changes in higher education. Among them it should be noted the amendment of the Education System Act, by the Law n° 49/2005, of August 30, in order to implement the Bologna Process, which was also followed by other important changes, including the approval of a new legal regime of the HEI (Law n° 62/2007 of September 10), the approval of the legal assessment of higher education (Law 38/2007) and the approval of amendments to the statutes of the academic careers in higher education in 2009 (Decree-Law n° 205/2009 and Decree-Law n° 207/2009, amended, respectively, by the Law n° 8/2010 and Law n° 7/2010, both of May 13).

Until the early'1970s, higher education was an elitist system, enrolling only a small number of students. There were only four universities, one in Coimbra, and one in Porto and two in Lisbon. In the early'1970s, there were important changes in the educational system, particularly in higher education. In 1971 the Catholic University was established. In 1973, a legal framework was approved (Law n° 5/73, of July 25), defining the basis of the educational reform. According to this law, higher education was provided by Universities, Polytechnics, Higher Normal Schools and other similar establishments (Base XIII, n°. 3). In the same year, by the Decree-Law n° 402/73 of August 11, the network of higher education was approved, creating new Universities, Polytechnics and Higher Normal Schools.

The aim was to modernize, expand and diversify the higher education, "so as to reach a rate of 9 % for the age group 18–24 years" (target set out in the preamble of the Decree-Law n° 402/73). As stated by Amaral et al. (2006, p. 41), the question was the necessity of "bringing the country closer to European standards, coupled with the influence of international organizations like the OECD, the World Bank and International Monetary Fund, which led that the government policies reflect an increasing number of 'functionalization' of education in general and in particular, higher education in relation to aspects of the country economic development". The plan was ambitious, compared to what previously had been the policy of higher education. The implementation of this plan was interrupted with the establishment

of democracy in 1974 and the days of the revolution that followed, and that changed the political agenda, including higher education (Magalhães and Santiago 2012).

In the late'1970s, the agenda of higher education was the subject of particular attention, in particular in what regards the diversification and the creation of polytechnic institutions. In 1977 the "short-term higher education" was introduced (Decree-Law n° 427-B/77), and was formally replaced by "polytechnic higher education", in 1979 (Decree-Law n° 513-T/79). The professional scope of polytechnic education was emphasized against the "more conceptual and theoretical characteristics" of university education. The Word Bank played an important role in the development of polytechnic subsystem, being responsible for several projects carried out until the integration in EU.

In the early'1980s, there were public higher education institutions in all districts. At the end of the 1970s, the Law on Private and Cooperative Higher Education was approved (Law 271/79), although its implementation has occurred, particularly in the second half of the 1980s and 1990s (Teixeira 2012). In 1986, the year Portugal joined the EEC, the Education Act (Law 46/86 of October 14) was approved, consolidating the binary system. According to this law, universities could confer all degrees ("bacharel", "licenciado", mestre e "doutor"[1]), while polytechnics could confer only a bachelor's degree. This situation changed in 1997 (first amendment of Education Act – Law n° 115/97, of September 19) and from this date, polytechnics grant also the degree of "licenciado". In 2005, the Education Act was amended in order to implementing the Bologna Process (Law 49/2005, of August 30). The law maintained the binary system. The number of higher education degrees was changed from four ("bacharel", "licenciado", "mestre" e "doutor") to three ("licenciado", "mestre" e "doutor"). Actually, universities grant all degrees while polytechnics grant the degrees of bachelor and master. The amendment of 2005 was followed by other changes, including the adoption of a new legal regime of the HEI (Law n°. No. 62/2007 of September 10) and the approval of legislation regulating accreditation and evaluation of higher education institutions and study programmes (Law n° 38/2007 of August 16).

Only after democratization in 1974, a significant expansion of higher education was initiated. In 1978 the total number of students enrolled in higher education was 81,582 (77,501 in the public sector and 4081 in the private sector). In the following years this number has been increasing, reaching in 1990 the total number of 157,869 (119,733 in the public sector and 38,136 in the private sector). At this time, higher education was already present in many cities and counties, although some of HEI have small size. In the following years, this number has continued to grow and in 2003 it reached 400,831. However this growth was different by subsystem and type of education.

In the private sector, the number of students reached the highest number in 1997, reaching 121,399 (96,163 in the universities and 25,236 in the polytechnics). Since then it has been declining, reaching 78,699 in 2012 (55,147 in the universities and

[1] "Bacharel" was a degree achieved after 3 years at HEI before the changes introduced by the Bologna process; "Licenciado" is the Portuguese term for Bachelor; "Mestre" is the Portuguese term for Master; "Doutor" is the Portuguese term for PhD.

23,552 in the polytechnics). Private universities reached the maximum number of students in 1997. Since then it has been continuously decreasing. The private polytechnic subsystem reached the highest number in 2003 and since then it has also been decreasing.

In the public sector, the trend has been different. The number of students reached the highest number in 2012, total of 311,574 (197,912 in the universities and 113,662 in the polytechnics). The public university subsector has always grown, except for the period 2004 to 2009. The public polytechnic subsector reached the highest number in 2011.

From 1997 to 2012 the private sector has lost 42,700 students, mostly in the university subsector. In the same period, the public sector has grown 98,848 (50,563 in universities and 48, 285 in the polytechnics) (Table 5.1).

The establishment of the binary system in the late 70s and its development in the following decades, aimed at the existence of two sub-systems with different goals and philosophies. The main idea was to expand higher education in the country and regional development, locating the polytechnics and their schools especially in cities where there were no universities. Its education programmes would be of short

Table 5.1 Students enrolled in higher education: total and by sub-system and type of education

		Public			Private		
	Total	Total	University	Polytechnic	Total	University	Polytechnic
1990	157,869	119,733	95,746	23,987	38,136	32,756	5380
1991	186,780	135,350	103,999	31,351	51,430	42,239	9191
1992	218,317	149,667	112,592	37,075	68,650	55,067	13,583
1993	246,082	164,433	120,307	44,126	81,649	64,814	16,835
1994	269,982	176,202	126,996	49,206	93,780	75,701	18,079
1995	290,348	186,286	132,199	54,087	104,062	84,895	19,167
1996	313,415	198,774	139,101	59,673	114,641	91,540	23,101
1997	334,125	212,726	147,349	65,377	121,399	96,163	25,236
1998	347,473	226,642	153,951	72,691	120,831	93,914	26,917
1999	356,790	238,857	158,850	80,007	117,933	89,361	28,572
2000	373,745	255,008	164,722	90,286	118,737	88,190	30,547
2001	387,703	273,530	171,735	101,795	114,173	82,979	31,194
2002	396,601	284,789	176,303	108,486	111,812	79,908	31,904
2003	400,831	290,532	178,000	112,532	110,299	77,109	33,190
2004	395,063	288,309	176,827	111,482	106,754	73,708	33,046
2005	380,937	282,273	173,897	108,376	98,664	67,157	31,507
2006	367,312	275,521	171,575	103,946	91,791	61,740	30,051
2007	366,729	275,321	169,449	105,872	91,408	60,659	30,749
2008	376,917	284,333	175,998	108,335	92,584	61,221	31,363
2009	373,002	282,438	175,465	106,973	90,564	60,755	29,809
2010	383,627	293,828	183,806	110,022	89,799	60,174	29,625
2011	396,268	307,978	193,106	114,872	88,290	60,452	27,838
2012	390,268	311,574	197,912	113,662	78,699	55,147	23,552

duration or up to 3 years of an applied nature and would be designed to meet the needs of work in the regions where they were deployed. There had been planned research activities for the polytechnic system. The research activities were taking place in universities and it was also these institutions that formed the faculty of polytechnics. In this sense, it can be said that the training of teachers of polytechnics was dependent on the universities. This situation has been changing and went to a growing rapprochement between the two subsystems, namely in terms of research. In fact, there are today research units in polytechnics.

The current system of higher education includes: 14 public universities, the Catholic University and a non-integrated public University Institute (institutions awarding university degrees, but not having the necessary conditions to be universities), all represented in the Portuguese Rectors' Conference (CRUP); 15 public polytechnics, represented in the Council of Portuguese Polytechnics (CCISP), and five schools not integrated in polytechnics (polytechnic institutions awarding degrees, but not having the necessary conditions to be polytechnics); and six public schools of higher education, depending on both the Ministry of Science and Education and other Ministry (Military Schools and Police Academy). Higher education includes also 99 private institutions, including 39 university institutions (universities and non-integrated institutes or schools) and 60 polytechnic institutions (polytechnics institutes and non-integrated polytechnics schools) (http://www.dges.mctes.pt/DGES/pt/Estudantes/Rede/Ensino+Superior/).

5.2.2 The Academic Career

The higher education system in Portugal, being a binary system, is characterised by the existence of different academic careers. The legal framework of academic careers is quite different in public and private institutions. The government defines the size of the teaching staff and creates the rules for career advancement within public institutions. The academics of public institutions are civil servants, as opposed to those that work in private institutions (Meira Soares 2001, 2003; Meira Soares and Trindade 2004).

The main regulatory frameworks of academic careers date back to 1970 (Decree-Law n° 132/70, March 30), 1979/80 (Decree-Law n° 448/79, November 13, and Law 19/80, July 16) and 1981 (Decree-Law n° 185/81, July 1). Recently, in 2009, the statutes of academic careers were subject to changes, after they have been in force for three decades. In the following pages, we cover the main changes in the academic career from the'1970s to the present day.

5.2.2.1 Shaping the Academic Career in the Early 1970

Until 1970, matters relating to university academic career appeared associated or integrated in the Statute of University Education. In 1970, the academic career was treated in a specific regulation (Decree-Law 132/70, dated March 30). There was

not binary system of higher education in Portugal. According to this normative the academic career focused on two major areas, teaching and research, although they also set out some administrative functions. In the introduction of this normative some issues were reported regarding higher education, namely the difficulties of recruiting qualified academics to cope with the increase of school population, salary and career conditions offered. Furthermore, the need to create conditions for achieving the doctoral degree was also raised, because the system was facing a lack of professors and unattractive conditions for the academic career.

The university career was divided into two phases: "the first one, especially devoted to the preparation for teaching and learning methods of research and the second one devoted to the full exercise and training of researchers." The first phase included the assistants and the second one the professors. Thus, the academic career was structured into two main groups: professors (full professor, extraordinary professor and auxiliary professor) and teaching assistants (readers, assistants, junior assistants and monitors). It was the structure shaping the academic career over four decades, until the changes introduced in 2009.

In the normative, more emphasis was given to teaching and research and after to the administrative tasks. Referring to this period, Caraça et al. (1996) say that the dominant model of the university up to 1970s gave priority to education and that only in the 80's emphasis to the research university was given, a trend reinforced in the following decades with the development of postgraduate programmes and the evolution of the university towards a greater openness to the outside society and the productive system.

5.2.2.2 The Diversification of Academic Careers in Higher Education

The expansion and diversification of higher education was the subject of particular attention from the late 70s and was followed by the approval of the university academic career legislation in 1979 (Decree-Law n° 448/79 and Law 19/80) and the polytechnic academic career legislation in 1981 (Decree-Law n° 185/81). Analysing this legislation we are faced with two different realities.

In the case of university, the structure of academic career designed in 1970 continued. The introductory of the new legislation was focused on a diverse set of issues, namely: a lack of qualified academic staff, the need to "make the career more attractive and dignified"; the need to provide means for assistants to obtain the doctoral degree; improving the quality of universities for international competition; the creation of conditions for graduates professionals to "neutralise or mitigate the effects of centrifugal […] requests from the private sector and even the public sector"; the idea that the university is not a "simple factory graduate" but "a comprehensive institution, dedicated to undergraduate and graduate teaching, to fundamental and applied research and to providing highly specialised services of undeniable social interest"; the full realization of the academics and of the universities, the creation of conditions to decrease bureaucracy and more autonomy; a more professional career with more employment stability.

In the case of polytechnic the main aim was to approve the creation of a new career, for the recently created subsystem (Decree-Law no. 185/81). In that sense, the creation of a new academic career was considered fundamental to the development of polytechnic education. On the introductory part of the decree-law, it was reported that this career was in line with "the teaching of higher level, targeted to the technicality and specificity of the various professional activities, claimed by modern societies". It was the desired connection between polytechnics, professional activities and regional development, which was emphasised in legal texts regarding polytechnics, namely the Decree-Law n° 427-B/77, the Decree-Law n° 513-T and Decree-Law n° 513-L1/79.

There were two different agendas for academic careers. In the case of the university the academic career was faced with the need for universities to modernise and respond to new demands and challenges, coming from both inside and outside the country, including increasing massification, which would deeply influence the end of the century and the beginning of the next. In the case of polytechnics, the purpose was to diversify higher education, developing a different subsystem and disseminating it over the country and, at the same time, creating a different academic career. This diversity of careers continued until the recent changes in 2009.

The university career (Decree-Law n° 448/79) had the following sequence: *Assistente Estagiário* (junior assistant), *Assistente* (assistant), *Professor Auxiliar* (auxiliary professor), *Professor Associado* (associated professor) and *Professor Catedrático* (full professor). Access to the lower rankinvolved the undergraduate degree, starting in the position of *Assistente Estagiário*, which remained for 2 years. After this period, the person was promoted to *Assistente*, which involved the acquisition of the master's degree. His/her career continued as *Assistente* for 6 years, during which he/she should acquire a doctoral degree to be promoted to the next category: *Professor Auxiliar*. This new situation did not guarantee, by itself, a permanent academic career. Indeed, after 5 years of service in this category, an applicant had to submit a very detailed "curriculum vitae" to the Scientific Council of the Institution, which, upon evaluation of academic performance, decided in favour (or not) of changing a temporary contract to final contract. Access to the next category, *Professor Associado*, required submission to a public competition, and implied a minimum period of service in the category of *Professor Auxiliar*, the condition for permanent appointment in this category not being required. In practice, access to a permanent appointment in the university academic career meant 13 years of service. Access to the rank of *Professor Catedrático*, the highest cumulative depended on three conditions: to be *Professor Associado*, the title of *Agregado* (may be compared with German notion of Habilitation) and submit to a public competition.

A career in polytechnic (Decree-Law no. 185/81, 1 July) included fewer categories: – *Assistente* (1st and 2nd triennium), *Professor Adjunto* and *Professor Coordenador*. Access to the rank of *Assistente* required a suitable higher education qualification (bachelor's or graduate). To progress to the next category, *Professor Adjunto*, it was necessary to obtain the master degree and to be a candidate in a public competition. Access to this category did not imply, by itself, a permanent appointment. This occurred only after a period of provisional appointment of

3 years, after which the candidate had to submit a detailed report to the Scientific Council and only with the approval of this body the appointment became final. Access to this category could also be done through public examination in the case of candidates without a master's degree. In practice, access to a permanent appointment in the polytechnic academic career meant 9 years of service. To access to the next category, *Professor Coordenador*, the *Professores Adjuntos* should be candidates in a public competition.

5.2.2.3 The Academic Career in the 2000s

The legislation concerning academic careers in public institutions of higher education has remained unchanged, or nearly so, over the last three decade, despite repairs and criticism over the years (Meira Soares and Trindade 2004). Changes arrived in 2009 by the approval of amendments to the statutes of academic careers in higher education, both public universities and polytechnics (Decree-Law n° 205/2009, n° 206/2009 and n° 207/2009, amended by the Law n° 7/2010 and n° 8/2010), after the amendment of Education Act in 2005 (Law 49/2005), in order to implement the Bologna Process. These changes in the statutes in 2009, occur in a national context characterised by a binary system already implemented and disseminated throughout the country and after other major changes for Portuguese higher education were approved, including the adoption of the new legal regime of the HEI governing regulations (Law 62/2007) and of the new HEI's evaluation system (Law 38/2007).

In 2009, a new legal framework changed the academic careers regulations. Under this new regulations, the academic careers in public HEI's were changed, although the main structures remain very similar. According to the new legal framework, academics of university and polytechnic public institutions continue to have different careers. Nevertheless, with the recent changes, there has been an approximation between the two sectors. Unlike what was published in 1979 and 1981, the preambles of the statutes in 2009 are very similar, sharing largely the same text, a sign that the issues of higher education are now largely common to both subsystems. The difference between them does not appear as 30 years before. Confining ourselves to the question of academic careers, the preambles of the diplomas focus largely on a common agenda. They are focused on issues such as: the modernization and strengthening of the vital contribution of higher education for the development of the country; the new challenges that higher education is called to respond to today; changes in the legal framework of employment of academics; changes in the careers of both subsystems, namely in the rules of the access to the academic career and of the public competitions to fill vacant positions; autonomy of HEI to produce regulations regarding the management, recruitment and assessment of performance of academic staff. The jury judging the filling a post through a public competition (always international for the filling of university positions) must have a composition with a majority of external members. With these new legislations in-breeding becomes more difficult, internationalisation is favoured and mobility is encouraged.

Table 5.2 Basic categories of academic staff in public institutions

Until august 31, 2009	After august 31, 2009
Universities	
Professor Catedrático	Professor Catedrático
Professor Associado	Professor Associado
Professor Auxiliar	Professor Auxiliar
Assistente	
Assistente Estagiário	
Polytechnics	
Professor Coordenador	Professor Coordenador Principal
Professor Adjunto	Professor Coordenador
Assistente 2° triénio	Professor Adjunto
Assistente 1.° triénio	

Source: Decree-Law n° 448/79; Decree-Law n° 185/81; Decree-Law n° 205/2009; Decree-Law 207/2009

As noted above, the academic careers remained unchanged over the past three decades. Amendments in 2009 refer mainly to the career structure, the access and mobility, the recruitment and the academic work. In The following table (Table 5.2) shows the professional categories of both subsystems, before and after the amendments made in 2009, with reference to legislation on the public sector.

In university career, a doctoral degree was required to access to the categories of professor. In the case of polytechnic education, the degree required for access to the categories of professor was a master's degree, but you could access these categories, without a master's degree, through the provision of public exams. With the changes of 2009, the degree required to access the categories of professors in both subsystems, is the doctoral degree. However, in the case of polytechnic education the title of specialist was also created, and can be obtained through public examination in which it is necessary to prove "the quality and the particular importance of the professional curriculum in a particular area for the performing functions of the polytechnic teachers" (Decree-Law n° 206/2009). Moreover, these experts, provided they meet certain requirements, may also apply to "professor coordenador", but not to the *Professor Coordenador Principal*. Access to this category, created in 2009, implies that in addition to other conditions candidates must be holders of the *Agregado*. The other categories provided for in previous legislation, no longer exist or remain in a transitory existence, according to new legislation. In addition, there remains the possibility of hiring teachers in HEIs situation of guests.

5.2.2.4 Academics' Functions

The approval of the statutes of the academic careers of 2009 brought closer the two careers also in respect to general functions of academics. One remaining difference between the two careers is the weekly teaching load, which is higher in polytechnics (9–12 h) than in universities (6–9 h). With regard to functions, in general, for

Table 5.3 Academics' functions

Functions of university academics (Article 4th)	Functions of polytechnic institutes academics (Article 2nd)
(a) to conduct scientific research, cultural creation and technological development;	(a) to carry out the teaching duties assigned to them and to guide and supervise students;
(b) to carry out the teaching duties assigned to them and to guide and supervise students;	(b) to conduct research, cultural creation and experimental development;
(c) to participate in activities related to the university, of scientific dissemination and economic and social valuation for knowledge;	(c) to participate in extension tasks of disseminating science and technology and of economic and social valuation for knowledge;
(d) to participate in the management of the university;	(d) to participate in the management of the polytechnic institute;
(e) to carry out other duties assigned by the competent bodies, falling under the activity of a faculty member.	(e) to carry out other duties assigned by the competent bodies, falling under the activity of an academic in polytechnic higher education.

Source: Decree-Law n° 205/2009; Decree-Law 207/2009

academic staff in both subsystems in public higher education, they show small differences (Table 5.3). The main differences appeared in the regulations adopted by each HEI concerning the provision of teaching since this matter became the responsibility of each HEI.

The changes in 2009, increases the quantity and diversity of tasks required to academics, and can be systematised into five groups of activities: (a) Research and development (scientific research, cultural creation, technological and experimental development); (b) Teaching (teaching service, monitoring and mentoring of students); (c) Participation in activities related to the scientific and technological dissemination and economic and social value of knowledge; (d) Participation in the management of institutions; (e) Participation in other duties assigned by the competent bodies, in the institution.

The first two groups are activities with a tradition in the academy. The following two formulations did not appear so explicitly in the previous statutes. The final group adds new responsibilities, whose definition is at the discretion of each HEI. From the classic teaching and research, the function and tasks of academics are moving to "other activities", which also means some ambiguity. Only the regulations of the HEI, in particular regarding with the provision service and performance evaluation, are likely to clarify the meaning of "other activities"

5.2.3 Coping with the Changes

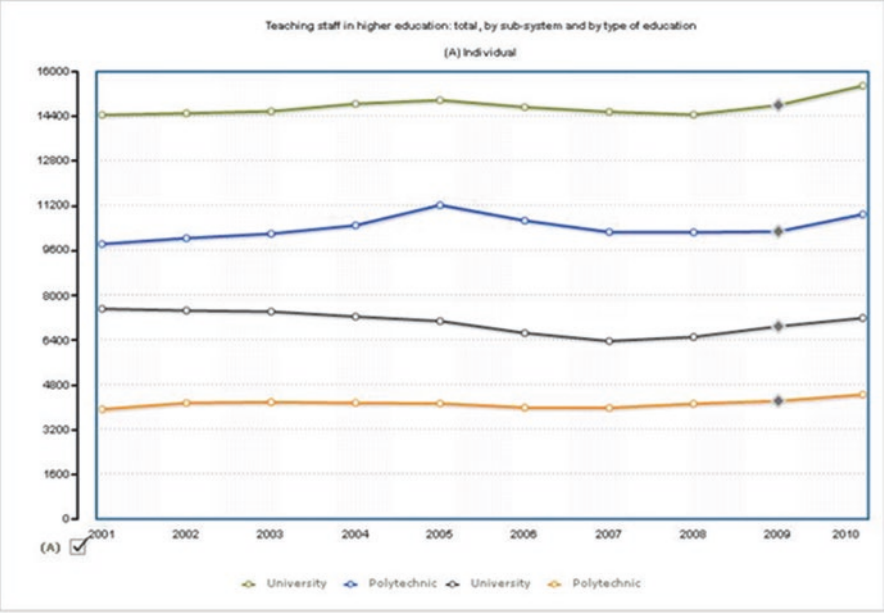
In a few decades, Portugal changed from a system of higher education of elites to a system of mass higher education, showing signs of stabilization in the last decade. With the expansion of higher education, there was also an increase in the number of

Table 5.4 Teaching staff in higher education: total, by sub-system and by type of education

	Sub-system and type of education						
		Public			Private		
Timeline	Total	Total	University	Polytechnic	Total	University	Polytechnic
2001	35,740	24,296	14,455	9841	11,444	7518	3926
2002	36,191	24,570	14,521	10,049	11,621	7464	4157
2003	36,402	24,794	14,590	10,204	11,608	7418	4190
2004	36,773	25,368	14,858	10,510	11,405	7244	4161
2005	37,434	26,214	14,984	11,230	11,220	7084	4136
2006	36,069	25,415	14,738	10,677	10,654	6660	3994
2007	35,178	24,831	14,566	10,265	10,347	6372	3975
2008	35,380	24,728	14,466	10,262	10,652	6519	4133
2009	36,215	25,092	14,803	10,289	11,123	6899	4224
2010	38,064	26,410	15,506	10,904	11,654	7195	4459

Data source: www.pordata.pt (accessed 30 May 2012)

academics, rising from 2726 in 1971 to 9097 in 1981, an increase that occurred mainly in the public sector. In the following decades, from 1981 to 1991 and from 1991 to 2001, growth continued to be very high. Since 2001 we are seeing some stabilization (Table 5.4).



In the 2000s, there was an improvement in the academic qualifications. The number of PhDs increased from 9465 in 2001 to 16,771 in 2010 and the total number of non-PhD decrease in the same period from 26,275 to 21,393 (GPEARI/MCTES). Another fact to be noted is the increasing feminisation in higher education. In the period from 2001 to 2010, the number of female teachers increased from 14,571 to 16,650. In the same period, there was a decline in male teachers, whose numbers rose from 21,169 in 2001 to 20,459 in 2009. The percentage of female teachers is higher in the polytechnic than in university education. In 2010, the percentage was 43.7 % in polytechnics and 40.2 % in universities. Throughout the first decade of this century there was certain stability in the number of academics. But in terms of age, there is some aging. Indeed, from 2001 to 2010, the number of teachers in the age-groups <30 years and 30–39 years decreased and the number of teachers in all other groups increased.

5.2.4 Challenges

There are various challenges academics and HEIs are currently facing, namely: the evaluation and accreditation, the developments of the Bologna process and the implementation of the European Area of Higher Education, the future development and reorganization of higher education network and its relation with the decreasing number of students and the economic anxieties.

Issues of evaluation and accreditation in higher education are some of the main concerns of both politicians and academics. One of the recent changes was the adoption of a new system of evaluation and accreditation of HEI (Law n° 38/2007, August 16), which led to the creation of A3ES.[2] The accreditation and evaluation of programmes of study, now under A3ES, is taking its first steps. The creation of programmes is now dependent on prior accreditation by A3ES. In addition, programmes are subject to periodic review, consisting of a set of guidelines that HEI's should take into account when implementing their programmes and self-assessment processes.

Study programmes are evaluated every 5 years and the process is based on a self-assessment (where students' opinions are included), followed by an external evaluation carried out by academic peers (domestic, external and foreign experts). In the previous evaluation system, there was not a link between direct and immediate results of evaluations and recognition of study programmes or other any consequences.[3] Actually, the process of accreditation has immediate consequences, namely non-accreditation. The implementation of the process of evaluation and accreditation is one of the main challenges that HEI and academics are faced with. Not accredited study programmes no longer work, which has consequences for the HEI. At the same time, this process also has an impact on academic work and may

[2] Agência de Avaliação e Acreditação do Ensino Superior.

[3] They were predicted, but never applied.

lead to termination of employment contracts of academics. These policies have important effects on the working conditions of academic staff and are related with quality assurance of HEI.

Another important challenge for higher education institutions and academics is the creation of the European Higher Education Area, created by the Bologna Declaration. The amendment to the Education Act in 2005 (Act 45/2005), has provided the implementation of the Bologna Process in Portugal. However, it has been a process that has not always received the consensus of the academic community. Actually, the system of degrees and diplomas in HE is organised according to the Bologna Process. However, in certain cases, the previous degree programmes have been replaced by new ones, merging undergraduate and master's degree (integrated masters), as is the case in various engineering, pharmacy, medicine. Identical procedures were not adopted in all areas of education and training. The introduction of the ECTS credit system happened but it needs yet some developments, particularly in terms of curriculum and teaching methods. On the other hand the concept of learning outcomes is not yet well known by the academics. It is also not clear to many students, academics and institutions that the acceptance of the principles of Bologna force them to change their attitudes regarding teaching and learning. It is difficult to predict the effect of these developments in the academic career. We believe that these changes are being reflected in the academic work. However, it is still early to say whether these effects are positive or negative for the academic career. The decrease in the number of training hours also resulted in a decrease in the number of teachers and in budget of HEIs.

As was already mentioned, in a few decades, Portugal passed from a higher education system of elites to a system of mass higher education. In the last decade, it is showing signs of stabilization and even some decrease in the number of students, which has led to increased competition between HEIs in attracting students. In this sense, the reorganization of the HE network is unavoidable. This reorganization may be the result of different options, including administrative (governmental) intervention, negotiation processes between institutions, market logics and so on.

HEI's have been confronted with the decreasing number of students each year, a decrease that is not evenly distributed among different scientific disciplines. As a result, in some areas, there will be excess of teachers while in other areas, there may be a need to increase their number, although not many. As mentioned above, the number of teachers in the first decade of the 2000s showed signs of some stability. Simultaneously, there has been an increase in the level of their qualifications, given the high number who acquired a PhD degree. This is beneficial to the quality of human resources and also has the effect of increasing competition among academics seeking a job or a position in an academic career. Moreover, as noted above, during the first decade 2000s there has been some aging on the academic staff. Furthermore, the laws of work and social security have also been altered, so that reforms are of lower value and occur later than previously. This also makes it more difficult the rejuvenation on the academic staff. Moreover, labour laws making employments more precarious and dismissal easier.

All these "ingredients" associated with budget constraints increase pressure on public institutions. The autonomy of institutions is greatly reduced. It is still unclear how they will deal with these situations and what will be the effect in academic career. Some people argue, rightly, that there are study programmes in the country offered by institutions geographically very close to each other, making cooperation between them desirable in order to reduce costs. This argument is correct, and solutions can be implemented in this direction. However, the implementation of those solutions may be insufficient, given the fact that teachers are already in institutions and the savings will not be felt in the short or medium term, except in what concerns administrative costs. Moreover, HE is still distant from goals of 2020.

The problems of the private institutions are not minor. It is a fact that they invested mainly in study programmes that are less expensive, such as law, management, information technology, teacher training and alike. Some of these programmes are still the most preferred by the candidates to HE. The demographic recession is, however, bringing problems. Moreover, the taxes in private education are much higher than those of public institutions. Therefore, it is expected that financial problems will profoundly affect these institutions. Probably the merging processes will continue and some institutions will have to close, bringing additional problems to the academic community of these institutions. As a result unemployment among academics is indeed a threat the country faces, both at the university and at the polytechnic subsystems.

These data, as well as those mentioned above, show that there are many factors that influence the work of academics. Moreover, they also show that these factors are not unrelated to the times of change, uncertainty and instability on academic work.

5.3 Models for Examination of Academic Job Satisfaction

5.3.1 Some Models of Faculty Satisfaction

The literature on job satisfaction of academics is limited. However, authors such as Santhapparaj and Alam (2005, p. 72) stressed that "Work plays a prominent role in our lives. It occupies more time than any other single activity and it provides the economic basis for our lifestyle. Therefore, job satisfaction is a key research area for numerous specialists and is a heavily researched area in the recent years". In fact, the "concept of job satisfaction is an important one for study because every individual has a variety of needs and values and much of a person's activity in a workplace is directed towards the acquisition of means and ways to fulfil these needs and values" (Egbule 2003, p. 158). In this context, Gappa et al. (2007, cited in Gappa 2010) argued that faculty members value equity, collegial relationships (with colleagues and administrators), security in employment, professional development, autonomy, access to the resources they need to do good work, support from department chairs and institutional administrators and recognition for their work. These are factors that, according to these authors, lead to high levels of satisfaction.

Job satisfaction is multi-dimensional, with both intrinsic and extrinsic qualities. The former include ability, achievement, advancement, compensation, co-workers, creativity, independence, moral values, social service, social status and working conditions. The latter involves authority, policies and practices, recognition, responsibility, security and variety (Weiss et al. 1967).

For instance, Herzberg et al. (1959) distinguish Motivators or Intrinsic Factors – Achievement, Recognition, The work itself, Responsibility, Advancement, Growth; and Hygiene Factors or Extrinsic Factors – Company Policy, Supervision, Relationship with Boss, Work Conditions, Salary, Relationship with Peers. According to Herzberg et al. (1959) intrinsic factors relate to job satisfaction when present but not to dissatisfaction when absent. The extrinsic factors are associated with job dissatisfaction when absent, but not with satisfaction when present. Motivating job characteristics are associated with job satisfaction, intrinsic motivation and work effectiveness (Winter and Sarros 2002).

Nyquist et al. (2000), presenting their model for faculty job satisfaction, suggested that organizational factors, job-related factors and personal factors affect self-knowledge, social knowledge and satisfaction. Organizational factors are available resources, collegial relations among colleagues, perceived opportunity for promotion and advancement, adequacy of mentoring, decision-making abilities and commitment to the organization. Job-related factors integrate autonomy and academic freedom, clear and consistent job duties, job security, stimulation from work, workload, income, resources available and work-related time pressures. Personal factors include -perceptions of role conflict and interference of work responsibilities with home. The model shows that institutional context and individual characteristics influence faculty satisfaction (please see Fig. 5.1).

An adaptation of Hagedorn (2000) illustrates another model. L. Hagedorn (2000) wrote about faculty job satisfaction using the "Conceptual Framework of Faculty Job Satisfaction", being her mission to sort and categorize the factors that contribute to job satisfaction. This model hypothesizes two types of constructs that interact and affect job satisfaction. These constructs are triggers and mediators. A trigger is a significant life event that may be either related or unrelated to the job. A mediator is

Fig. 5.1 Conceptual model 1 of academic staff job satisfaction (Adapted from: Nyquist et al. (2000)

Table 5.5 Conceptual model 2 of academic staff job satisfaction

Mediators			*Triggers*
Achievement	Gender	Collegial Relations	Life Stage
Recognition	Ethnicity	Student Quality	Personal/Family
Work itself	Institutional Type	Administration	Rank/Tenure
Responsibility	Acad. Discipline	Climate/Culture	New Institution
Advancement			Perceived Justice
Salary			Emotional State

Adapted from: Hagedorn (2000)

a variable or situation that influences or moderates the relationships between other variables or situations producing an interaction effect. The mediators represent situations, developments and extenuating circumstances that provide the context in which job satisfaction must be considered. The conceptual model presented by L. Hagedorn (2000) is composed by six triggers and three types of mediators, forming a framework in which faculty job satisfaction may be scrutinized (please see Table 5.5).

To measure the job satisfaction of university teachers, Oshagbemi (1997) used a questionnaire comprising eight basic job elements. The job elements were listed in Fig. 5.2. Respondents were asked to indicate the level of satisfaction or dissatisfaction with which they derived from each of the aspects considered.

Verhaegen (2005) analysed the recruitment and retention of academic talent, as the most important factors for the success and competitiveness of a business school. With respect to faculty, the most important factors from both recruitment and a retention perspective were academic freedom, research time, geographic location of the school and opportunities for professional development. The important factors for faculty were institutional factors, specifically reputation of the school, innovativeness and progressiveness of the school and international orientation. In the case of deans, the most important factors for recruitment of faculty were reputation of the school in the academic community, innovativeness and progressiveness of the school, stimulating peer community and research time. For retention, the most important factors were academic freedom, recognition of research achievements and career opportunities (please see Table 5.6).

According to Verhaegen (2005, p. 815), the results of academic job satisfaction "[…] could not only help the school in identifying its main bottlenecks in the recruitment and retention of academic talent, but it can also help the school to assess its competitive position and identify its unique selling points and help to design an effective profiling strategy".

Another conceptual model is that of Houston et al. (2006) (please see Fig. 5.3). The figure shows a clear relationship between some dimensions of academic staff job and their job satisfaction.

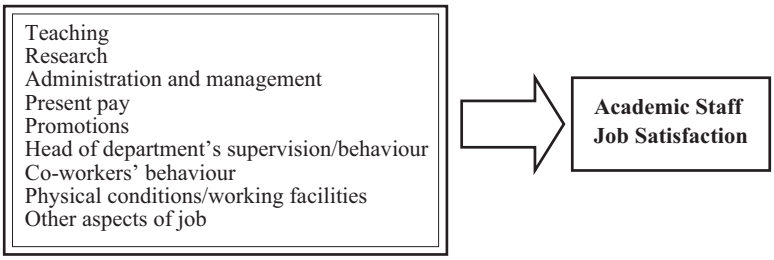


Fig. 5.2 Conceptual model 3 of academic staff job satisfaction (Adapted from: Oshagbemi (1997)

Table 5.6 Categories and factors used in the Verhaegen's survey

Categories	Factors
The school's culture and values	Academic freedom
	Stimulating peer community
	Participation in decision-making processes
	Identification with school's mission and strategy
	Availability of resources for new initiatives
	Innovativeness and progressiveness of the school
The school's reputation and position	Reputation of the school in the academic community
	Reputation of the school in the business community
	Prestige/reputation of the department/discipline
	Composition of the program portfolio
	International orientation of the school
	Partners in the school's network
Conditions of employment	Remuneration
	Career opportunities
	Job security
	Non-financial reward systems
	Resources for professional activities
	Opportunities for sideline activities or additional jobs
Personal and professional development	Balance between work and life
	Opportunities to work with people outside the school
	Opportunities and facilities for family
	Opportunities for personal growth and development
	Opportunities for professional development
	Opportunities to pursue cross-disciplinary scholarship
Teaching climate	Teaching time
	Recognition of teaching achievements
	Availability of teaching support
	Availability of teaching facilities
	Quality of students
	Participation in executive education

(continued)

Table 5.6 (continued)

Categories	Factors
Research climate	Research time
	Recognition of research achievements
	Financial resources for research
	Availability of research support
	Availability of research facilities
	Research climate within the school
Work environment	Geographic location of the school
	Necessity to speak local language
	Professional opportunities for partner
	Campus quality
	Office quality
	Competency of administrative staff and support services

Adapted from: Verhaegen (2005)

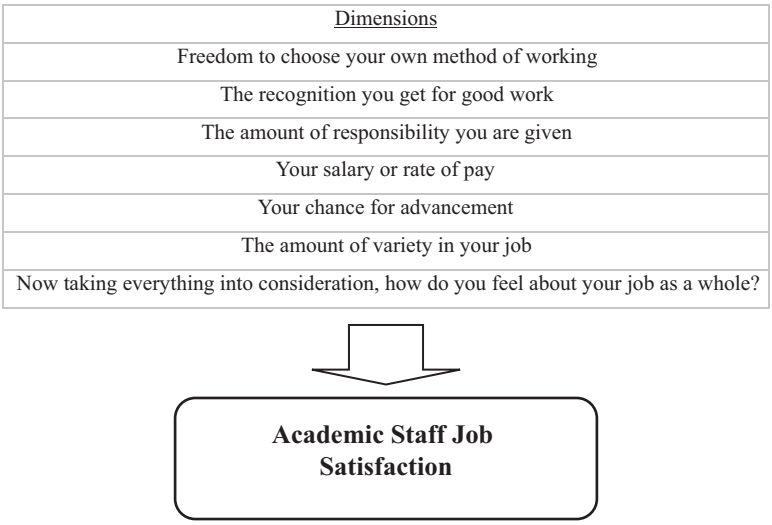


Fig. 5.3 Dimensions of satisfaction – Houston et al. (2006) (Adapted from: Houston et al. (2006)

5.3.2 Suggested Model for Faculty Satisfaction

In our study, the research team proposed a conceptual model derived from some of the best known models in the literature, such as those described above. Figure 5.4 shows the model, in which it was hypothesized that some dimensions – teaching climate, management, colleagues, non-academic staff, physical work environment,

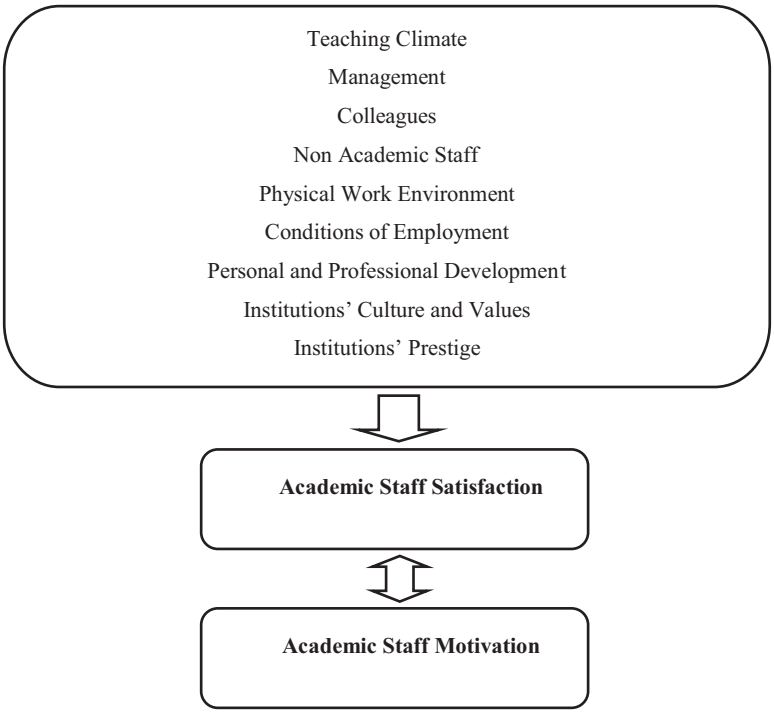


Fig. 5.4 Conceptual model of the study

conditions of employment, personal and professional development, institutions' culture and values, institutions' prestige and research climate – have an impact on academic staff satisfaction. Moreover, the conceptual model shows the relationship between satisfaction and motivation. This relationship was demonstrated by several authors. The literature also shows that job satisfaction is closely connected to employees' motivation. Herzberg et al. (1959) have already stressed the need to strengthen motivators in order to engender career satisfaction. In like manner, Dinham and Scott (1998, p. 362–363) stated that "Satisfaction and motivation are […] inextricably linked through the influence each has on the other." Higher levels of motivation have been considered as a positive outcome of job satisfaction (Sledge et al. 2008).

5.4 Methodological Approach

A nation-wide study emerges in the context of the Project PTDC/ESC/67784/2006 – An Examination of Academic Job Satisfaction and Motivation in Portuguese Higher Education, financed by the Foundation for Science and Technology.

In this chapter, we present results derived from quantitative data gathered through an on-line survey (please see Appendix 2). Before the application of the survey, the research team applied three Focus Groups to ascertain the factors of satisfaction/dissatisfaction and motivation/amotivation[4] of academic staff. The information collected was used in the construction of the questionnaire. Thus, the survey gives rise to the literature review for this theme and from the preoccupations expressed by faculty members/participants in the Focus Groups. The on-line survey was accessible to all faculty members, including all sub-groups (professor, researcher, part-time, full-time, etc.) for all institutional types of Portuguese HEIs public-private, university-polytechnic, etc.). Here we will only present results about academics in public higher education institutions.

The satisfaction dimensions considered were: Teaching Climate; Management of the Institution/Department/Unit; Colleagues; Non Academic Staff (administrative staff, technical and laboratory staff); Physical Work Environment; Conditions of Employment; Personnel and Professional Development; Institutions' Culture and Values; Institutions' Prestige; and Research Climate. Those dimensions to examine the academic staff job satisfaction were defined accordingly to the literature review. The aspects mentioned by academics during the Focus Groups were also covered by these dimensions. Therefore, each satisfaction dimension is composed of factors of satisfaction/dissatisfaction identified in the literature review and considered by the academics in the Focus Groups. The instrument was available to all Portuguese academics on the website http://questionarios.ua.pt/index.php?sid=19766&lang=pt. This address was sent to all Portuguese HEIs in year 2010 and all academics invited to participate:

In order to have a vast divulgation of the survey among the faculty members, several efforts were pursued. Therefore, all the faculty members were invited to participate in many different ways:

1. Communiqués were sent to the Council of Rectors of Public Universities (CRUP), Council of Presidents of Public Polytechnics (CCISP) and Portuguese Association of Private Higher Education (APESP) informing them about the study and requesting their help in the dissemination of the study;
2. A letter was sent to all Rectors and Presidents of both public and private universities as well as polytechnic institutes requesting that the link to the survey was sent to the faculty members in their institutions;
3. Also the link to the survey was sent to the three faculty unions;
4. All the steps above were repeated thrice in order to increase the response rate.

On average, the response time was 25 min. Because the questionnaire was long, some people gave up halfway through the fill which is often common in online surveys. In Portuguese higher education, according to the last statistics available at the time the survey was launched (2009), there were 36215 academics (PORDATA 2011; GPEARI 2011). The response rate obtained was about 12.5 % – a total of

[4] The concept of amotivation is used by Vallerand et al. (1992).

Table 5.7 Academics by institutional type and academic rank in the sample and in the population

		Sample		Population[a]	
		N	%	N	%
Public universities	Seniors	379	27.5	3578	24.2
	Juniors	973	70.7	11,225	75.8
	NA	25	1.8		
	Total	**1377**	**100.0**	**14,803**	**100.0**
Public polytechnic institutes	Seniors	117	10.0	764	7.4
	Juniors	1016	87.1	9525	92.6
	NA	34	2.9		
	Total	**1167**	**100.0**	**10,289**	**100.0**
Total	Seniors	496	15.5	4342	17.3
	Juniors	1989	58.4	20,750	82.7
	NA	59	26.1		
	Total	**2544**	**100.0**	**25,092**	**100.0**

Source:[a]GPEARI (2011)

4529 academics participated in the study, a response rate that is much higher than usual in a study of national dimension and administered online.

The results relate only to the academics that work in public higher education institutions (universities and polytechnics) and agreed to answer the online questionnaire (the total of 2544 academics). The response was free and spontaneous.

Most respondents to the survey work in public universities 54.1 %. With regard to age groups, respondents are concentrated in age groups "41–50 years" (38.2 %), "31–40 years" (28 %) and "51–60 years" (23.7 %). It should be noted that, on average, the age of respondents were 45 years with the mode range of 44 years. Considering the distribution of the respondents by gender, we can verify that 50.7 % of them are men and 49.3 % are women. There are, therefore, slightly more men than women among the respondents. Finally, with respect to the academic rank in Portuguese higher education, a higher proportion of respondents are "Juniors" (58.4 %). Only 15.5 % of the academics respondents are "Seniors". With respect to academics by institutional type and academic rank, the sample and the population present the following configuration: (Table 5.7)

As noted, there are marked and statistically significant differences between the sample and the population, preventing, therefore, to generalize any conclusions.[5] That is, comparisons between academic ranks and institutional type, which we proceed to in this work, do not reflect more than the opinions and attitudes of academics who responded to the questionnaire.

[5] According to Malhotra and Birks (2007), although no conclusions can be inferred for the population when working with non-probability samples, as it is the case, it is always possible to draw some conclusions about the behaviour of the population and, therefore, to assume some conclusions regarding the research questions. Please, see Malhotra, N. K., & Birks, D. F. (2007). *Marketing research: An applied approach*. 3rd Edition. Harlow, England: Prentice Hall.

5.5 Results

5.5.1 Satisfaction with Teaching Climate by Institutional Type

With regard to satisfaction with Teaching Climate in public polytechnic institutes and in public universities, only the indicator "training of students" records mean below the centre of the scale (5) which is interpreted, therefore, as dissatisfaction. The "degree of autonomy in teaching practice" is the indicator with which academics are more satisfied (Fig. 5.5). Research shows that autonomy and academic freedom have been particularly expensive for teachers, although some have referred to it with a sense of nostalgia (Ylikoji 2005), and others referring to the major constraints that have been felt in academic work and on professional autonomy (Barrier and Musselin 2009). Moreover, the previous preparation of students as well as the way on how it occurs in the transition from secondary education to higher education have been considered crucial to the success of students at the beginning of higher education (Brites Ferreira et al. 2011, 2012a, b; Seco et al. 2006).

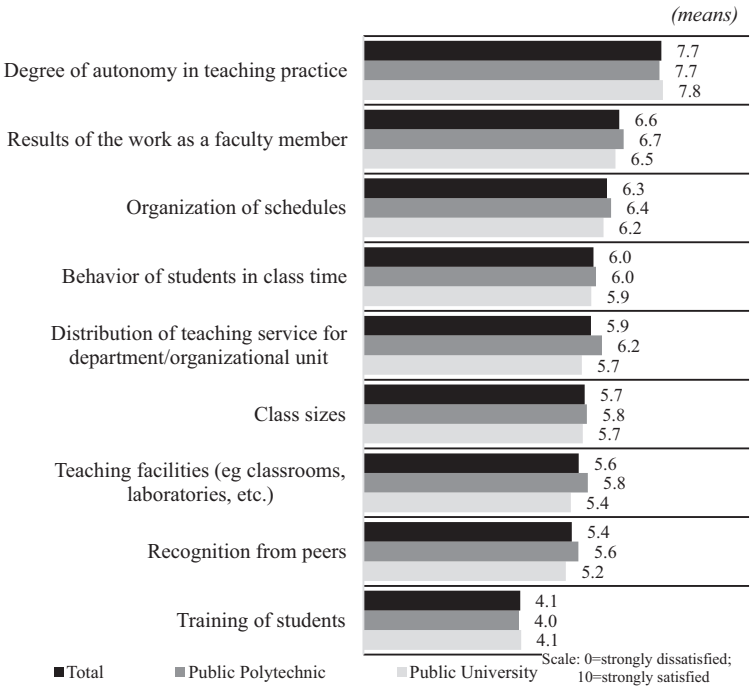


Fig. 5.5 Satisfaction with teaching climate by institutional type

5.5.2 Satisfaction with Management of the Institution/ Department/Unit by Institutional Type

The satisfactory means with the Management of the Institution/Department/Unit is higher in public polytechnic institutes, when compared with satisfaction in public universities. In public universities, academics are dissatisfied with almost all indicators: with the ability of managers to innovate, with management's response to faculty needs, with time that managers take to respond to these needs and to communicate with managers. The satisfaction with the managers of the department/organizational unit registers the highest values but around the centre of the scale, as shown in the following figure. With respect to this dimension and with consideration of the satisfaction levels of the academics, it seems to us that the data suggest that there is quite some way to go with regard to possible improvements in the management of the institutions, their departments and their units (Fig. 5.6).

5.5.3 Satisfaction with Colleagues by Institutional Type

Regarding satisfaction with Colleagues, the indicators "interaction between faculty members of different courses" and "cooperation with colleagues from different departments/units" record lower values, especially in public universities. The

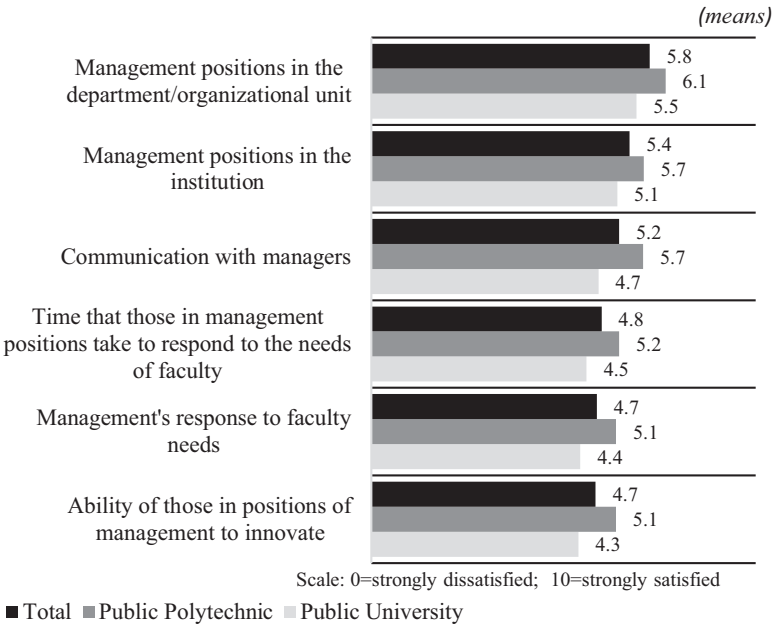


Fig. 5.6 Satisfaction with management of the institution/department/unit by institutional type

satisfaction with scientific quality, skills and pedagogic quality of the faculty registers the highest values, as was shown in the following figure. These results suggest that improvements are possible, particularly in terms of cooperation and interaction between academics of different departments or disciplines. Although the data may also reflect competition among academics or between areas and departments in which they are; this is related to managerial trends that have been felt in higher education (Lima 2012; Magalhães and Santiago 2012) (Fig. 5.7).

5.5.4 *Satisfaction with Non Academic Staff (Administrative Staff, Technical and Laboratorial Staff…) by Institutional Type*

The satisfaction with cooperation, with administrative staff and technical and laboratory staff registers the highest values. Academics express less satisfaction with the adequacy of the number of non academic staff to the amount of existing work. In public universities, they are dissatisfied with this aspect (mean is below the centre of the scale) (Fig. 5.8).

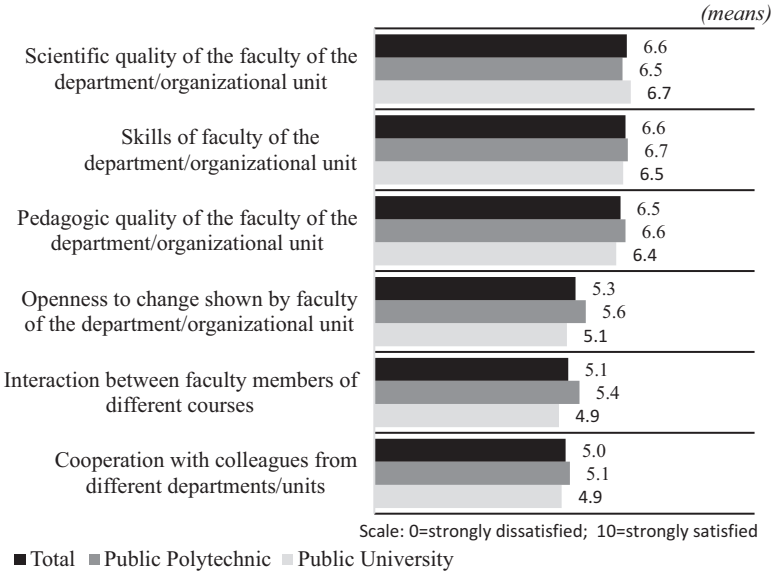


Fig. 5.7 Satisfaction with colleagues by institutional type

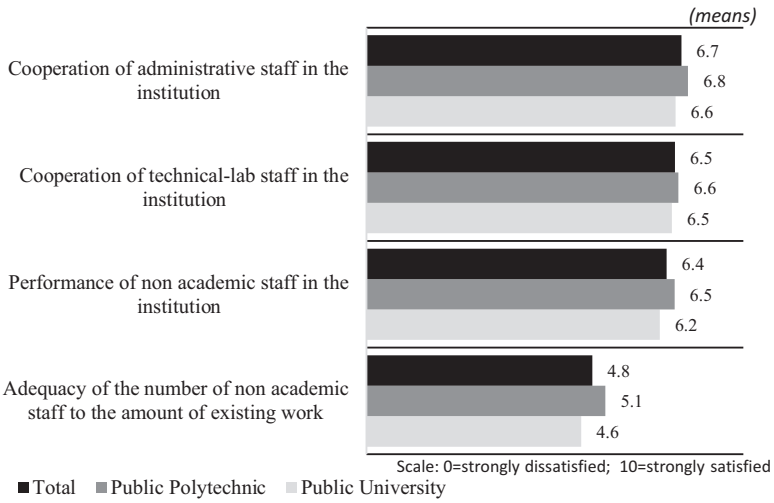


Fig. 5.8 Satisfaction with non academic staff (administrative staff, technical and laboratorial staff…) by institutional type

5.5.5 Satisfaction with Physical Work Environment by Institutional Type

Regarding satisfaction with Physical Work Environment, only the indicators "existence of an area to monitor the students" and "equipment available to faculty and their families" record means below the centre of the scale (5) and are interpreted, therefore, as dissatisfaction, especially in public universities. The "cleanup of the institution" and the "size of classrooms" are the indicators with which academics are more satisfied (Fig. 5.9). From these results emerges the fact that HEIs cannot dispose of support facilities, including kindergartens. Academics spend a lot of time in institutions or in classes or meetings and administrative work with obvious prejudices family (Forest 2002). Still, another reason for dissatisfaction of the academics is lack of spaces for student attendance. The authors of this book for personal knowledge supports this evidence. Many faculty share offices (sometimes there are 3, 4 or more teachers per cabinet) which naturally complicates the personalized attention to the student.

5.5.6 Satisfaction with Conditions of Employment by Institutional Type

Regarding satisfaction with Conditions of Employment, in public universities and public polytechnic institutes, the satisfaction mean is below the centre of the scale of the three indicators ("remuneration", "job security" and "career opportunities"). This means that academics are dissatisfied with this dimension, and more dissatisfied in

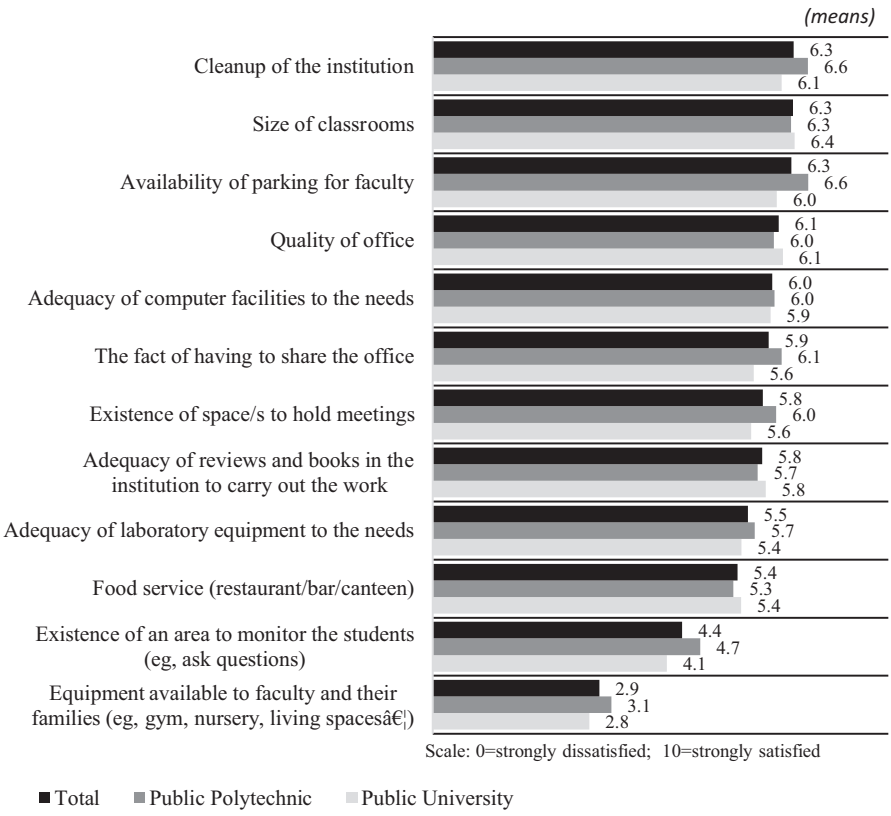


Fig. 5.9 Satisfaction with physical work environment by institutional type

particular with career opportunities (indicator that registered the lowest mean: 3.7) (Fig. 5.10). Indeed, Portuguese academics are overall more satisfied with intrinsic aspects of job and dissatisfied with the extrinsic aspects of the job, such as the characteristics of employment considered in this study. This dissatisfaction with extrinsic aspects of the job is well documented in scientific literature (Ward and Sloane 2000).

5.5.7 Satisfaction with Personal and Professional Development by Institutional Type

Academics in public universities and public polytechnic institutes seem to be reasonably satisfied with the dimension "Personal and Professional Development" (means registered are close to the centre of the scale) (Fig. 5.11). These data confirm that, despite its importance, it is not always easy to reconcile the professional aspects of career development with personal life or family (Santos 2007; Brites Ferreira et al. 2011, 2012a, b).

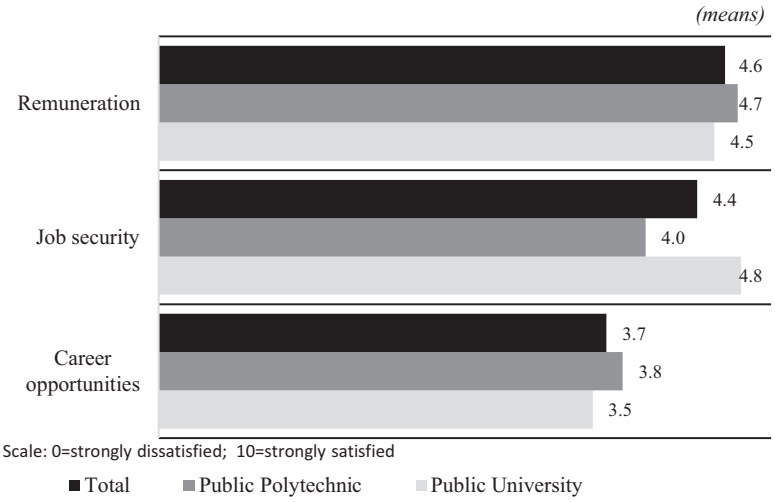


Fig. 5.10 Satisfaction with conditions of employment by institutional type

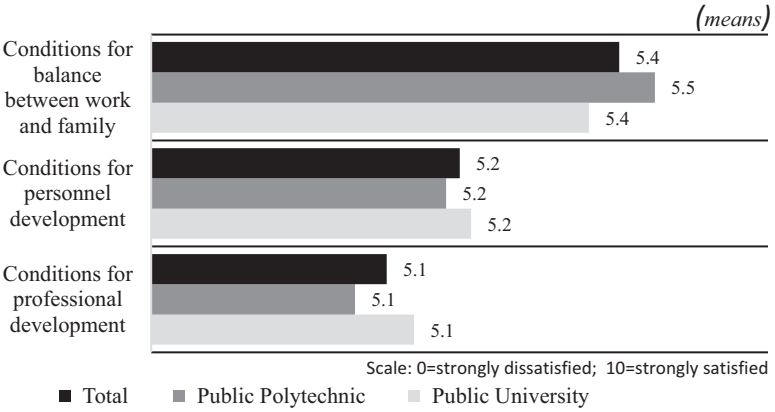


Fig. 5.11 Satisfaction with personal and professional development by institutional type

5.5.8 Satisfaction with Institutions' Culture and Values by Institutional Type

Academics are more satisfied with the academic freedom they have. Academics in public universities are dissatisfied with the ability to innovate in the institution (mean = 4.8) and with the participation of faculty in decision-making processes (mean = 4.6) (Fig. 5.12). As a result of the research, academic freedom is highly valued by academics. However, if we consider the other two indicators mentioned, we may wonder if we are not before some critical attitude towards innovation of

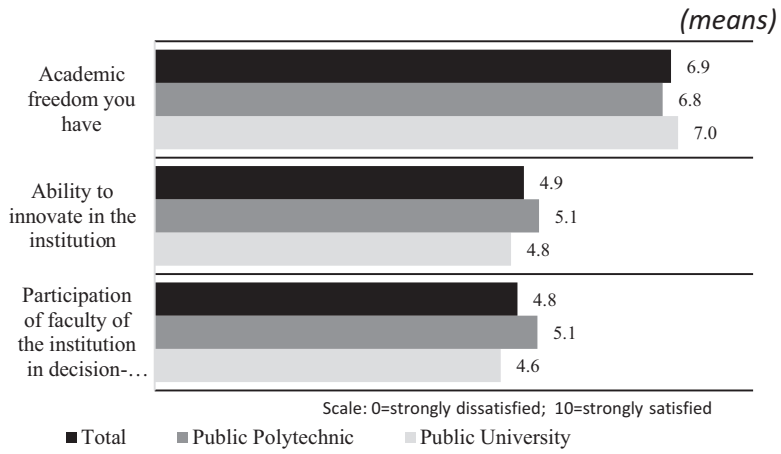


Fig. 5.12 Satisfaction with institutions' culture and values by institutional type

institutions and participation of the academic staff in decision-making processes. With regard to the latter aspect, it is important to note that the legal regime of IES, approved by Law no. ° 62/2007 of 10 September, has provided conditions for the existence of more uninominal bodies, to the detriment of collegial bodies and elected bodies.

5.5.9 Satisfaction with Institutions' Prestige by Institutional Type

With respect to satisfaction with Institutions' Prestige, all indicators ("prestige of the institution", "efforts of the institution to improve its image", "international partners of the institution", "national partners of the institution") registered satisfaction means slightly above the centre of the scale, which means that academics in public higher education institutions are satisfied but not very satisfied with this dimension (Fig. 5.13).

5.5.10 Satisfaction with Research Climate by Institutional Type

Regarding satisfaction with Research Climate, in public universities and public polytechnic institutes, only the indicator "research outputs" records means above the centre of the scale (5) in both institutional types. This is, therefore, the indicator with which academics are more satisfied. Dissatisfaction is higher with financial

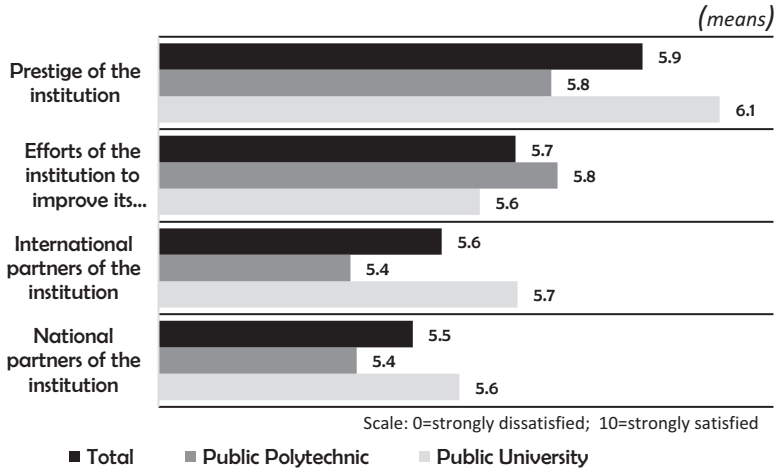


Fig. 5.13 Satisfaction with institutions' prestige by institutional type

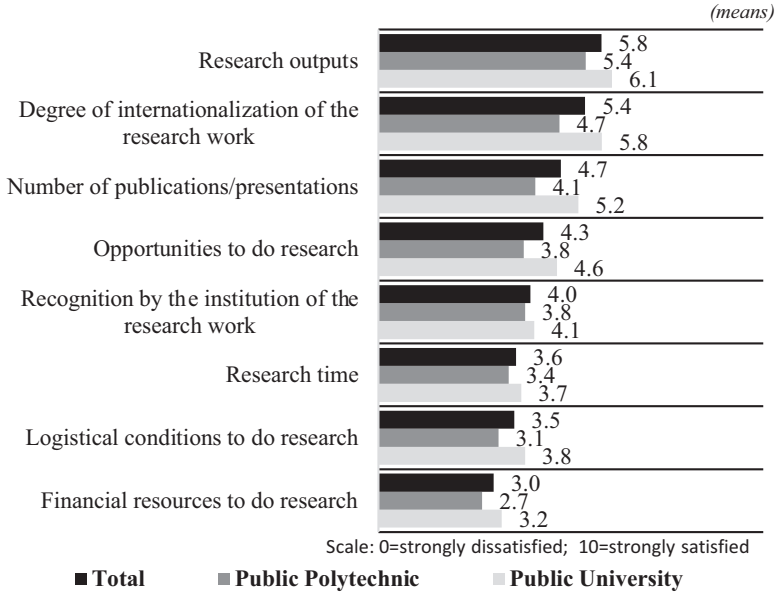


Fig. 5.14 Satisfaction with research climate by institutional type (Only researchers)

resources to do research, but academic staff is also dissatisfied with logistical conditions to do research, research time, recognition by the institution of the research work and opportunities to do research (Fig. 5.14).

Research in higher education in Portugal was "marginal" before the Revolution of April 1974. The relationship between research and teaching was reinforced by

law (Decree-Law 448/79) in universities. It then becomes clear that academics have assumed the three traditional missions of the university: teaching, research and services to society, together with duties in terms of institutional governance and academic management at all organizational levels. Later, a similar law was approved for the polytechnic institutes (Decree-Law 185/81) (Santiago et al. 2013). Thus, research is a relatively recent requirement in the academic career. On the other hand, we must associate the current state of economic and financial constraints that have been reflected in research funding.

5.5.11 Overall Satisfaction by Institutional Type

Overall Satisfaction of academics were higher with the indicators "adequacy of skills to the teaching practice" and "job", in public universities and public polytechnic institutes. Less satisfaction (but not dissatisfaction) was expressed by academics with the "institution". The satisfactory means are higher in public polytechnic institutes, except with respect to the indicator "opportunity to update knowledge" as shown in Fig. 5.15. The literature shows, similar to what happens in our study, positive levels of satisfaction among teachers (Oshagbemi 1999; Ward and Sloane 2000).

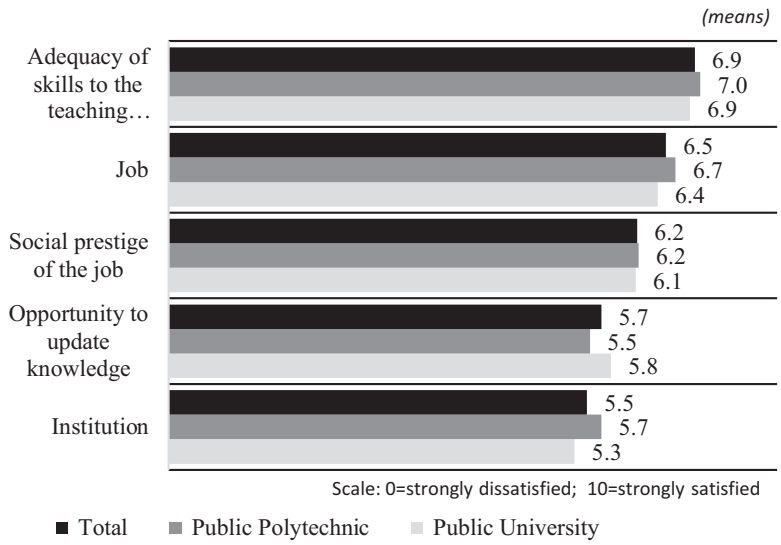


Fig. 5.15 Overall satisfaction by institutional type

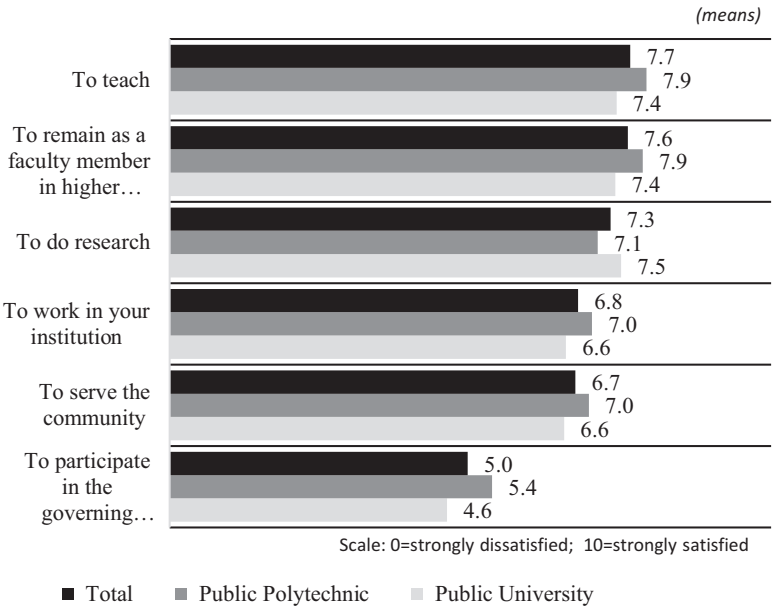


Fig. 5.16 Overall motivation by institutional type

5.5.12 Overall Motivation by Institutional Type

Regarding Overall Motivation, academics are more motivated to teach and to remain as faculty members in higher education in public universities and public polytechnic institutes. They are less motivated to serve the community and to participate in the governing bodies in public universities and public polytechnic institutes. Demotivation to participate in the governing bodies was shown by academics in public universities (only this indicator records a motivation mean below the centre of the scale in public universities, interpreted as demotivation) (Fig. 5.16). These results are similar to those of several studies which indicate that the preferences of the academics are primarily for teaching activities, then to research and ultimately to management (McInnis 2000a, b; Oshagbemi 2000; Verhaegen 2005).

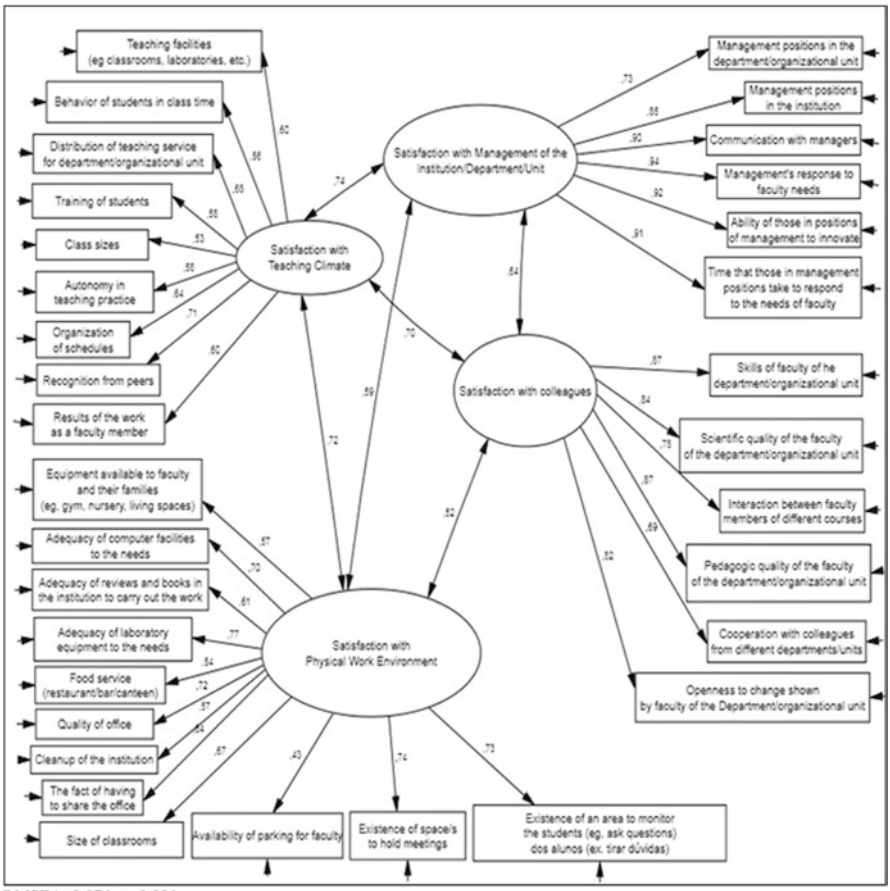
5.5.13 Satisfaction with Teaching Climate, Management, Colleagues and Work environment: A Structural Equation Model

As shown in the following figure, the indicators are well explained by their latent dimensions, all are statistically significant and the correlations between the dimensions (latent variables) are high (rs>=0,7), positive and statistically significant

(Fig. 5.17). More information is provided on Appendix 1 (please see Tables 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, and 5.19).

5.5.14 Synthetic Indexes

The dimensions of satisfaction and motivation are synthetic indexes constructed using a Principal Component Analysis (PCA) with a single dimension.[6] The factorial scores - standardized values, after unstandardized[7] – are the individual index



RMSEA: 0,076; p<0,001.

Fig. 5.17 Satisfaction with teaching climate, management, colleagues and work environment a structural equation model (RMSEA: 0,076; p < 0,001.)

[6] See Saris, W., available at http://surveymethodology.eu/conferences/warsaw-2009/sessions/106/).

[7] As suggested by Vaus, D. (2004). *Analyzing social science data*. London: Sage, reprinted, p. 112.

scores. Based on the respective indicators, we have constructed the following dimensions of satisfaction and motivation:

- Satisfaction with Teaching Climate[8]
- Satisfaction with Management of the Institution/Department/Unit[9]
- Satisfaction with Colleagues[10]
- Satisfaction with Physical Work Environment[11]
- Satisfaction with Non academic staff (administrative staff, technical and laboratorial staff…)[12]
- Satisfaction with Conditions of Employment[13]
- Satisfaction with Personal and Professional Development[14]
- Satisfaction with Institutions' Culture and Values[15]
- Satisfaction with Institutions' Prestige[16]
- Overall Satisfaction[17]
- Overall Motivation[18]

As can be observed, only academics in public polytechnic institutes reveal satisfaction values above the mean, in the dimensions Physical Work Environment and Management of the Institution/Department/Unit, and also Overall Motivation is above the mean (Fig. 5.18).

Regarding synthetic indexes by academic rank, there are not significant statistical differences between juniors and seniors with respect to their overall motivation and their overall satisfaction. The significant statistical differences are only between seniors and juniors with respect to their satisfaction with conditions of employment; personal and professional development, being seniors more satisfied than juniors and with respect to their satisfaction with management and colleagues, being juniors more satisfied than seniors (Fig. 5.19).

Regarding synthetic indexes by gender, there are not significant statistical differences between men and women with respect to their overall satisfaction, their satisfaction with institutions' culture and values, conditions of employment, non academic staff and physical work environment.

There are significant statistical differences between men and women with respect to their overall motivation, their satisfaction with teaching climate, management,

[8] Cronbach' Alpha: 0,84; Explained Variance: 44,4 %
[9] Cronbach' Alpha: 0,95; Explained Variance: 80,8 %
[10] Cronbach' Alpha: 0,92; Explained Variance: 71,9 %
[11] Cronbach' Alpha: 0,90; Explained Variance: 48,3 %
[12] Cronbach' Alpha: 0,86; Explained Variance: 72,7 %
[13] Cronbach' Alpha: 0,79; Explained Variance: 70,5 %
[14] Cronbach' Alpha: 0,91; Explained Variance: 84,6 %
[15] Cronbach' Alpha: 0,83; Explained Variance: 74,6 %
[16] Cronbach' Alpha: 0,93; Explained Variance: 82,1 %
[17] Cronbach' Alpha:0,89; Explained Variance: 68,8 %
[18] Cronbach' Alpha: 0,83; Explained Variance: 54,8 %

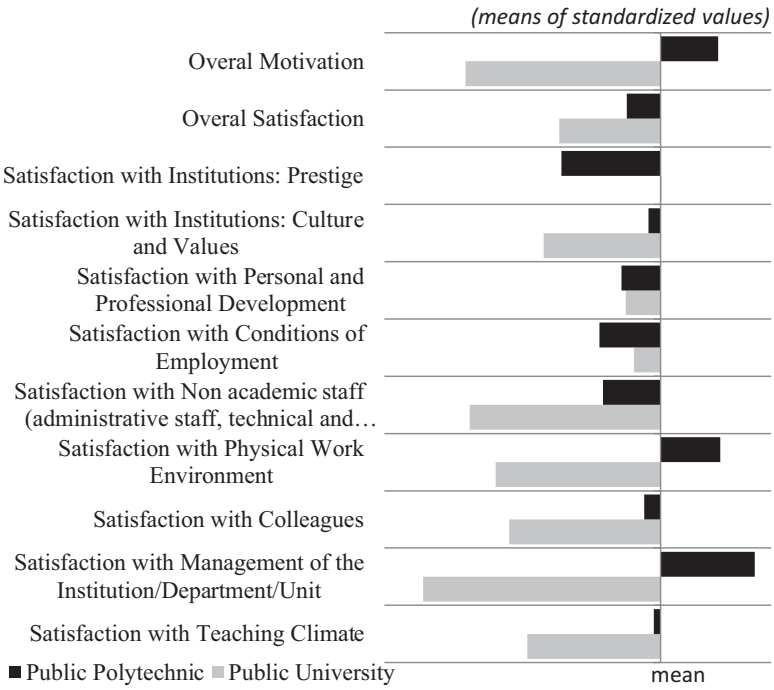


Fig. 5.18 Synthetic indexes by institutional type
Significant statistical differences in Teaching Climate ($t(2407) = -2.901$; $p < 0.05$);
Significant statistical differences in Management ($t(2292) = -7.417$; $p < 0.05$);
Significant statistical differences in Colleagues ($t(2339) = -2.946$; $p < 0.05$);
Significant statistical differences in Physical Work Environment ($t\ (1127) = -3.545$; $p < 0.05$;
Significant statistical differences in Non academic staff ($t(1940) = -2.719$; $p < 0.05$);
No significant statistical differences in Conditions of Employment ($t(2468) = 0.798$; $p > 0.05$);
No significant statistical differences in Personal and Professional Development ($t(2493) = 0.094$; $p > 0.05$);
Significant statistical differences in Institutions' Culture and Values ($t(2429) = -2.371$; $p < 0.05$);
Significant statistical differences in Institutions' Prestige ($t(2351) = 2.247$; $p < 0.05$);
No significant statistical differences in Overall Satisfaction ($t(2376) = -1.517$; $p > 0.05$);
Significant statistical differences in Overall Motivation ($t(2390) = -5.648$; $p < 0.05$)

colleagues, personal and professional development, institution's prestige (please see Fig. 5.20).

5.5.15 Satisfaction and Motivation

The following figure shows the relationship between the dimensions of satisfaction and academic motivation (Fig. 5.21).

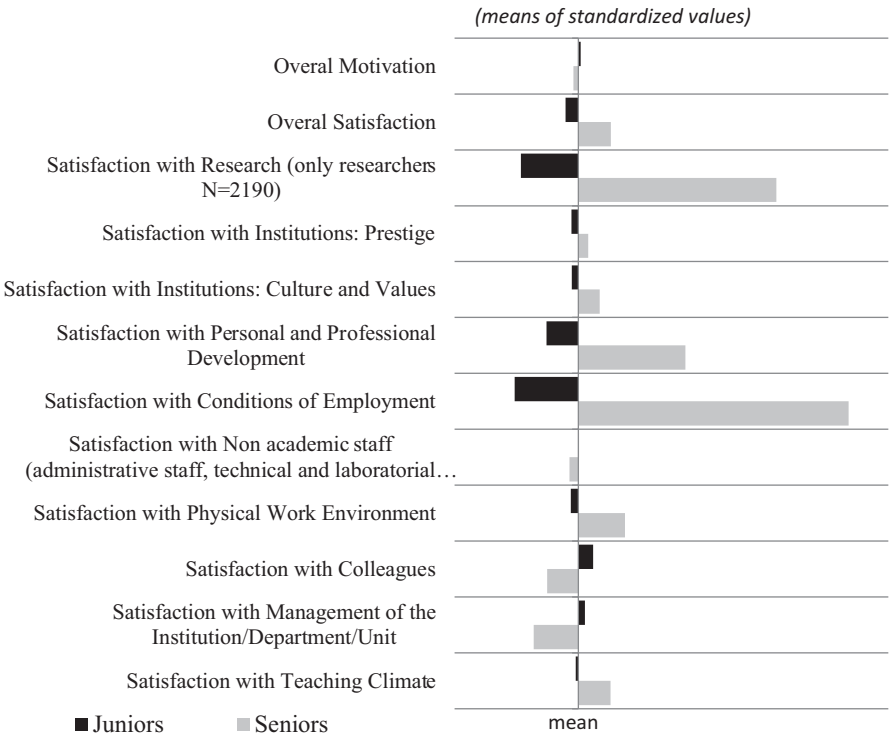


Fig. 5.19 Synthetic indexes by academic rank
Significant statistical differences in Teaching Climate ($t(2042) = 2.169$; $p < 0.05$);
Significant statistical differences in Management ($t(2248) = -2.603$; $p < 0.05$);
Significant statistical differences in Colleagues ($t(2287) = -2.096$; $p < 0.05$);
No significant statistical differences in Physical Work Environment ($t(1108) = -1.153$; $p > 0.05$);
No significant statistical differences in Non academic staff ($t(1902) = -0.132$; $p > 0.05$);
Significant statistical differences in Conditions of Employment ($t(2411) = 12.013$; $p < 0.05$);
Significant statistical differences in Personal and Professional Development ($t(2437) = 5.167$; $p < 0.05$);
No significant statistical differences in Institutions' Culture and Values ($t(2377) = 0.936$; $p > 0.05$);
No significant statistical differences in Institutions' Prestige ($t(2299) = 0.795$; $p > 0.05$);
No significant statistical differences in Overall Satisfaction ($t(2326) = 1.148$; $p > 0.05$);
No significant statistical differences in $^{\text{Overall}}$ Motivation ($t\ (2339) = -0.334$; $p > 0.05$)

The model explains that 35 % of the variation are motivated to teach, 41 % of the variation are motivated to work in the institution and 50 % of the variation are motivated to remain as a faculty member in higher education. Only the relationship between "Satisfaction with Physical Work Environment" and "Motivation to Work in the Institution" is not statistically significant.

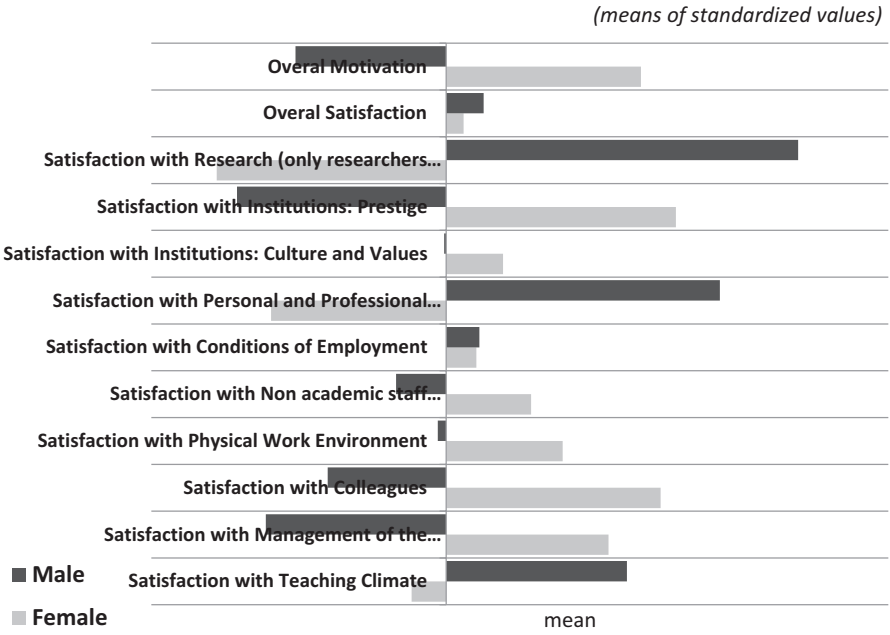


Fig. 5.20 Synthetic indexes by gender
Significant statistical differences in Teaching Climate ($t(2383) = -2.162$; $p < 0.05$);
Significant statistical differences in Management ($t(2271) = 2.684$; $p < 0.05$);
Significant statistical differences in Colleagues ($t(2317) = 2.187$; $p < 0.05$);
No significant statistical differences in Physical Work Environment ($t(1116) = 0.060$; $p > 0.05$);
No significant statistical differences in Non academic staff ($t(1921) = -0.408$; $p > 0.05$);
No significant statistical differences in Conditions of Employment ($t(2443) = -0.368$; $p > 0.05$);
Significant statistical differences in Personal and Professional Development ($t(2470) = -4.433$; $p < 0.05$);
No significant statistical differences in Institutions' Culture and Values ($t(2406) = -0.013$; $p > 0.05$);
Significant statistical differences in Institutions' Prestige ($t(2328) = 2.606$; $p < 0.05$);
No significant statistical differences in Overall Satisfaction ($t(2354) = -1.139$; $p > 0.05$);
Significant statistical differences in Overall Motivation ($t(2367) = 2.648$; $p < 0.05$)

5.6 Interviews

In the survey cited above, interviews were also made with policy makers, (including former ministers, former directors, former presidents and current presidents and rectors of HEI) and human resource managers of HEI. Some questions and answers were directly related to academic work and academic career. Despite the diversity of responses, there are issues that reappear throughout the interviews, particularly when they are about motivation and satisfaction of the academics.

Talking about what motivates academics, respondents refer mainly the following aspects: research, teaching, good environment, exchange with other communities, international acknowledgement and appreciation, freedom and autonomy, social

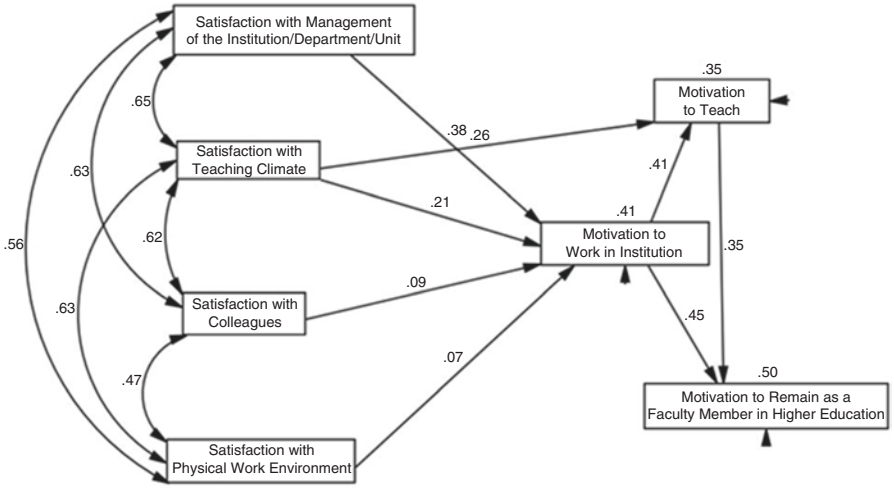


Fig. 5.21 Academic staff satisfaction and motivation a structural equation model (RMSEA: 0,044; p > 0,05)

position, self-motivation, working conditions, payment. On other hand, referring to what discourages academics, respondents highlight the following aspects: uncertainty, job insecurity/lack of stability, excessive administrative work, lack of real conditions for career progression, lack of time and conditions for research, poor organizational climate, increased bureaucracy, difficulties to create research teams, and lack of commitment to student success, reward, no recognition of bureaucratic work.

Regarding the existing dissatisfaction of academics, respondents report that it is due mainly to the following reasons: too much bureaucracy, contract instability, payment, difficulties in promotions/career, differential treatment, not recognizing the merits of teaching, lack of research funding, lack of resources, lack of technological resources, lack of student motivation. On other hand, in relation to the satisfaction, they report the following aspects: recognition/appreciation of the work results/merit, research, good working conditions, organizational support, stability in employment, payment, flexible timetable work, training support, career progression, freedom and autonomy, exchange and dialogue between communities, merit awards performance, student's success and/or motivation of students.

There are several studies related to academic work and satisfaction on several professional roles that characterise the academic work (Dowd and Kaplan 2005; Hagedorn 2000; Hermanowicz 2003; McInnis 2000a, b; Rosser 2005; Ssesanga and Garrett 2005; Stevens 2005; Taylor 2008; Teichler 2012; Verhaegen 2005; Winter and Sarros 2002; Ylikoji 2005). In general, these studies indicate high levels of sat-

isfaction with aspects intrinsic to academic work, such as the content of academic activities (with particular reference to the case of research), freedom and autonomy in planning and organizing the work itself. Dissatisfaction appears associated with material and financial conditions of work, as well as dimensions related to the work in this heightened competition among colleagues and the deterioration of relations of collegiality, lack of human and material support for performing an increasing number of administrative tasks. These studies also warn the degradation of working conditions of academics and a general increase in stress levels in the academic career. These constraints and unrealistic expectations in terms of performance of the various professional roles are aspects mentioned by a large number of academics, as relevant to the decreased quality of life at work.

The present statutes of academic career enunciate explicitly functions of teaching, research, service to the community and management. Moreover, they allow a number of other tasks that are regulated by each HEI. Thus, academics are facing changes and challenges. On the one hand, these changes and challenges refer to the complementarity between the various activities. On the other hand, the question of competition between the activities is also present. Indeed, these activities have a different value in the organization and management of academic careers. As stated by the authors such as McInnis (2000a, b); Taylor (2008) the perception of the importance of different professional roles for the promotion system shapes the everyday working practices and career planning by academics.

Given the diversity of roles currently assigned to academics and the changes that have been happening in higher education it will be natural that the academic profession in Portugal, will be faced with moments of uncertainty, insecurity and challenges.

5.7 Analysis

5.7.1 Dimensions of Job Satisfaction

Academic staff expresses more satisfaction with “Non academic staff (administrative staff, technical and laboratory staff)”, “Teaching Climate” and “Colleagues”. On the contrary, academics reveal less satisfaction or dissatisfaction with “Research Climate” and “Conditions of Employment”. These results are similar to Ssesanga and Garrett (2005) conclusions – academics were relatively satisfied with the co-worker behaviour and intrinsic factors of teaching. Also Ward and Sloane (2000) have stated similar results: academics were most satisfied with the opportunity to use their own initiative, with the relationship with their colleagues and with the actual work; they were least satisfied with promotion prospects and salary.

5.7.2 Indicators in Each Dimension of Job Satisfaction

Some indicators included in each dimension deserve to be highlighted. With respect to satisfaction with Teaching Climate academics are dissatisfied with the indicator "training of students". The "degree of autonomy in teaching practice" is the indicator with which academics are more satisfied. As argued by Teichler (2010) the academic profession is a free profession and academic freedom is a value appreciated in academia.

With respect to the dimension Colleagues, the indicators "interaction between faculty members of different courses" and "cooperation with colleagues from different departments/units" record lower values, especially in public universities. Thus, it seems very important to pay more attention to these aspects especially in public universities.

Because academics express less satisfaction with the "adequacy of the number of non academic staff to the amount of existing work", this is the indicator in the dimension Non academic staff that needs more attention by policy makers and institutional leaders. Dissatisfaction is evident with "existence of an area to monitor the students" and "equipment available to faculty and their families" in the satisfaction dimension Physical Work Environment. In public universities, academics are dissatisfied with the ability to innovate in the institution and with the participation of faculty in decision-making processes (indicators in the dimension Institutions' Culture and Values). Therefore, as argued by Evans (1999), it is important to give professors a voice, by effective consultation and sharing of decision-making. This is a factor to improve and to work.

Academics are dissatisfied with remuneration, job security and career opportunities in the dimension Conditions of Employment and with financial resources to do research, logistical conditions to do research, research time, recognition by the institution of the research work and opportunities to do research in the dimension Research Climate. These two dimensions need very urgent attention to work, because dissatisfaction is more pronounced here.

Moreover, analysing why academics are less motivated to serve the community and to participate in the governing bodies is an important task to be undertaken, in order to work these two indicators of the dimension Motivation.

5.7.3 Job Satisfaction and Motivation by Institutional Type

Academics seem to be more motivated and more satisfied in public polytechnic institutes, when compared with academics in public universities, but this result has to be interpreted with precaution, because the results of this study relate only to the academics who agreed to answer the online questionnaire, the sample is not representative of the population.

5.7.4 Job Satisfaction and Motivation by Gender

In our study, we found that there were no significant statistical differences between men and women with respect to their overall satisfaction. Moreover, with respect to satisfaction with institutions' culture and values, conditions of employment, non academic staff and physical work environment, there were no significant statistical differences between men and women. Similarly, authors such as Ward and Sloane (2000); Santhapparaj and Alam (2005) and Stevens (2005) found that women expressed similar levels of satisfaction when compared with men.

There were significant statistical differences between men and women with regard to their overall motivation, their satisfaction with teaching climate, management, colleagues, personal and professional development and institutions' prestige. Women are more motivated than men and are more satisfied than men with institutions' prestige, management and colleagues. Men are more satisfied than women with teaching climate and, not surprisingly, with personal and professional development. In a study by Monroe et al. (2008), this was the most intractable problem derived from the tension between career and family. It was notable that almost every woman with children lamented the difficulty in balancing the two roles.

5.7.5 Job Satisfaction and Motivation by Academic Rank

Seniors are more satisfied than juniors (significant statistical differences) with respect to their satisfaction with conditions of employment and personal and professional development. This is not surprising, considering that seniors when compared with juniors have a stable career. Moreover, as shown by EUROAC survey, in all countries juniors are less satisfied than seniors (Höhle and Teichler 2011).

5.7.6 Motivation and Satisfaction

The relationship between the dimensions of satisfaction and academic motivation was statistically demonstrated in our study. Thus, this finding is similar to some other findings in other studies in the literature. Dinham and Scott (1988, p. 362–363) stated that "Satisfaction and motivation are …inextricably linked through the influence each has on the other." Higher levels of motivation have been considered as a positive outcome of job satisfaction (Sledge et al. 2008).

5.8 Conclusion

The academic careers in Portugal have been heavily regulated by the government, and academics are covered by much of the general law on civil servants. For nearly 30 years, the legislation of academic careers remained almost unchanged. The changes introduced in this millennium occurred at the same time as changes in the legal status of HEI, in a context strongly influenced by changes in labour legislation.

Additionally, those changes allow each institution to regulate academic work. The implementation of the new statutes of HEIs is just in the beginning. The implementation of this process will clarify the future academic career in the next years. However, in the cases already known, it is clear the growing influence of market in the approved regulations.

After a period of strong growth in higher education, in Portugal, academics are faced today with much weaker employability opportunities than in the recent past. Moreover, there is more competition for the same positions than in the past. It is a context of uncertainty, increased competition and deterioration of working conditions threatening the future of academics in higher education. For the near future the academic career will strongly depend on the financial condition, framed in the logic of increasing performance assessment and accountability and immersed within European higher education area. Additionally, the financial sustainability of HEIs will put greater pressure on academics, towards raising research and in service delivery revenue for. Furthermore, financial constraints are having negative effect on his career, devalued during of the last years. In short, the career is subject to increasing uncertainty.

The changes observed in the statutes of the academic careers, as well as the current conditions of employment, have increased the difficulty of academic and career development, while creating conditions for greater mobility between HEIs. In the past, the transfer of a public higher education institution to a private one was not very popular in Portugal, due to the anchored ancient belief that the state provides security for life and the private sector does not. However, the current situation is different. The tenure has become more difficult and the uncertainty and job insecurity increased. Job mobility was very low in higher education but may increase in the new situation.

Academic career is today, in a time of globalization, characterised by uncertainties, not only due to lack of resources on higher education. As a matter of fact, HEI's and academics are faced today with pressures, changes and uncertainties, due to multiple factors that are reflected in areas of academic work and in the mission of HEI (Alves and Possamai 2010; Barrier and Musselin 2009; Brites Ferreira et al. 2012; Ferreira et al. 2012; Machado et al. 2011; Burbules and Torres 2004; Forest 2002; Morgado and Ferreira 2006; Teichler 2012; Welch 2005). The reflection raised by authors such as Altbach (2000, 2003); Deem (2006) and Enders (2000) continues to be necessary. The changes in the academic profession have been accompanied by the increasing loss of socioeconomic status. Changes like these

have been presented with some frequency, as efficiencies contrasting with the consciousness of impoverishment and decreasing resources. Moreover, there is a deterioration of wages and working conditions.

This chapter has considered the study on academic job satisfaction and motivation within the Portuguese academia. The academic profession is highly important in a society often characterized as a 'knowledge society', because it is responsible for the enhancement of systematic general knowledge (Cavalli and Teichler 2010). Job satisfaction is viewed as a predictor of positive attitudes at work, productivity, and, consequently, good results for the organization (Clark 1997). The study of job satisfaction can contribute to identifying organizational areas that deserve particular attention, as well as to understand and improve HEIs in relation to its main functions, such as teaching and researching (Fontes 2002). Job satisfaction in organizations has received growing attention because it reduces employee turnover, absenteeism and lateness (Chimanikire et al. 2007). Job satisfaction is essential for the organization as its absence will lead it toward laziness and will reduce the dedication to the organization (Moser 1997). Moreover, job satisfaction has an impact on worker health (Rego 2001; Marqueze and Moreno 2005). Thus, it's undeniable the importance of academic staff satisfaction, in order to attain all these positive consequences for academics and for HEIs.

The findings of this chapter are similar to Ssesanga and Garrett's (2005) that found out academics to be relatively satisfied with co-worker behaviour and intrinsic factors such as teaching and also similar to Ward and Sloane (2000) found academics were least satisfied with promotion and salary. The findings also confirm Herzberg et al.'s Two Factor Theory (1959) as the intrinsic element of the job- "Teaching climate" was associated with satisfaction and academics were less satisfied with extrinsic elements as "The Conditions of Employment" and interpersonal relationships with "Non academic staff" and "Colleagues" is not related with dissatisfaction.

Moreover, these set of results shows similar trends noticed in other studies developed in the topic, notwithstanding, the specificities of the Portuguese academics' career and the momentum of Portuguese higher education (Bentley et al. 2013; Dias et al. 2013; Machado-Taylor et al. 2013; Teichler 2012).

Nevertheless, the impact of funding cuts, of increased accountability measures and wide-scale change in teaching processes and technologies have left the academic staff de-motivated. The faculty career in public higher education are not changing in the last years in the direction of the academics request, particularly since 2004 with the exception of 2009. The development of strategic responses on people issues must consider the huge changes and trends that are occurring. Besides, HEIs need to identify not only what motivates existing academics, but also potential academics – knowledge workers who can meet desires elsewhere (Dunkin 2005). This identification is crucial, because today the business environment is extremely competitive and, consequently, continuous improvement has become a necessity (Machado et al. 2011; Machado-Taylor et al. 2010).

To attain this improvement each HEI must work with and for their human resources. In this case, institutional leaders and policy makers must take into account

the findings of this study and others in order in which they can contribute to the attraction of academic talents and to the improvement of quality of HEIs. Given the diversity of roles currently assigned to academics, the current changes in higher education and the influence of the contexts in which it falls it is natural that the academic profession will go through moments of tension, ambiguity and uncertainty, marked by some haziness as to their future, which, in itself, justifies a thorough reflection on academic work.

Acknowledgements The authors wish to thank the Portuguese Foundation for Science and Technology (FCT) and the Center for Research in Higher Education Policies (CIPES) for funding the research project "An Examination of Academic Job Satisfaction and Motivation in Portuguese Higher Education".

Appendices

Appendix 1

Table 5.8 Satisfaction with teaching climate

	N	Mean	Standard deviation
Distribution of teaching service for teachers of department/ organizational unit	2544	5,9	2,56
Recognition from peers	2544	5,4	2,57
Teaching facilities (e.g. classrooms, laboratories, etc.)	2544	5,6	2,57
Behaviour of students in class time	2544	6,0	2,23
Training of students	2544	4,1	2,19
Results of the work as a faculty member	2544	6,6	1,80
Degree of autonomy in teaching practice	2544	7,7	1,91
Class sizes	2544	5,7	2,65
Organization of schedules	2544	6,3	2,51

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.9 Satisfaction with management of the institution/department/unit

	N	Mean	Standard deviation
Management positions in the institution	2513	5,4	2,75
Management positions in the department/organizational unit	2491	5,8	2,80
Communication with managers	2419	5,2	2,79
Management's response to faculty needs	2486	4,7	2,68
Ability of those in positions of management to innovate	2433	4,7	2,76
Time that those in management positions take to respond to the needs of faculty	2433	4,8	2,74

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.10 Satisfaction with colleagues

	N	Mean	Standard deviation
Skills of faculty of the department/organizational unit	2508	6,6	2,09
Scientific quality of the faculty of the department/organizational unit in comparison with faculty of other similar institutions	2500	6,6	2,22
Pedagogic quality of the faculty of the department/organizational unit in comparison with faculty of other similar institutions	2473	6,5	2,17
Interaction between faculty members of different courses	2491	5,1	2,50
Cooperation with colleagues from different departments/units	2465	5,0	2,49
Openness to change shown by faculty of the department/ organizational unit	2478	5,3	2,60

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.11 Satisfaction with non academic staff (administrative staff. technical and laboratorial staff…)

	N	Mean	Standard deviation
Cooperation of administrative staff in the institution	2449	6,7	2,16
Cooperation of technical-lab staff in the institution	1996	6,5	2,24
Performance of non academic staff in the institution	2425	6,4	2,14
Adequacy of the number of non academic staff to the amount of existing work	2378	4,8	2,69

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.12 Satisfaction with physical work environment

	N	Mean	Standard deviation
Quality of office	2454	6,1	2,84
Adequacy of laboratory equipment to the needs	1999	5,5	2,67
Adequacy of computer facilities to the needs	2502	6,0	2,76
Adequacy of reviews and books in the institution to carry out the work	2502	5,8	2,76
Food service (restaurant/bar/canteen)	2447	5,4	2,67
Cleanup of the institution	2486	6,3	2,43
Equipment available to faculty and their families (eg, gym, nursery, living spaces…)	1961	2,9	2,80
Existence of an area to monitor the students (eg, ask questions)	2353	4,4	2,91
The fact of having to share the office	1924	5,9	3,00
Existence of space/s to hold meetings	2449	5,8	2,87
Size of classrooms	2468	6,3	2,51
Availability of parking for faculty	2357	6,3	3,36

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.13 Satisfaction with conditions of employment

	N	Mean	Standard deviation
Remuneration	2518	4,6	2,70
Career opportunities	2497	3,7	2,82
Job security	2494	4,4	3,08

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.14 Satisfaction with personal and professional development

	N	Mean	Standard deviation
Conditions for balance between work and family	2517	5,4	2,68
Conditions for personnel development	2508	5,2	2,66
Conditions for professional development	2525	5,1	2,72

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.15 Satisfaction with institutions' culture and values

	N	Mean	Standard deviation
Academic freedom you have	2514	6,9	2,33
Participation of faculty of the institution in decision-making processes	2468	4,8	2,66
Ability to innovate in the institution	2481	4,9	2,58

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.16 Satisfaction with institutions' prestige

	N	Mean	Standard deviation
Prestige of the institution	2515	5,9	2,45
International partners of the institution	2406	5,6	2,43
National partners of the institution	2399	5,5	2,36
Efforts of the institution to improve its image	2491	5,7	2,66

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.17 Satisfaction with research climate

	N	Mean	Standard deviation
Research time	2190	3,6	2,59
Recognition by the institution of the research work	2141	4,0	2,70
Financial resources to do research	2148	3,0	2,62
Logistical conditions to do research	2156	3,5	2,72
Research outputs	2126	5,8	2,34
Degree of internationalization of the research work	2070	5,4	2,65
Opportunities to do research	2141	4,3	2,71
Number of publications/presentations	2115	4,8	2,65

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.18 Overall Satisfaction

	N	Mean	Standard deviation
Job	2515	6,5	2,02
Institution	2502	5,5	2,46
Opportunity to update knowledge	2522	5,7	2,46
Adequacy of skills to the teaching practice	2522	6,9	2,22
Social prestige of the job	2456	6,2	2,39

Scale: 0 = strongly dissatisfied; 10 = strongly satisfied

Table 5.19 Overall motivation

	N	Mean	Standard deviation
To teach	2528	7,7	2,12
To do research	2477	7,3	2,34
To serve the community	2504	6,7	2,30
To participate in the governing bodies	2513	5,0	2,78
To work in the institution	2524	6,8	2,54
To remain as a faculty member in higher education	2523	7,6	2,47

Scale: 0 = strongly demotivated; 10 = strongly motivated

Appendix 2

Survey on Faculty Job Satisfaction in Higher Education – CIPES – Centre for Research in Higher Education Policies

This survey was designed to collect information on your satisfaction and motivation as a faculty member. Your personal identity is not known to participate in it. This questionnaire is applied under the Project PTDC/ESC/67784/2006 – An Examination of Academic Job Satisfaction and Motivation in Portuguese Higher Education (ESMAESP), funded by the Foundation for Science and Technology (FCT). If you work in more than one higher education institution, please answer reporting your major contract.

A Note on Privacy

This survey is anonymous. The record kept of your survey responses does not contain any identifying information about you, unless a specific question in the survey has asked for this. If you answered a survey that used an identifying token to allow you access, you can be assured that the identifying token is not kept with the answers. It is managed in a separate database and will only be updated to indicate if you completed or not this survey. It is not possible to relate the tokens of identification with the answers to this survey.

I. Satisfaction Dimensions

1. *What is your degree of satisfaction with the following aspects of your job as a faculty member?*

1.1. Teaching climate	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the distribution of teaching service for teachers of your department/organizational unit											
With the recognition from your peers											
With teaching facilities (e.g. classrooms, laboratories, etc.)											
With the behaviour of your students in class time											
With training of students											
With the results of your work as a faculty member											
With your degree of autonomy in your teaching practice											
With class sizes											
With the organization of schedules											

1.2. Management of the Institution/ Department/Unit	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With those in top management positions in your institution											
With those in top management positions in your department/organizational unit											
With communication with managers											
With the management's response to faculty needs											
With the ability of those in positions of management to innovate											
With the time that those in management positions take to respond to the needs of faculty											

1.3. Colleagues	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the skills of faculty of your department/organizational unit											

(continued)

1.3. Colleagues	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the scientific quality of the faculty of your department/ organizational unit in comparison with faculty of other similar institutions											
With the pedagogic quality of the faculty of your department/ organizational unit in comparison with faculty of other similar institutions											
With the interaction between faculty members of different courses											
With the cooperation with colleagues from different departments/units											
With the openness to change shown by faculty of your department/ organizational unit											

1.4. Non academic staff (administrative staff, technical and laboratorial staff…)	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10	Not applicable 11
With the **cooperation** of administrative staff in your institution												
With the **cooperation** of technical-lab staff in your institution												
With the **performance** of non academic staff in your institution												
With the adequacy of the number of non academic staff to the amount of existing work												

1.5. Physical work environment	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10	Not applicable 11
With the quality of the office												
With the adequacy of laboratory equipment to your needs												
With the adequacy of computer facilities to your needs												

(continued)

1.5. Physical work environment	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10	Not applicable 11
With the adequacy of reviews and books in your institution to carry out your work												
With food service (restaurant/ bar/canteen)												
With the cleanup of the institution												
With the equipment available to faculty and their families (eg, gym, nursery, living spaces…)												
With the existence of an area to monitor the students (eg, ask questions)												
With the fact that you have to share the office												
With the existence of space/s to hold meetings												
With the size of classrooms												
With the availability of parking for faculty												

1.6. Conditions of employment	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With your remuneration											
With the career opportunities											
With job security											

1.7. Personnel and professional development	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the conditions you have to balance work and family life											
With the conditions you have for your personnel development											
With the conditions you have for your professional development											

1.8. Institutions' culture and values	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the academic freedom you have											
With the participation of faculty of your institution in decision-making processes											

(continued)

1.8. Institutions' culture and values	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the ability to innovate in your institution											

1.9. Institutions' prestige	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the prestige of your institution											
With the international partners of your institution											
With the national partners of your institution											
With the efforts of your institution to improve its image											

1.10. Research climate											
(ANSWER ONLY IF YOU DO RESEARCH)	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With the time you have to do research											
With the recognition by the institution of your research work											
With the financial resources to do research											
With the logistical conditions to do research											
With your research outputs											
With the degree of internationalization of your research work											
With the opportunities you have to do research											
With your number of publications/ presentations											

1.11. General satisfaction	Strongly dissatisfied 0	1	2	3	4	5	6	7	8	9	Strongly satisfied 10
With your job											
With your institution											
With the opportunity you have to update knowledge											
With the adequacy of your skills to your teaching practice											
With the social prestige of your job											

***All things considered**, how do you rate your overall satisfaction:*

	Strongly dissatisfied									Strongly satisfied
	0	1	2	3	4	5	6	7	8	9	10
With your teaching activity											
With the research you do											

2. *Would you advise other people to work in your current and primary institution?*

Yes	O	No	O	I don't know	O

3. *In your opinion, how important is each of these aspects for students' academic success?*

	Not important at all									Very important	I have no opinion
	0	1	2	3	4	5	6	7	8	9	10	11
Your knowledge as a faculty member												
Your skills as a faculty member												
Your motivation as a faculty member												
Your satisfaction as a faculty member												

4. *Given the mission and objectives of your institution, what is the importance you give to each of the following aspects?*

	Not important at all									Very important	I have no opinion
	0	1	2	3	4	5	6	7	8	9	10	11
Your teaching activity												
The research you do												
The support you provide to the community												
Your participation in governing bodies												

II. Motivation

5. *What is your level of motivation for each of the following aspects?*

	Strongly demotivated										Strongly motivated
	0	1	2	3	4	5	6	7	8	9	10
To teach											
To do research											
To serve the community											
To participate in the governing bodies											
To work in your institution											
To remain as a faculty member in higher education											

III. Satisfaction, Motivation and Performance

6. *What is the importance you give to each of the following aspects for faculty performance?*

	Not important at all										Very important	I have no opinion
	0	1	2	3	4	5	6	7	8	9	10	11
The faculty motivation												
The faculty satisfaction												

IV. Academic Decision at Your Institution

7. *Distribute 100 points among the options available to characterize the decision-making process in your (main) institution of higher education.*

   In these fields only should be introduced numbers
   The total must be 100 points

collegial: There are widespread opportunities to participate meaningfully in decision making.	0
formal/rational: Decision making is formally structured. Problems are analysed. Decisions are made in a logical and reasoned manner.	0
autonomous: Academic and professional units function with a good deal of freedom in a decentralized or loosely coordinated environment.	0
autocratic: Decisions are made by higher level administrators with little or no consultation with faculty or lower level academic units.	0

(continued)

political: Different people or groups move in and out of the decision making process, wielding varying amounts of power at different times.	0
Remaining:	100
Total:	0

8. *What influence do you have, personally, in the formulation of key academic policies at the level of your unit?*

Much influence	O
Some influence	O
Little influence	O
No influence	O

9. *What influence do you have, personally, in the formulation of key academic policies at the level of your institution?*

Much influence	O
Some influence	O
Little influence	O
No influence	O

V. The New Regulation for Faculty Careers (Answer Only If You Are Professor of Public Higher Education)

10. *Do you know the new regulation for faculty careers (Decree-Law No. 205 - university higher education; Decree-Law No. 206 – polytechnic higher education; Decree-Law No 207 - polytechnic higher education, of 31, August, 2009)?*

Yes	O (go to **question 10.1.**)	No	O (go to **question 11**)

10.1 *What is your degree of satisfaction with the following aspects of this new regulation?*

	Strongly dissatisfied										Strongly satisfied
	0	1	2	3	4	5	6	7	8	9	10
Evaluation and Performance											
Hiring Process											

(continued)

	Strongly dissatisfied									Strongly satisfied
	0	1	2	3	4	5	6	7	8	9	10
Advancement in the Academic Career											
The new regulation for faculty careers **in general**											

10.2 *In your opinion, to what extent the new regulation for faculty careers (Decrees-Law No. 205, 206 and 207 of 31, August, 2009) contributes to facilitate the mobility of faculty between higher education institutions?*

Doesn't contribute	O
Contributes little	O
Contributes	O
Contributes a lot	O
I have no opinion	O

Does the new regulation for faculty careers promote inbreeding?

Yes	O	No	O	I don't know	O

What is your degree of satisfaction with the practice of "inbreeding"?

	Strongly dissatisfied									Strongly satisfied
	0	1	2	3	4	5	6	7	8	9	10
Degree of satisfaction											

VI. Academic/Professional Context

If you work in more than one higher education institution, please answer reporting your major contract.

Teaching

12. *Academic position*

Full Professor	O
Associate Professor	O
Assistant Professor	O
Invited Assistant Professor	O
Invited Associate Professor	O
Invited Full Professor	O
Visiting Assistant Professor	O
Visiting Associate Professor	O
Visiting Full Professor	O
Assistant	O
Junior Assistant	O
Invited Assistant	O
Reader	O
Monitor	O
Coordinator Professor	O
Adjunct Professor	O
Professor *Equiparado*-Coordinator, Adjunct, Assistant	O
Other (please specify) _____	O

13. *Type of contract*

Indefinite contract with experimental period	O
Indefinite contract without experimental period	O
Fixed term contract	O
Administrative contract *(Contrato administrativo de provimento)*	O
Other (please specify)_____	O

14. *Validity of your contract*

Less than 1 year	O
Between 1 and 3 years	O
More than 3 years	O

15. *Are you with an exclusive regime?*

Yes	O	No	O

16. *Working regime*

Part-time	O
Full-time	O
Other (please specify)_____	O

17. *How many hours do you usually teach per week:*

At night (after 8 pm) _____
During the day _____
Saturday _____

18. *Besides the hours you teach during a week, how many hours do you work per week in average considering all aspects of education (orientation, lesson planning, assessment, monitoring of students…)?* _____

19. *Is the work at night (teaching) rewarded at the primary institution where you teach?*

Yes	O	No	O	I don't know	O

20. *In which area/s do you teach?*

General Programs	O
Education	O
Arts and Humanities	O
Social Sciences, Commerce and Law	O
Science, Mathematics and Computer	O
Engineering, Manufacturing Industries and Construction	O
Agriculture	O
Health and Social Protection	O
Services	O
Unspecified	O

21. *Is there correspondence between the area/s you teach and your area/s of academic education?*

Yes	O	No	O

22. *Does your teaching activity cause stress to you?*

Yes	O	No	O

23. *For how many years, including this year, are you teaching in higher education?*

Less than 1 year	O
Please indicate the years: _____	

24. *For how many years, including this year, are you teaching in your current institution ?*

Less than 1 year	O
Please indicate the years: _____	

25. *If you have the opportunity, will you move to another institution?*

Yes	O	No	O

25.1. *If yes, why?*

Select all that apply	
I would like to have better working conditions (e. g. space, workload)	O
I would like to work in another geographical location	O
I would like to work in another type of institution (e.g. public, private)	O
I would like to work in another institution with better reputation	O
I would like to have research opportunities	O
I am not satisfied with my position	O
I am not satisfied with my salary	O
I am not satisfied with the quality of my students	O
Other (please specify) _____	O

Teaching management

26. *Are you responsible for the management of any program?*

Yes	O	No	O

26.1. *If yes, what is/are the academic degree/s?*

Select all that apply	
Undergraduate	O
Master	O
PhD	O
Advanced Training Courses	O

Management

27. *What management positions have you been holding in the last five years?*

Select all that apply	
Coordinator/Director of Department	O
President/School Director	O
School Vice-President	O
School Vice-Director	O
Rector/President	O
Vice-Rector/Vice-President	O
Pro-Rector	O
I have not held management responsibilities	O
Other (please, specify)_____	O

Research

28. *Over the last five years have you been responsible for:*

any research centre?			
Yes	O	No	O
any funded research project?			
Yes	O	No	O
any unfunded research project?			
Yes	O	No	O

29. *If you have research tasks/responsibilities, what is the main scientific area in which you do research?*

Mathematics	O
Computer and information sciences	O
Physical sciences	O
Chemical sciences	O
Earth and related environmental sciences	O
Biological sciences	O
Other natural sciences	O
Civil engineering	O
Electrical engineering, electronic engineering, information engineering	O
Mechanical engineering	O
Chemical engineering	O
Materials engineering	O
Medical engineering	O
Environmental engineering	O
Environmental biotechnology	O
Industrial Biotechnology	O
Nano-technology	O
Other engineering and Technologies	O
Basic medicine	O
Clinical medicine	O
Health sciences	O
Health biotechnology	O
Other medical sciences	O
Agriculture, forestry, and fisheries	O
Animal and dairy science	O
Veterinary science	O
Agricultural biotechnology	O
Other agricultural sciences	O
Psychology	O
Economics and business	O
Educational sciences	O
Sociology	O
Law	O
Political Science	O
Social and economic geography	O
Media and communications	O
Other social sciences	O
History and archaeology	O
Languages and literature	O
Philosophy, ethics and religion	O
Art (arts, history of arts, performing arts, music)	O
Other humanities	O

29.1. *On average, how many hours do you spend per week with that research activity?*_____

All Activities in Higher Education

30. *Approximately, what percentage of time do you spend , during an academic year, in the following activities (including your national and international involvement)?*
In these fields only should be introduced numbers
The total must be 100 points

Teaching activities (Including preparations, teaching, evaluation)	0
Academic and educational advising	0
Orientation of works/thesis/dissertations	0
Research	0
Committee work (national and/or international)	0
Administrative duties	0
Professional development	0
Consulting	0
Service to the academic community	0
Community Services	0
Other	0
Remaining:	100
Total:	0

31. *Approximately, what percentage of time would you like to spend , during an academic year, in the following activities (including your national and international involvement)?*

In these fields only should be introduced numbers
The total must be 100 points

Teaching activities (Including preparations, teaching, evaluation)	0
Academic and educational advising	0
Orientation of works/thesis/dissertations	0
Research	0
Committee work (national and/or international)	0
Administrative duties	0
Professional development	0
Consulting	0
Service to the academic community	0
Community Services	0
Other	0
Remaining:	100
Total:	0

32. *Please tell us the following:*

Does your professional activity has an impact on your family life?
Positive Impact (Please describe)_____
Negative Impact (Please describe)_____

VII. General Information

33. *Sex*

Female	O
Male	O

34. *Marital status*

Single	O
Married	O
Divorced	O
Widow/er	O
Separated	O
União de facto (living together for more than two years)	O

34.1. *Does your partner/husband/wife work? (If you have partner/husband/wife)*

Yes	O	No	O

34.2. *Is your partner/husband/wife an academic? (If you have partner/husband/wife)*

Yes	O	No	O

35. *Year of birth* _____

36. *Type of institution*

Public University	O
Public Polytechnic	O
Private University	O
Private Polytechnic	O

37. *In which institution do you teach? (answers in attachment)*

38. *Approximately, what is your net salary per month? (The answer is optional)*

_____

39. *Which of the following descriptions comes closest to your feeling about the current income of people living in your house?*

The current income allows you to live comfortably	O
The current income is enough to live	O
It's difficult to live with the current income	O
It is very difficult to live with the current income	O
You don't know	O

40. *What is your degree of education?*

Undergraduate	O
Master	O
PhD	O

Specify the area	
Mathematics	O
Computer and information sciences	O
Physical sciences	O
Chemical sciences	O
Earth and related environmental sciences	O
Biological sciences	O
Other natural sciences	O
Civil engineering	O
Electrical engineering, electronic engineering, information engineering	O
Mechanical engineering	O
Chemical engineering	O
Materials engineering	O
Medical engineering	O
Environmental engineering	O
Environmental biotechnology	O
Industrial Biotechnology	O
Nano-technology	O
Other engineering and Technologies	O
Basic medicine	O
Clinical medicine	O
Health sciences	O
Health biotechnology	O
Other medical sciences	O
Agriculture, forestry, and fisheries	O
Animal and dairy science	O
Veterinary science	O
Agricultural biotechnology	O
Other agricultural sciences	O
Psychology	O
Economics and business	O
Educational sciences	O
Sociology	O
Law	O
Political Science	O
Social and economic geography	O
Media and communications	O
Other social sciences	O

(continued)

History and archaeology	O
Languages and literature	O
Philosophy, ethics and religion	O
Art (arts, history of arts, performing arts, music)	O
Other humanities	O

Specify the year of conclusion of your highest academic degree _____

GENERAL COMMENTS

References

Addio, A. C., Eriksson, T., & Frijters, P. (2007). An analysis of the determinants of job satisfaction when individuals' baseline satisfaction levels may differ. *Applied Economics, 39*(1), 2413–2423.

Altbach, P. (Ed.). (2000). *The changing academic workplace: Comparative perspectives*. Boston College: Center for International Education.

Altbach, P. G., & Chait, R. (2001). Introduction. *Higher Education, 41*, 1–2.

Altbach, P. (Org.) (2003). *The decline of the guru: The academic profession in developing and middle-income countries*. New York: Palgrave/MacMillan.

Alves, M. P., & Possamai, F. (2010). Da simplicidade para a complexidade: O trabalho enredado do professor universitário. In M. P. Alves & M. A. Flores (Orgs.) (Eds.), *Trabalho docente, formação e avaliação: Clarificar conceitos, fundamentar práticas* (pp. 35–51). Mangualde: Edições Pedago.

Amaral, A., Ferreira, J. F., Machado, M. L., & Santiago, R. (2006). *Modelos de governação e gestão dos Institutos Politécnicos no contexto europeu*. Castelo Branco: Politécnica – Associação dos Institutos Politécnicos do Centro.

Ambrose, S., Huston, T., & Norman, M. (2005). A qualitative method for assessing faculty satisfaction. *Research in Higher Education, 46*(7), 803–830.

Barrier, J., & Musselin, C. (2009). The rationalization of academic work and careers: Ongoing transformations of the profession and policy challenges. In B. M. Kehm, J. Huisman, & B. Stensaker (Eds.), *The European higher education area: Perspectives on a moving target* (pp. 203–221). Rotterdam: Sense Publishers.

Bentley, P., Coates, H., Dobson, I., Goedegebuere, L., & Meek, L. (Eds.). (2013). *Job satisfaction around the academic world* (The changing academy – The changing academic profession in international comparative perspective, Vol. 7). Dordrecht: Springer.

Brennan, J. (2007). The academic profession and increasing expectations of relevance. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 19–28). Kassel: INCHER.

Brites Ferreira, J., Seco, G., Canastra, F., Dias, I. S., & Abreu, M. O. (2011). (In)sucesso académico no ensino superior: Conceitos, factores e estratégias de intervenção. *Revista*

Iberoamericana de Educación Superior (RIES), México, IISUE-UNAM/Universia, II(4). Available at http://ries.universia.net/index.php/ries/article/view/91

Brites Ferreira, J., Machado, M. L., & Gouveia, O. (2012). Satisfação e motivação dos docentes do ensino superior em Portugal. *Revista Ibero-americana de Educação*, secção 'Estudos e Investigações'/Docência Universitária, 58/1, 1–12.

Burbules, N. C., & Torres, C. A. (2004). Globalização e educação: Uma introdução. In N. C. Burbules & C. A. Torres (Orgs.), *Globalização e educação: Perspectivas críticas* (pp. 11–26). São Paulo: Artmed Editora.

Cabrito, B. (2006). Higher education in Portugal: Recent evolution, democratisation and trends. *The Journal of Finance and Management in Colleges and Universities, 3*, 242–268.

Capelleras, J. (2005). Attitudes of academic staff towards their job and organization: An empirical assessment. *Tertiary Education and Management, 11*(2), 147–166.

Caraça, J. G., Conceição, P., & Heitor, M. V. (1996). Uma perspectiva sobre a missão das universidades. *Análise Social, 139*, 1201–1233.

Cavalli, A., & Teichler, U. (2010). The academic profession: A common core, a diversified group or an outdated idea? *European Review, 18*(1), S1–S5.

Chimanikire, P., Mutandwa, E., Gadzirayi, C. T., Muzondo, N., & Mutandwa, B. (2007). Factors affecting job satisfaction among academic professionals in tertiary institutions in Zimbabwe. *African Journal of Business Management, 1*(6), 166–175.

Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics, 4*(4), 341–372.

Deem, R. (2006). Conceptions of contemporary European universities: To do research or not do research? *European Journal of Education, 41*(2), 281–304.

Dias, D., Machado-Taylor, M. L., Santiago, R., Carvalho, T., & Sousa, S. (2013). Portugal: Dimensions of academic job satisfaction. In P. Bentley, H. Coates, I. Dobson, L. Goedegebuere, & L. Meek (Eds.), *Job satisfaction around the academic world* (The changing academy – The changing academic profession in international comparative perspective, Vol. 7, pp. 187–208). Dordrecht: Springer.

Dinham, S., & Scott, C. (1998). A three domain model of teacher and school executive career satisfaction. *Journal of Educational Administration, 36*(4), 362–378.

Dowd, K. O., & Kaplan, D. M. (2005). The career life of academics: Boundaried or boundaryless? *Human Relations, 58*(6), 699–721.

Dunkin, R. (2005). *The HR challenge: Some more thoughts. Response to Keynote Address*. Seminar on HR issues OECD, Paris, August 25–6.

Egbule, P. E. (2003). Factors related to job satisfaction of academic staff in Nigerian universities. *Journal of Further and Higher Education, 27*(2), 157–166.

Enders, J. (1999). Crisis? What crisis? The academic professions in the "knowledge" society. *Higher Education, 38*(1), 71–81.

Enders, J. (2000). Academic staff in Europe: Changing employment and working conditions. In M. Tight (Ed.), *Academic work and life: What it is to be an academic, and how this is changing* (pp. 7–32). New York: Elsevier Science.

Evans, L. (1999). *Managing to motivate: A guide for school leaders*. London and New York: Cassell.

Ferreira, J. B., Machado-Taylor, M. L., Brites, R., & Gouveia, O. M. R. (2012a). O trabalho académico no ensino superior, em Portugal. In C. Leite & M. Zabalza (Coords.), *Ensino superior: Inovação e qualidade na docência* (pp. 9168–9182). Porto: Edição CIIE – Centro de Investigação e Intervenção Educativas/Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto.

Ferreira, J. B., Seco, G. Abreu, M. O., Dias, I. S., Cadima, R., & Canastra, F. (2012b). *Sucesso e satisfação dos estudantes finalistas do Instituto Politécnico de Leiria*. Instituto Politécnico de Leiria/Edições Afrontamento.

Fontes, J. F. (2002). La satisfacción en el trabajo de académicos en una universidad publica estatal. *Perfiles Educativos, 24*(96), 47–72.

Forest, J. (2002). *I prefer to teach: An international comparison of faculty preference for teaching over research*. New York: Routledge.

Galaz-Pontes, J. F., Padilla- González, L., & Gil-Antón, M. (2007). The increasing expectation of relevance for higher education and the academic profession: Some reflections on the case of Mexico. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 57–81). Kassel: INCHER.

Gappa, J. M. (2010). Rethinking faculty work and workplaces. In G. Gordon & C. Whitchurch (Eds.), *Academic and professional identities in higher education: The challenges of a diversifying workforce*. New York/London: Routledge.

Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work: Higher education's strategic imperative*. San Francisco: Jossey-Bass.

Gordon, G., & Whitchurch, C. (Eds.). (2010). *Academic and professional identities in higher education: The challenges of a diversifying workforce*. New York/London: Routledge.

GPEARI. (2011). *Docentes do ensino superior [2001 a 2009]*. Lisboa: Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais.

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. *New Directions for Institutional Research*, *105*, XXVII(1), 5–20.

Hargreaves, A. (1998). *Os professores em tempos de mudança: O trabalho dos professores na idade pós-moderna*. Lisboa: McGraw-Hill.

Hargreaves, A. (2003). *O ensino na sociedade do conhecimento: A educação na era da insegurança*. Porto: Porto Editora.

Henkel, M. (2007). Shifting boundaries and the academic profession. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 191–204). Kassel: INCHER.

Henkel, M. (2010). Introduction: Change and continuity in academic and professional identities. In G. Gordon & C. Whitchurch (Eds.), *Academic and professional identities in higher education: The challenges of a diversifying workforce* (pp. 3–12). New York/London: Routledge.

Hermanowicz, J. C. (2003). Scientists and satisfaction. *Social Studies of Science, 33*(1), 45–73.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. New York: Wiley.

Höhle, E. A., & Teichler, U. (2011). What makes academics happy? Factors for academic job satisfaction – An international comparison. *EAIR 33rd Annual Forum*, Warsaw, 28–31 August.

Houston, D., Meyer, L. H., & Paewai, S. (2006). Academic staff workloads and job satisfaction: Expectations and values in academe. *Journal of Higher Education Policy and Management, 28*(1), 17–30.

Kogan, M., & Teichler, U. (2007). Key challenges to the academic profession and its interface with management: Some introductory thoughts. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 9–18). Kassel: INCHER.

Lima, L. (2012). Patterns of institutional management: Democratisation, autonomy and managerialist canon. In G. Neave & A. Amaral (Eds.), *Higher education in Portugal 1974–2009* (pp. 287–306). Dordrecht: Springer.

Machado, M. L., Meira Soares, V., Brites, R., Brites Ferreira, J., Farhangmehr, M., & Gouveia, O. (2011). Uma análise da satisfação e da motivação dos docentes no ensino superior português. *Revista Lusófona de Educação, 17*, 167–181.

Machado, M. L., Meira Soares, V., Brites Ferreira, J., Brites, R., Farhangmehr, M., & Gouveia, O. M. R. (2013). Job (in)satisfaction among academics in Portuguese higher education institutions. *Journal of the European Higher Education Area, 2*, 69–94.

Machado-Taylor, M. L., Meira Soares, V., & Gouveia, O. (2010). The study of academic job satisfaction and motivation: An ongoing study in Portuguese higher education. *Global Business & Economics Anthology, B&ESI, II*(2), 242–246.

Magalhães, A. M., & Santiago, R. (2012). Governance, public management and administration. In G. Neave & A. Amaral (Eds.), *Higher education in Portugal 1974–2009* (pp. 227–248). Dordrecht: Springer.

Malhotra, N. K., & Birks, D. F. (2007). *Marketing research: An applied approach* (3rd ed.). Harlow: Prentice Hall.

Marginson, S. (2009). The academic professions in the global era. In J. Enders & E. Weert (Eds.), *The changing face of academic life: Analytical and comparative perspectives*. New York: Palgrave Macmillan.

Marqueze, E. C., & Moreno, C. R. (2005). Satisfação no trabalho: Uma breve revisão. *Revista Brasileira de Saúde Ocupacional, 30*(112), 69–79.

McInnis, C. (2000a). Changing academic work roles: The everyday realities challenging quality in teaching. *Quality in Higher Education, 6*(2), 143–152.

McInnis, C. (2000b). Towards new balance or new divides? The changing work roles of academics in Australia. In M. Tight (Ed.), *Academic work and life: What it is to be an academic, and how this is changing* (pp. 117–145). New York: Elsevier Science.

Meira Soares, V. (2001). The academic profession in a massifying system: The Portuguese case. In J. Enders (Ed.), *The academic staff in Europe: Changing contexts and conditions* (pp. 233–253). Westport: Greenwood Press.

Meira Soares, V. (2003). *The attractiveness of the academic careers in Portugal*. Matosinhos: Centre for Research in Higher Education Policies (CIPES).

Meira Soares, V., & Trindade, A. R. (2004). The attractiveness of the academic career. In J. Enders & E. de Weert (Eds.), *The international attractiveness of the academic workplace in Europe*. Franfurt am Main: Gewerkschaft Erziehung und Wissenschft.

Monroe, K., Ozyurt, S., Wrigley, T., & Alexander, A. (2008). Gender equality in academia: Bad news from the trenches, and some possible solutions. *Perspectives on Politics, 6*(2), 215–233.

Morgado, J. C., & Ferreira, J. B. (2006). Globalização e autonomia: Desafios, compromissos e incongruências. In A. F. Moreira & J. A. Pacheco (Eds.), *Globalização e educação* (pp. 61–86). Porto: Porto Editora.

Moser, K. (1997). Commitment in organizations. *Psychologies, 41*(4), 160–170.

Musselin, C. (2007). Transformations of academic work: Facts and analysis. In M. Kogan & U. Teichler (Eds.), *Key challenges to the academic profession* (pp. 175–190). Kassel: INCHER.

Musselin, C. (2010). The impact of changing recruitment practices on academic profiles. In G. Gordon & C. Whitchurch (Eds.), *Academic and professional identities in higher education: The challenges of a diversifying workforce*. New York/London: Routledge.

Neave, G. (2009). The academic estate revisited: Reflections on academia's rapid progress from the Capitoline hill to the tarpeian rock. In J. Enders & J. Weert (Eds.), *The changing face of academic life: Analytical and comparative perspectives* (pp. 15–35). Basingstoke: Palgrave Macmillan.

Nyquist, J. G., Hitchcock, M. A., & Teherani, A. (2000). Faculty satisfaction in academic medicine. *New Directions for Institutional Research, 27*(1), 33–43.

Oshagbemi, T. (1997). Job satisfaction and dissatisfaction in higher education. *Education + Training, 39*(9), 354–359.

Oshagbemi, T. (1999). Academics and their managers: A comparative study in job satisfaction. *Personnel Review, 28*(1/2), 108–123.

Oshagbemi, T. (2000). How satisfied are academics with their primary tasks of teaching, research and administration and management? *International Journal of Sustainability in Higher Education, 1*(2), 124–136.

PORDATA. (2011). *Docentes*. Lisbon: Fundação Francisco Manuel dos Santos. Retrieved June 2, 2011, from: http://www.pordata.pt/azap_runtime/?n=26&SubThemeId=43&Varnum=7

Rego, A. (2001). Percepções de justiça: Estudos de dimensionalização com professores do ensino superior. *Psicologia: Teoria e Pesquisa, 17*(2), 119–131.

Rosser, V. J. (2005). Measuring the change in faculty perceptions over time: An examination of their worklife and satisfaction. *Research in Higher Education, 46*(1), 81–107.

Santhapparaj, A. S., & Alam, S. S. (2005). Job satisfaction among academic staff in private universities in Malaysia. *Journal of Social Sciences, 1*(2), 72–76.

Santiago, R., Sousa, S. B., Carvalho, T., Machado-Taylor, L., & Amado, D. (2013). Teaching and research; perspectives from Portugal. In J. Cheol Shin, U. Teichler, W. K. Cummings, & A. Arimoto (Eds.), *Teaching and research in contemporary higher education: Systems, activities, nexus, and rewards* (pp. 153–176). London: Springer.

Santos, G. M. G. (2007). *O desenvolvimento de carreira dos académicos: Uma análise centrada na relação entre o trabalho e a família*. Ph.D. Thesis. Braga: Universidade do Minho.

Seco, G., Pereira, I., Dias, I. S., Casimiro, M., & Custódio, S. (2006). *Para uma abordagem psicológica da transição do ensino secundário para o ensino superior: pontos e alçapões*. Politécnica – Associação dos Institutos Politécnicos do Centro.

Silva, R. B. (1998). Para uma análise da satisfação com o trabalho. *Sociologia, Problemas e Práticas, 26*, 149–178.

Sledge, S., Miles, A., & Coppage, S. (2008). What role does culture play? A look at motivation and job satisfaction among hotel workers in Brazil. *The International Journal of Human Resource Management, 19*(9), 1667–1682.

Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of University academics: Perspectives from Uganda. Higher Education, 50(1), 33–56.

Stevens, P. A. (2005). *The job satisfaction of English academics and their intentions to quit academe*. London: National Institute of Economic and Social Research.

Tardif, M., & Lassardi, C. (Orgs.) (2008). *O ofício de professor: História, perspectivas e desafios internacionais*. Petrópolis: Editora Vozes.

Taylor, P. (2008). Being an academic today. In R. Barnett & R. Di Napoli (Eds.), *Changing identities in higher education: Voicing perspectives* (pp. 27–39). London: Routledge.

Teichler, U. (2009). *Higher education and the world of work: Conceptual frameworks, comparative perspectives, empirical findings*. Rotterdam: Sense Publishers.

Teichler, U. (2010). The diversifying academic profession? *European Review, 18*(1), S157–S179.

Teichler, U. (2012). Teaching versus research: The vulnerable balance. *Contribution to the Seminar Challenges and Options: The Academic Profession in Europe*. Porto: Centro de Investigação de Políticas do Ensino Superior, 15–16 March.

Teixeira, P. (2012). The changing public-private mix in higher education: Analysing Portugal's apparent exceptionalism. In A. Amaral & G. Neave (Eds.), Higher education in Portugal 1974-2009 – A nation, a generation (pp. 307–328). Dordrecht: Springer.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C., & Vallières, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic and amotivation in education. *Educational and Psychological Measurement, 52*, 1003–1017.

Verhaegen, P. (2005). Academic talent: Quo Vadis? Recruitment and retention of faculty in European business schools. *Journal of Management Development, 24*(9), 807–818.

Ward, M. E., & Sloane, P. J. (2000). Non-pecuniary advantages versus pecuniary disadvantages: Job satisfaction among male and female academics in Scottish universities. *Scottish Journal of Political Economy, 47*(3), 273–303.

Weiss, D., Dawis, R., England, G., & Lofquist, L. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minneapolis: The University of Minnesota Press.

Welch, A. (Ed.). (2005). *The professoriate: Profile of a profession*. Dordrecht: Springer.

Winter, R., & Sarros, J. (2002). The academic work environment in Australian universities: A motivating place to work. *Higher Education Research & Development, 21*(3), 241–258.

Ylikoji, O.-H. (2005). Academic nostalgia: A narrative approach to academic work. *Human Relation, 58*, 555–576.

Part III
Country Chapters

Chapter 6
Academic Careers During the Massification of Austrian Higher Education

Radical change or persistence of long-standing traditions?

Hans Pechar and Elke Park

6.1 Introduction

Academic careers at Austrian universities are structured along the Germanic pattern with a hierarchical division between full professors and academics below professorial status. Starting with the massification of higher education this pattern was subject to major changes. The central theme of this paper is the balance between radical change and the persistence of long-standing traditions in the structure of Austrian academic careers. It will also be shown how academics' working conditions and career progression have ultimately been shaped and determined by the surrounding legal framework and socio-political context.

Over the last five decades Austria has experienced a series of higher education reforms. From an analytical point of view, two reform cycles are visible, each with very different underlying policy paradigms. Both periods implemented a variety of measures, following a coherent background philosophy (see Fig. 6.1). These reform cycles also represent transitional periods separating distinct organisational models, or incarnations, of the university: the 'chair-university' (up to 1975), the 'group university' (from 1975 to 1993/2002) and the 'managerial university' (from 1993/2002 up to the present day).

- The 1st reform cycle had its peak in the mid-1970s and can be characterised as an inclusion of higher education under the umbrella of welfare state policies. The policy catchwords referred to the 'opening-up' and 'democratisation' of higher education (emphasising student participation, integrating junior faculty into decision making, and broadening the fields of research).

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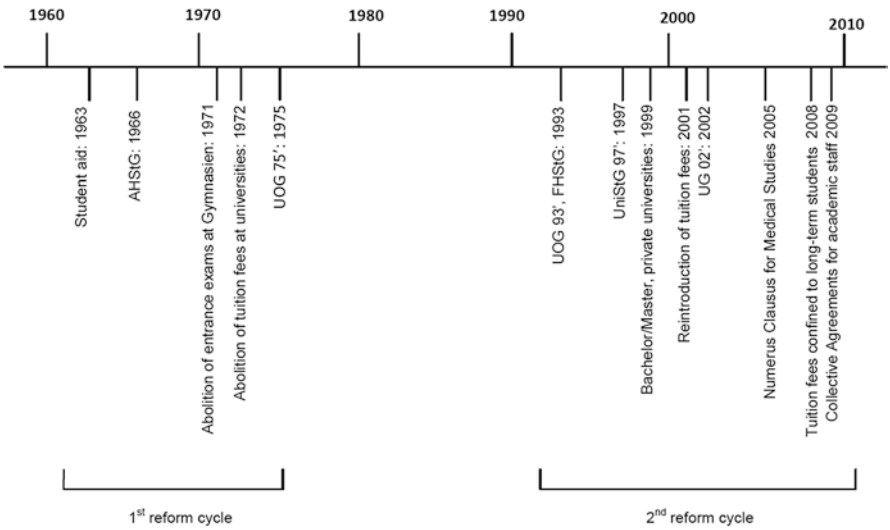

Fig. 6.1 The two reform cycles in Austrian higher education, 1960–2010

- The 2nd cycle follows the international policy trends that emerged in the 1990s and has peaked with a governance reform transforming universities from state agencies to 'public enterprises'. The buzzwords of this cycle are 'deregulation' and 'efficiency'.

Reforms regarding the career structure of academics reflect the background philosophy of these two reform cycles. We will summarise the changes in the academic workplace during the post-war period that culminated in an improvement of the legal status and the employment conditions for the "middle rank" of Austrian academics (Mittelbau). We will then discuss the changes during the 2nd reform cycle – these reforms led to a radical break with the long-standing tradition in Austrian higher education, with the government leaving behind its philosophy of a 'cultural mission' in favour of a contractual relationship with universities. One implication of the change is that academics are no longer civil servants but now have private employment contracts with their universities.

6.2 The Chair Structure and the Dominance of the Academic Oligarchy

In the period after 1848 Austria adopted the Humboldtian concept of the research university, including the organizational structure of the chair system. The university was basically an assembly of chair holding professors, each in charge of their own specialized field of research. Originally, no other academic staff were employed by the university. Private docents who had already completed their habilitation (the

second thesis that serves as a gatekeeper to the professoriate) had no regular salary but did receive income from the fees of students enrolled in their lectures.

The growth of laboratories and other service intensive research infrastructure together with an increase in student enrolments meant that the chair system in its original form could not be maintained. Professors increasingly needed 'helping hands' which they found in the new category of 'assistants' who were increasingly employed by universities (Busch 1963). Since their employment conditions were rarely satisfactory, social rights issues emerged for this new category of academic staff (Bruch 1984). Chair-holders for the most part reacted in a very hostile manner towards this union like movement, which they considered a threat to the German tradition of the research university. Consequently, the different academic status groups developed their own organizations representing particular interests.[1]

Over the years, academic staff below the professoriate were able to successfully increase their social rights and the conditions for their academic work. However, they remained a kind of 'foreign body' in the chair structure that only recognized the full professor as a true academic position. Hence, they were not represented in collegial bodies and could not participate in collegial decision-making. We will now explore the situation of academic staff in more detail with a special focus on attempts to establish a 'middle-rank' of academic staff and to develop appropriate career paths for sub-professorial positions.

6.2.1 Status and Working Conditions of 'Middle-Rank' Academics

The first phase of post-war higher education in Austria (1955–1975) is characterised by a revival of the traditional 'Ordinarienuniversität' (chair-university). The HE Organisation Act of 1955 (HOG 55) did not bring about structural change but reinstated and consolidated the traditional, pre-war chair-system characterised by strongly hierarchical structures and the dominion of ordinary professors (academic oligarchy) within the university. Professors held the decision-making monopoly (Preglau-Hämmerle 1986, p. 223) at universities and they ruled via collegial bodies (in 'professorial commissions' and the senate). This restoration of traditional power and personnel structures was not to change until the mid-1970s. University staff in this period consisted of two main groups: the professoriate on one side, and their 'assistants' on the other.

[1] Contrary to this development, at the same time academics in the United States founded the American Association of University Professors, encompassing all academic ranks. The driving initiative came from established professors; this was unlike the German speaking countries, where junior academics were fighting for their social rights. 'The fact that this initiative was assumed by the academic elite in this country points to the special context in which the call for professional unity arose. Here professors were not members of autonomous guilds or of a high and privileged stratum of the civil service; they were employees of lay governing boards in private and public institutions.' (Metzger 1987, p. 168).

Until 1972/1975 there were two types of professors at Austrian universities: ordinary and 'extraordinary' professors. Both were considered 'chair holders' and followed the same appointment procedures (a competitive 'call'). Their civil servant positions differed only in terms of remuneration and benefits. Also, extraordinary professors, despite belonging to the 'professorial estate' in professorial commissions (the collegial decision-making bodies below the senate), were not eligible for membership of the senate (as the senate was comprised of deans which could only be recruited from the group of ordinary professors). However, these extraordinary professors only made up a small part of the professoriate and their numbers continued to decline until 1972.[2]

Alongside – or better, below – the professoriate existed the second and by far the largest group of academic staff in this first phase of university organisation in Austria: the group of so-called 'university assistants'. This reflected a two-tier structure, with no direct means of progression from one tier to the other.

In 1948 and then 1962, the University Assistants Act laid down and codified the role, career path and obligations of university assistants. The Act, which remained in force until 1988, foresaw a supporting role for assistants in relation to the professoriate. They were to aid and support professors in carrying out their duties in teaching, research and administration. While they were to 'participate' in professors' lectures, their job profile did not extend to an independent teaching (and/or research) function, although teaching duties could be assigned to them by the professoriate via externally remunerated lecturing contracts. Assistants were also not represented in collegial decision-making bodies.

With growing student numbers, and thus increased teaching responsibilities, this setup became increasingly problematic. Assistants had to take on an ever-growing workload (exploitation without representation) and personal allegiance often demanded that they would carry out teaching assignments for professors without extra remuneration. The administrative workload was also increasingly devolved to university assistants: in 1969, for example, 23 % of all departments had no administrative support staff and thus had to rely on the work of university assistants alone (see Hochschulbericht 1969). In the 'take-off' phase of HE massification (from the 1960s to the mid-1970s, see Preglau-Hämmerle 1986, p. 202), public interest, investment and expenditure in HE – along with student numbers – all grew. The tasks at hand increased drastically and so did the numbers of university assistants (1955: 1456, 1962: 1720, 1969: 3353, 1972: 4484). In the 5 years between 1962 and 1969 their numbers almost doubled, over the period from 1955 to 1972 they tripled. Still, the legal framework acknowledging the contributions and work of assistants was not changed to increase their independence or participatory rights.

Assistants were strongly dependent on and hierarchically subordinated to professors. They had to rely on the professoriate (especially on the one professor they were assigned to) for positive assessment and thus career advancement ('unbearable personal dependencies', see Pechar 2005). However, if in turn they were supported

[2] Chair-holders in 1955: 336 ordinary and 121 extraordinary professors; in 1964: 502 ordinary and 113 extraordinary professors; in 1970: 806 ordinary and only 100 extraordinary professors at all Austrian universities; Source: BMWF, Hochschulberichte.)

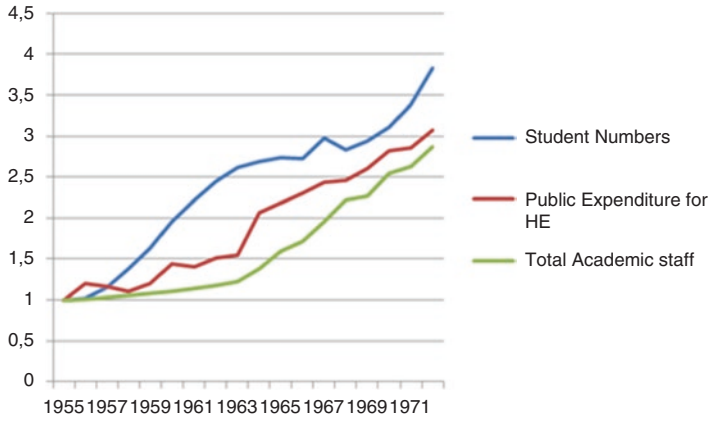

Fig. 6.2 Student numbers, HE public expenditure (as a percentage of total public expenditure) and total academic core staff at universities, 1955–1972; Index 1955 = 1 (Source: Austrian Federal Ministry of Science and Research, Report on Higher Education 1969, 1972 and 1975)

and rewarded by their professors, their career path was quite clear and stable. Once a professor had selected a university assistant for a position, their career followed a pre-determined path. All assistant positions were first offered on a fixed-term basis for a period of between 10 (2 + 4 + 4) and 14 years; during this phase prolonging the contract was merely a formality if the assistant showed ability and progress. If the assistant had completed his habilitation (or an equivalent achievement) at the end of this period, he or she could apply for a tenured position as a university assistant and, following approval of the collegial bodies in charge (i.e. the professoriate), the contract was made permanent. This led to obtaining tenure and a 'definitive' (civil servant) employment status as a 'university assistant'. Thus, habilitation practically provided the entry ticket to permanent civil servant status and lifetime of tenured employment. The existence of a 'track' below the professorial level is a peculiar feature of the Austrian HE system within the Germanic pattern. With growing numbers of assistants and budget restraints, this quasi-automatic career progression would prove increasingly problematic in later years. However, public expenditure and investment in HE grew rapidly in the years between 1955 and 1972 and the university budget continued to increase steadily.

6.2.1.1 Quantitative Developments 1955–1975

From 1955 to 1972, student numbers in Austria tripled (with especially high growth rates in the early 1960s and early 1970s) along with public expenditure for higher education in this period (measured both as a percentage of the total national budget as well as a percentage of GDP, see Fig. 6.2). Academic staff numbers also increased. However, the new teaching burden was mostly absorbed by a drastic increase in assistant positions: Although professorial positions grew mildly, assistant positions

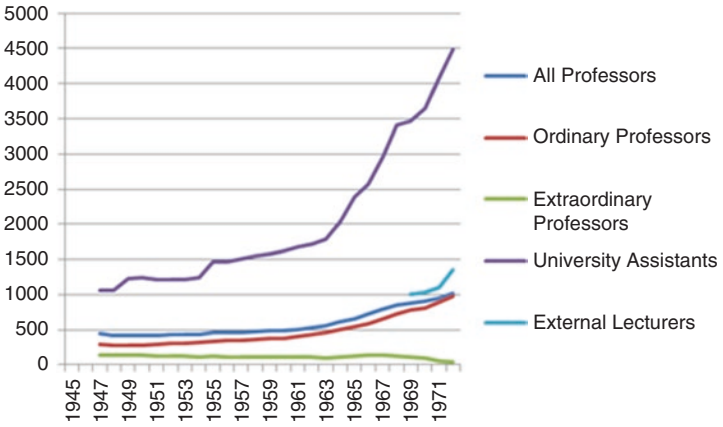

Fig. 6.3 The quantitative development of different categories of academic staff at Austrian universities, 1955–1972 (Source: Austrian Federal Ministry of Science and Research, Report on Higher Education 1969, 1972 and 1975)

tripled from 1955 to 1972 in line with student numbers and budgetary expenditure (see Fig. 6.3). This was how the traditional chair university coped with the demands of mass education.

In 1969, the ministry's HE Report deplored 'the lack of an institutionalised middle-rank' to be able to officially and independently take on increased teaching obligations, and highlighted the necessity of creating a 'true middle-rank' between assistants and professors. The attempt to define and establish a middle-rank, to determine its role and function and to identify its position in the hierarchical structure of the university (as a status group) is ultimately the central issue of Austrian university staff reforms in the last 50 years. There have been various attempts and phases of reform designed to restructure the professional division of labour at universities: on the one hand, by steering away from the traditional chair university while, on the other hand, adamantly refusing to give up the specific status and role of the (ordinary, full) professor. What followed in the next 40 years were various attempts to establish and integrate the 'middle-rank' into the structure of the university, without abandoning the distinct and detached role of the professoriate: the direct link between a full professorship and other academic positions – and thus a true career track that allows for regular promotion – has never been established in Austria.

6.2.2 The 'Group University': The Status Increase of Middle-Rank Academics

The governance reform of the 1st reform cycle brought a radical change to the decision-making patterns of the chair system. The University Organisation Act of 1975 (UOG 75) established a collegial decision-making system based on the tiered

participation of students and 'middle-rank' academics (assistants with and without habilitation).

The UOG 75 represented a stark departure from the chair university and the dominance of ordinary professors within the institution. It aimed to increase staff participation and initiated a certain democratization within universities by integrating all three newly defined 'status groups' into the decision-making process (hence 'group university'): ordinary professors, university assistants and the student body were all represented and had to cooperate in newly defined collegial bodies (albeit with different voting powers). Also, the institutional levels below the senate (i.e. the 'faculty assembly' and the so-called 'institute's conference'), gained in influence (especially regarding decisions on personnel or open positions).

6.2.2.1 Academic Career Structures 1975–1993

The increased necessity acknowledged by policy makers to create a middle-rank with independent teaching duties had ultimately led to the creation of a new type of associate professor in 1972 (§10a professor). This amendment to the HOG in 1972 was later incorporated into the University Organisation Act of 1975(UOG 75) as the Act's 'new associate professor' (§31). Both the 1972 amendment and the UOG 75 stipulated that these associate professors should concentrate mainly on teaching in order to ease the increased teaching load. In addition, he or she can be assigned research and – with limitations – management tasks (for example, acting as substitute to the head of the institute). In carrying out his/her teaching duties, the associate professor enjoys the same professional autonomy as ordinary professors. The creation of this new position, as an independent academic teacher, is also significant as it changed and challenged the 'chair' principle: previously only professors as chair-holders were able to teach independently. For the first time, the new Act allowed permanent positions to exist outside the chair system (i.e. not directly linked to a chair-holder) for university assistants with habilitation.

However, the appointment procedures for these positions differed from those of full (or ordinary) professors, thus maintaining a clear delineation between ordinary and associate professors. A competitive call and professorial appointment procedure was not foreseen for associate professors. A university assistant with habilitation could apply for a position – if a vacancy arose – and was promoted to associate professor after a hearing. Associate professors were merely 'nominated' ('ernannt'), no longer 'appointed' or 'called' ('berufen') in the sense of the chair tradition.

In establishing the various groups, the UOG integrated all formerly 'extraordinary' professors into the group of ordinary professors, as their equals. The new associate professors occupied an intermediary position: while they became part of

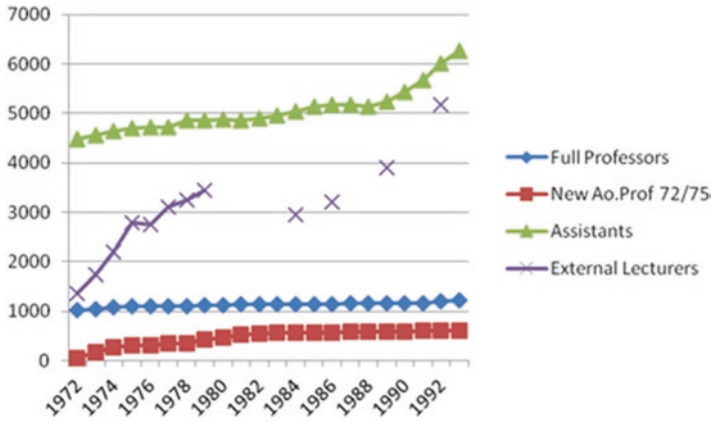

Fig. 6.4 The quantitative development of the different categories of academic staff at Austrian universities, 1972–1993 (Sources: Austrian Federal Ministry of Science and Research, Report on Higher Education 1975, 1982, 1984, 1987, 1990, 1993 and 1996)

the (voting) group of full professors at the faculty[3] and institute[4] level, in the university senate they still belonged to the group of university assistants as only ordinary professors could be part of the professorial status group in this top ranking collegial body. Thus, the UOG75 associate professor was situated between the professoriate and university assistants.

6.2.2.2 Quantitative Developments 1972–1993

After a rapid expansion in the first years, associate professorships doubled between 1975 and 1993. As such, they grew more rapidly than ordinary professorships.[5] However, the group of associate professors still made up only a minority within the professoriate and the growth of both positions stagnated during the 1980s. The continuing rise in student numbers during the late 1970s and 1980s was absorbed by a different group which had already seen a drastic increase in the years leading up to the UOG 75: the group of external lecturers. From 1972 to 1993 their numbers increased almost fivefold (see Fig. 6.4). HE reports in the second half of the 1970s and then again at the end of the 1980s made frequent reference to the problem surrounding the situation of external lecturers and the increasing reliance that the sys-

[3] The faculty assembly was composed of: 50 % professors (all associate and ordinary professors of the faculty), 25 % assistants and 25 % students; this body decided the demand for new staff and sanctioned the creation of new posts.

[4] The three groups (professoriate, assistants and students) were represented in equal numbers in the so-called institutional conference.

[5] Associate Professors UOG 1975: 172 in 1973; 305 in 1975; 540 in 1986; 608 in 1993; Ordinary Professors: 1093 in 1975 to 1201 in 1993, Source: BMWF, Hochschulberichte.

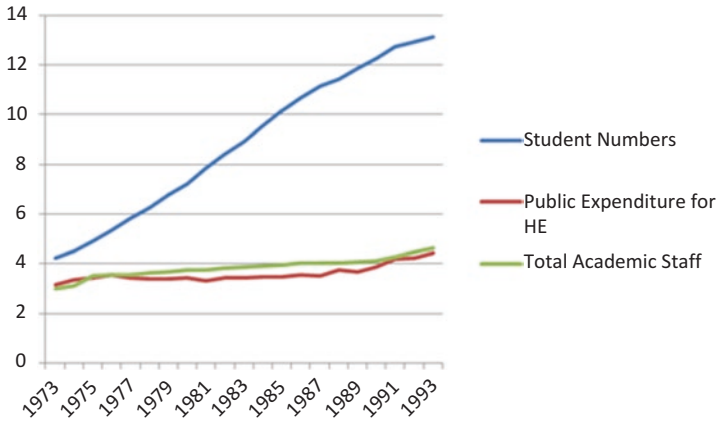

Fig. 6.5 Student numbers, HE public expenditure (as a percentage of total public expenditure) and total academic core staff at universities, 1972–1993; Index 1955 = 1 (Source: Austrian Federal Ministry of Science and Research, Report on Higher Education 1975, 1982, 1984, 1987, 1990, 1993 and 1996)

tem placed on them. The further student increase in the late 1980s was also accompanied by an increase in assistant positions.

Student numbers continued to climb at a rapid pace throughout the 1970s and 1980s (in 1977 there were around 100 000 students, hitting around 200 000 in 1991). This second phase was characterised by unabated growth in student numbers while the numbers of core staff increased only slightly and budgetary expenditure remained relatively stable (see Fig. 6.5). As a result the teacher-student ratio deteriorated: in 1969 there were 55 students per professor and 14 students per assistant. In 1986 these numbers increased to 92 students per professor and 31 per assistant. This trend has continued until today: in the year 2000 there were around 120 students per professor, rising to 147 by 2011 (three times as many as in 1969); meanwhile the ratio of assistant positions to students has remained the same since 1986 (around 30 students per assistant).

The independence and responsibilities of university assistants as teachers and researchers was strengthened in 1975. However, it took until 1988 that legislation newly regulating their career path finally passed following more than 12 years of heated debates on the subject.

Now, after a fixed-term entry period of 4 years, a 'provisionally permanent' period of 6 years was introduced. After 4 years (mostly leading up to the doctorate) the assistant was moved to a 'provisionally permanent' tenured contract and had a clear employment prospect if he or she fulfilled certain criteria (apart from habilitation, experience and other professional criteria were added). The appraisal and review of the candidate thus shifted to an earlier stage, in practice taking place after the first 4 years (as opposed to after 10 years in the old system) before entering the 'probationary' or 'provisional' period. After completing the doctorate, university assistants had a clear perspective regarding their future employment situation. They

were on a track leading to tenured sub-professorial employment. In the words of a contemporary: 'if you were in [even at a pre-doctoral stage] you were in'.[6] This quasi-automatism of promotion or advancement into a tenured civil servant contract eventually led to an increase of permanently tenured (assistant) staff. In 1969, around 6.5 % of university assistants were permanently or 'definitively' employed as civil servants, in 1980 this had risen to 14.8 %, standing at 14.7 % in 1986 – by 1990 the numbers of permanently employed university assistants had climbed to 31.4 % of all university assistants.

As a result, this kind of 'career automatism', enjoyed by all those junior academics who were successful in getting a foot into the university, led to a significant split between insiders and outsiders: Insiders enjoyed a high level of job security without necessarily being academically evaluated in a rigorous manner. Since all available positions were occupied by insiders, young researchers who were not already part of internal networks had little chance to get an academic position. This began to be problematic in the late 1990s.

6.3 The Managerial University: Radical Change

6.3.1 UOG 93 – Transition to Managerialism

While the unions were successful in further increasing the job security of junior faculty during the 1980s, the shift of power moved in the opposite direction during the 2nd reform cycle. This wave of reform began to gain momentum in the early 1990s and eventually culminated in a fundamental governance reform that was to change the legal nature of universities (University Act of 2002).

As a first step in that direction, the University Organisation Act 1993 (UOG 93) strengthened and encouraged university autonomy. However, the new Act did not contemplate any drastic departures from the previous model in terms of academic careers and career progression. In fact, in the period leading up to 2001, the above mentioned career automatism leading to tenured employment even expanded.

The 1993 Act evolved the position and role of associate professors, following a similar pattern to that observed with the changes of the 1975 Act compared to the HOG 55. All associate professors under §31 UOG 75 were from now on to be integrated with ordinary professors in all collegial bodies. Both were to carry the new title of 'university professors', (old) associate professors were thus (again) integrated into the full professoriate. In a similarly repetitive mode, the UOG 93 created its own, new type of associate professor. However, these new associate professors no longer belonged to the group of professors in any collegial assembly; they were represented only in the group of university assistants. In fact, they were university

[6] Quote from an interview with an Austrian associate professor in the framework of the EuroAc project: http://www.uni-kassel.de/einrichtungen/en/incher/research/research-area-change-of-knowledge/euroac-academic-profession-in-europe.html

assistants, as from now on all (permanent) university assistants with habilitation (having thus successfully completed the 'provisionally permanent' period) were to carry the official title of 'associate professor'. The career automatism at Austrian universities was at its height: it was now possible to advance directly from doctoral student to associate professor. Even if a candidate did not complete habilitation, there was still the possibility of remaining a tenured 'assistant', carrying the title of 'assistant professor'. The intermediary position held by associate professors (of the type envisaged under the UOG75) was thus dissolved, reviving the old division between ordinary professors and assistants, albeit with different titles.

Including staff in 'provisionally permanent' positions, 63.4 % of university assistants were tenured civil servants in 1999 (excluding provisionally permanent staff this number was 45 %). By the year 2000, UOG 93 associate professors had outnumbered ordinary professors. The increase in permanently employed positions was the main development during this time, in fact somewhat counteracting the trend the UOG 93 envisaged. Progression often became a formality and staff were able to stay at the same institution for an entire career.

This pattern of automated, non-competitive career advancement into tenured civil servant positions continued until the late 1990s. It then became clear that the relatively easy access to tenured positions and a subsequent increase in permanent civil servant positions meant that departments were increasingly 'blocked' to young researchers, with funds failing to keep up with the growth in student numbers and staff.

As a strong- reaction to this quasi-automated career progression at one institution the government passed the Provisional Employment Act in 2001 at the height of the controversy about the new governance structure. The Act eliminated all permanent positions below the professoriate. All sub-professorial staff and thus the entire middle-rank was to be employed on a fixed term basis.[7] The entry position, as an 'assistant in training' (pre-doctoral), was limited to 4 years; the following position as a postdoc university assistant was limited to 6 years. After a maximum of 10 years, career progression within the same institution could go no further and a change of location was required. At this point, the academic could either apply for a position as a (full) university professor (competitive call) or a fixed-term 'contractual' professorship (Vertragsprofessur) limited to 6 years. The ministry thus constructed different 'career pillars' and the transition to the next career pillar required a new application.

Further, civil servant positions were entirely abolished and new personnel were hired by the State on a contractual basis (VBG).

The ministry argued that immediate action was necessary in order to prevent an increase in the number of civil servants from blocking the academic career path for the younger cohorts. The Act was to last for only a few years until universities could act as full legal employers. It was also suggested that the regulations of the provisional employment act should be regarded as a model for future collective agree-

[7] With the (minor) exception of the so-called 'staff scientist', a permanent non-professorial academic position.

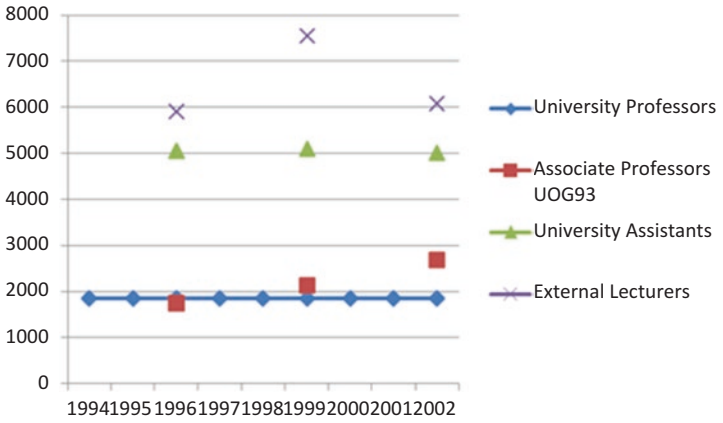

Fig. 6.6 Quantitative development of different categories of academic staff at Austrian universities 1993–2002 (Source: Austrian Federal Ministry of Science and Research, Report on Higher Education 1993, 1996, 1999 and 2002)

ments between universities and unions. The ministry thus clearly signalled its preference for strictly limited term employment contracts and its rejection of a continuous career model. Obviously, it was convinced that permanent academic posts below the professorial level are inherently problematic.

The Provisional Employment Act broke with the established conditions of academics at Austrian universities in two ways: Firstly, public employment contracts were abolished and substituted by private contracts. Secondly, the new act ended the possibility of perpetual employment contracts for all academic positions below the professoriate (Fig. 6.6).

The Provisional Employment Act was met with stiff opposition by the large majority of academics. The unions and the representatives of junior academics were opposed due to the obvious negative effects felt by the groups they represented. However, even many professors, who basically agreed that employment conditions should be changed in order to allow more competition, argued that the Act took the wrong approach. A frequent objection was that job security and status as an independent academic was granted too late. The most productive period of many academics would thus be impeded by insecurity and personal dependence on professors.

6.3.2 UG 2002 – The Breakthrough of Managerialism

The Provisional Employment Act came into force in 2002; however, its reign was short-lived as the same year the most radical reform of Austrian higher education to date took place with the approval of the University Act of 2002 (UG 2002) which overthrew most previous regulations. What was tentatively initiated by the UOG 93 now took full shape: Universities were de-coupled from direct state control and

acted as autonomous entities under public law. At the same time, institutional management (i.e. the rectorate) was strengthened at the expense of academic self-governance in collegial bodies. The UG 2002 transformed public research universities from state agencies to public enterprises. Consequently, academics are no longer civil servants – they now have private employment contracts with the university. Existing contracts, however, were not changed; academics that already had a public employment contract retained civil service status.

Academics of all ranks predominantly considered the change from public to private employment contracts as a severe deterioration in their working conditions. The civil service status was attractive for two reasons:

- High job security: civil service status can be considered as the traditional European equivalent to 'tenure' in the US-American sense. Most academics feared that private contracts would result in a 'hire and fire' philosophy that would endanger academic freedom (Pechar 2005).
- Attractive pension schemes: academics saw this benefit as compensating for the low starting salaries of civil servants. However, there was little hope that future junior academics would get higher starting salaries.

The new University Act had the strongest impact on junior academics, postdocs, and graduate students who strived for an academic career. Professors who already had employment contracts as civil servants were affected in a different way: the new managerial structures challenged the traditional forms of collegial decision-making.

Universities which are fully independent legal entities are now employers of all academic and non-academic staff. Under the new governance regime, universities are autonomous, self-governed organisations, which are responsible for the guidance and monitoring of academic work. Even in large and complex universities, the institutional management will be much closer to the basic academic units and their work than the bureaucracy of the government; closer in terms of space, professional competence and shared academic values. This means that the 'principal' comes closer to the 'agent', possibly close enough to effectively influence the work of academics.

Not surprisingly, there is a lot of suspicion among academics of the organisational change and the corresponding decision-making structures. Rectors were regarded as primus inter pares, now they are 'bosses', 'superiors'; this is at odds with the traditional concept of academic autonomy implying no subordination, no formal responsibilities, in particular for the members of the guild, the chair-holders. Many academics think that the new legislation has imposed the decision-making structures of the corporate world onto universities. They fear and expect an overt hierarchy, possibly prejudicing academic freedom; an authoritarian mode of leadership, which will not allow appropriate faculty influence.

These tensions are aggravated by an interesting side effect of the new relationship between the government and the higher education institutions. Formerly, the ministry served as an outside adversary, absorbing much of the frustration of academics. Now many conflicts, which formerly were fought between the university and the ministry, are internalised. From one perspective, the loosely united community of scholars has lost a powerful external enemy. Some issues previously

treated as conflicts between the government and academia now re-emerge as conflicts between the rector (the management) and the academic staff. Such 're-labelling' most frequently occurs with issues of budget (typically prompted by the internal distribution of resources). In general, competition between academics and between different academic units has increased. Some academics fear that this could adversely affect the cohesion and productivity of the organisation.

The most fundamental change of the new legislation covers the normative dimension of the relationship between the State and higher education. The new governance model implied a break with the long-standing tradition of the State following a cultural mission and introduced the philosophy of new public management. The controversies surrounding these different aspects will be summarised briefly below.

6.3.2.1 Academic Career Structures and A Quantitative Overview

While the UG 2002 explicitly regulated access to professorial positions, it remained vague as to the organization of sub-professorial positions (this also highlights the importance placed on professorial positions). It was left to the universities to develop a 'Collective Agreement' to establish new personnel structures for the middle-rank.[8] The Collective Agreement came into force in 2009, representing an agglomeration of previous models and specific Austrian elements. However, it is also infused with new reform ideas, most importantly incorporating notions of the American tenure-track system. On the sub-professorial level, the Collective Agreement foresaw that all assistant positions were fixed-term (4 years at the pre-doctoral level, 6 years at the post-doctoral level, a continuation of the Provisional Employment Act). Further, as in all large reform cycles before, the Collective Agreement introduced its own, new version of the associate professor, this time in the shape of a 'tenure-track'.

The Austrian version of a 'tenure-track' begins with a position as an assistant professor. Candidates for such positions can be competitively recruited, however, the position can also simply be 'offered' to promising assistants already at the institution (internal recruitment, reminiscent of career patterns of civil servant university assistants in earlier periods). By taking up the position of assistant professor, the candidate concludes a so-called 'Qualification Agreement', with the university outlining obligations or criteria to be fulfilled at the end of the 'probationary' period. Examples of such demands may include a certain number of international publications, successful acquisition of external funding or, in most cases, the long-standing requirement of habilitation; the content and conditions of the qualification agreement are ultimately left to the university. If at the end of the assistant professorship

[8] During the interim or transitional period between 2002 and 2004 (when the University Act entered into force), it is hard to statistically trace the various co-existing positions and legal arrangements. For this reason, this chapter leaves out the years between 2002 and 2004. Even after 2004, when the new staff-reporting regulations of the University Act applied, thus rewriting a (new) statistical basis, there was still considerable confusion regarding how positions were defined. This situation was only fully resolved in 2009, when new positions that were codified in the collective agreement were ultimately categorised and defined by the universities.

the candidate fulfils the pre-set criteria, they are promoted to associate professor with permanent tenured employment.

This tenure-track model, or 'quasi tenure-track', was certainly inspired by the American model, and while it offers a permanent employment prospect if the candidate is promoted, it is ultimately not comparable to it. Firstly, internal recruitment – and an entire career at one institution – is still possible in the Austrian system and, secondly, the track does not lead to full professorship as it does in the US. The new Austrian associate professor remains part of the middle-rank and belongs to the status-group of university assistants in collegial decision-making bodies.

As mentioned above, it should be noted that academic self-governance – the role and influence of the academic profession on the decision-making process at universities – was seriously curtailed in the last cycle of university reform. Previously, either only ordinary professors took decisions in 'professorial commissions' (as in the HOG 55 framework or 'chair university'), or separate status groups jointly helping steer the institution (as envisaged by the UOG 75 or the 'group university'). The academic senate, for example, lost much of its influence, and is now mostly limited to dealing with curricular matters; similarly the faculty and institutes also suffered. At the same time, university leadership gained influence and power, especially concerning the opening of new, permanent positions. It could thus be argued that representation (within a certain status group) has lost some of its significance (as the most pressing issues are not decided any longer by the academics themselves in collegial decision making bodies). The assignment of the new associate professor to the middle-rank, the status group of university assistants, thus does not entail the same consequences as it would have in the framework of the group university. NPM inspired governance structures somewhat favour flatter hierarchies (see Pechar 2004, 2005). Ideally, the development of a faculty model would probably fit better with current governance structures, however, at Austrian universities today the 'unbridged disjunction' (Ben-David 1991, p. 198) between the professoriate and all other academic staff still remains, with the associate professor again occupying an intermediate position.

At this time, 2 years after the Collective Agreement came into force, only a few tenure-track positions have as yet been established. However, there is substantial growth (369 positions in 2010, 633 in 2011). While the numbers of older associate professors (civil servants, UOG 93) are slowly fading due to ongoing retirements, they will probably be replaced by new tenure-track positions. So far, universities have only reluctantly handed out these coveted positions. It is not yet foreseeable if these new positions will turn into 'elite-positions' or into a way of keeping university assistants at the university, a new old version of the Austrian associate professor.

Looking at the recent developments in the numbers shown in Figs. 6.7 and 6.8 shows us that while student numbers again continued to climb, following a brief decline caused by the introduction of tuition fees in 2001, the numbers of both full professors and associate professors remained relatively stable. While older UOG 93 associate professors are slowly being replaced by new 'tenure-track' positions, assistant positions, on the other hand, continue to increase.

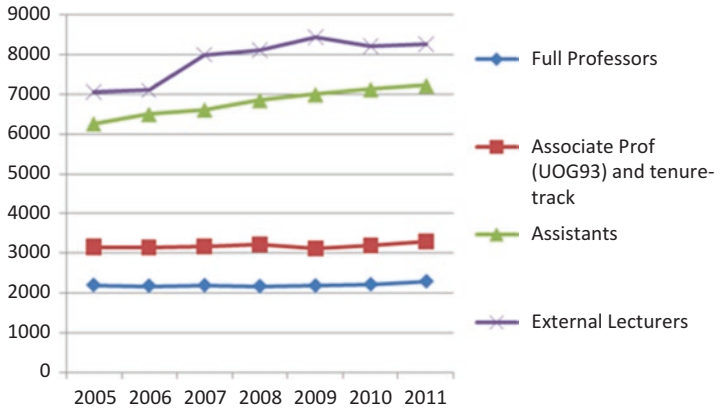

Fig. 6.7 Quantitative development of different categories of academic staff at Austrian universities 2005–2011 (Source: Austrian Federal Ministry of Science and Research 1999–2011 and Uni:data Warehouse, available online at www.bmwfw.gv.at)

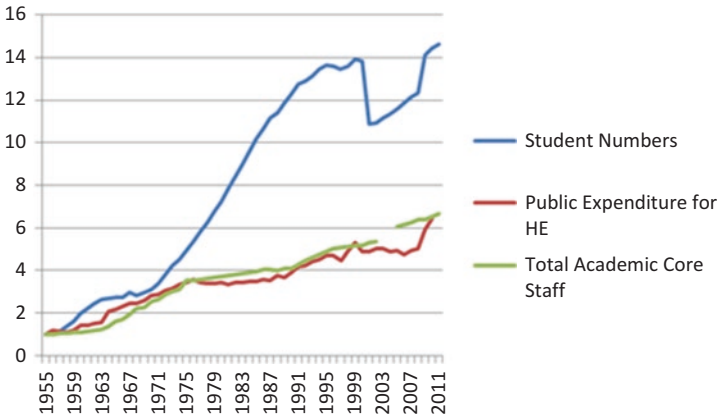

Fig. 6.8 Student numbers, HE public expenditure (as a percentage of total public expenditure) and total academic core staff at universities 1955–2011; Index 1955 = 1 (Source: Austrian Federal Ministry of Science and Research, Report on Higher Education 1969, 1972,1975, 1982, 1984, 1987, 1990, 1993, 1996, 1999, 2002; since 2005: Uni:data Warehouse, available online at www.bmwfw.gv.at)

Summarizing our observations on academic career structures over the last 55 years of Austrian university reform, each reform cycle brought about its own version or type of 'associate professor', a position between the mass of university assistants and the (full) professoriate. Since 1955, there have been four types of associate professor, each with its own specific dimension and strategic focus. While attempts to regulate and stabilize the middle-rank and to establish intermediary positions between assistants and full professors were taken throughout this period, the gap between the status group of professors and other academic staff was never bridged,

an ‘unbridged disjunction’ remains, with different career patterns and participation rights based on different recruitment procedures for each group. The professoriate remains a detached estate in Austrian higher education to this day.

While the numbers of ordinary professors quadrupled in this 55-year period of higher education massification, the enormous growth in student numbers saw a tenfold increase, and assistant positions rose ninefold. The massification of higher education in Austria was thus absorbed by an increasing reliance on university assistants and sub-professorial staff.

6.3.2.2 A Farewell to the ‘Cultural State’

The new University Act was not just another change in employment conditions but also a dramatic change to the long-standing normative foundation of higher education. The new governance model abolished the assumption that the State has a cultural mission. Instead, the government embraced the new public management model that established a contractual relationship between the State and the universities.

For the past 150 years, the educated elite saw it as an obligation of the government to be a benevolent patron of higher culture in general and universities in particular. The State’s duty was to protect the integrity and autonomy of universities and secure academic freedom from outside pressures by supporting academics as civil servants with life tenure. The government, according to this concept would subsidize higher learning with no instrumental or utilitarian strings attached. According to the neohumanist model, the State ‘would become a vehicle, a worldly agent of form for the preservation and dissemination of spiritual values. Indeed, it would seek its legitimacy in this action, and it would be rewarded by finding it there. The State earns the support of the learned elite, who would serve it not only as trained officials but also as theoretical sponsors and defenders.’ (Ringer 1969, p. 116). The autonomous university, protected by the enlightened government against interference from particularistic interests (meaning utilitarian goals), gives legitimacy to the State and trains its civil servants and teachers. Accordingly, academic freedom does not need to be defended against the government, but is guaranteed by the government.

The real conditions for autonomous scholarly work under the umbrella of the cultural State were not as conducive as the Humboldtian saga suggests. According to Max Weber, academic freedom existed ‘only within the limits of officially accepted political and religious views’. (cf. Ringer 1969, p. 143). Meritocratic principles of promotion and appointment were often violated by racial (predominantly anti-Semitic) discrimination and political pressure. Discrimination was practiced partly by the government that declined to appoint unwanted academics; and partly by the collegial bodies of the universities, that would not promote them. No defining difference existed in that respect between German and Austrian universities. The latter, during the last decades of the nineteenth century, became a battlefield of violent nationalist conflicts and were dominated by Pan-Germanic movements (Cohen 1996, p. 127). Between the two world wars, Austrian universities became a centre for antidemocratic and anti-Semitic movements (Höflechner 1989). Interference

with academic autonomy continued during the first decades of the 2nd Republic, when higher education policy was dominated by a soft version of Political Catholicism. During the 1950s, ideological reservations led education ministers to decline the appointment of professors with a Darwinist or Positivist background (Kleiner 2011, p. 164).

The advent of mass higher education gradually changed the relationship between the State and universities. On the one hand, the expansion of the professoriate eroded the hegemony of conservatism among the academic oligarchy and gave way to a greater pluralism of different political orientations. Governments no longer interfered in academic affairs for ideological reasons. On the other hand, policy makers adopted a utilitarian approach to higher education that was at odds with the Humboldtian tradition. After all, the government increased funding for universities because it expected them to contribute to economic growth. This new utilitarian approach required a stricter legal regulation of academic affairs, which were formerly left to internal academic decision making. For example, in 1966 the government established for the first time a legal basis for study courses (AHStG – General Act on Higher Education Study Courses). In the commentary to this Act (that was a major step towards formalizing and harmonizing the curriculum under federal law), the government explained that higher education has become too important to society as to be left to academics (Götz 1993, p. 35).

As a response to the tightened legal framework, academics started to complain about the overregulation of Austrian higher education. During the 1980s, demands for more autonomy for universities increased. When the government came forward with first drafts of the new governance reform it promised to give more autonomy to universities. However, autonomy can be interpreted in totally different ways by different actors. Academics still saw the notion of autonomy within the conceptual framework of the Humboldtian tradition – individual autonomy for full professors – while the government was determined to increase institutional autonomy. This concept of institutional autonomy was rejected by all academic camps, by students, junior faculty, and the academic oligarchy; the government was seen to be abandoning its financial responsibility to universities.

The University Act of 2002 was probably the most far-reaching reform since 1849 when Austria embraced the Humboldtian model. It made Austria a leader in the 'managerial revolution' on the European continent. Controversies that arose with this reform are still being settled 10 years after the Act was passed.

6.4 The Managerial University: Persisting Traditions

6.4.1 The Persistence of 'Academic Estates'

The UG 2002 makes a distinction between 'members' and 'employees' of the university (§ 94). Membership refers to the traditional concept of the academic corporation. Members are not only employees, but also students, holders of scholarships, and retired professors. Employees are divided into academic and non-academic

staff. Academic staff are again divided into two categories: professors and non-professorial academic staff, with the latter group comprising all levels of junior faculty including academics with habilitation.

The distinction between these two categories of academics is of the utmost importance because it is the legal foundation for two distinct 'academic estates'. Professors are separated from other academic staff by an 'unbridged disjunction' (Ben-David 1991, p. 198). Historically they were defined as chair-holders, and this definition inherently limited their number. The basic structure of the chair system remains, although the term 'chair' went out of fashion and is no longer used.

The organizational reform of 1975 officially abolished the chair system and instead introduced the new structure of 'institutes'. These new institutes were supposed to be larger academic units that foster cooperation among academics of the same discipline. However, the academic oligarchy's resistance against this reform was strong and basically successful. The majority of institutes contained just one professor – the former chair-holder –and his/her academic and non-academic support team. In other words, the Institute structure was predominantly a slightly modernized chair system.[9]

The traditional justification for the split between academic estates is that junior academics are still trainees, and hence constitute a different category of staff. However, a closer look at the structural conditions of academic careers in German speaking countries reveals that a large part of the 'middle-rank' never progress beyond the trainee position. This is a characteristic of the traditional chair system that has – together with the habilitation as a gatekeeper for the professoriate – survived the dramatic changes of two reform cycles described in the previous section.

6.4.2 Habilitation Versus Tenure Track

The peculiar characteristics of the Germanic career structure become obvious if one compares it with the American tenure track system. Such a comparison is not arbitrary; after all the Humboldtian university served as a role model for the American research university. However, as Ben-David (1991) explains, the US – a country lacking the feudal past and guild tradition of Europe – did not adopt the chair system and the division of academic estates. Instead, the American research university developed a tenure track system, making rigorous academic demands on junior faculty, but at the same time allowing a reasonable calculation of risks and chances to

[9] Burton Clark has pointed to problems associated with mass higher education systems where the chair structure is preserved: 'As academic enterprises and systems have grown, the chair, compared to the department, has been an increasingly inappropriate unit for swollen disciplines. Systems that have both kept the chair as primary unit and have grown much larger have exhibited overload and extreme fragmentation. Most important, the chair system has a weak capacity to correct errors, particularly in the crucial area of equity appointments. When a mistake is made in selecting a mediocre person to fill a chair, the affect is long lasting, through the rest of the academic life of the incumbent and beyond.' (Clark 1983, p. 48).

proceed with an academic career. The Germanic system, on the contrary, has maintained until this day some features that provoked Max Weber to characterise pursuing an academic career as a hazardous occupation.[10]

There are several similarities between the career structure in the US and the Germanic systems.

- Firstly, both systems subject junior academics to a rigorous evaluation upon completing their doctorate. In Germanic systems, the habilitation (the second thesis after the doctorate) is the crucial gatekeeper for a successful academic career. In the US, assistant professors who are on the tenure track but do not yet have tenure, are evaluated at the end of their probation period ('up or out'). This evaluation has some parallels with the habilitation (Kreckel 2008, p. 179).
- Secondly, both systems expect a positive predisposition towards inter-institutional mobility during the academic career. As a safeguard against inbreeding, academics are expected to leave – at least temporarily – their home institution where they have completed their research training. They should prove themselves in a new environment, independent from their old networks and their academic mentors.

Irrespective of these similarities, the differences between the two systems are impressive.

- Firstly, the PhD in the American system is an explicit research training based on a professional model (a formalized system outside the private discretion of individual mentors). It is assumed that PhD's have completed their research training and that the next step of their career is to accumulate experience (as postdocs) and 'stand the test' as independent academics on the tenure track. The doctorate in the Germanic systems has mixed functions: it is not only a research training but it is also used as a signal of professional and managerial talent (Frank and Opitz 2007). Doctoral training has been undergoing major change in recent years, but the traditional form is based on the apprenticeship model that gives huge discretion to the individual mentor. Would-be academics who have completed their doctorate and are working on their habilitation are still considered to be trainees. Even if they have an employed position as an assistant professor they are not considered to be independent academics (like their American counterparts). They are not considered to be in a probation phase, but still in their qualification phase.
- Secondly, young academics leave their home institution at different stages in their career. In the American system, inter-institutional mobility is compulsory after completion of the PhD. When they apply for their first tenure track position,

[10] 'For it is extremely hazardous for a young scholar without funds to expose himself to the conditions of the academic career […] The question whether or not such a private lecturer, and still more an assistant, will ever succeed in moving into the position of a full professor or even become the head of an institute. That is simply a hazard. Certainly, chance does not rule alone, but it rules to an unusually high degree. I know of hardly any career on earth where chance plays such a role.' (Weber 1947a, p. 129f.).

junior academics are on average in their early 30s. They start their academic career in a new environment detached from their academic mentors. In the Germanic system, academics are supposed to move when they get a 'call' for a professorship. On average, academics are then in their mid-40s. In other words, mobility takes place 10–15 years later in the Germanic academic life cycle compared with their American counterparts. This has important implications. Firstly, mobility may be much more disruptive for the family life of academics when it takes place at a later period in the life cycle. Secondly, junior academics in Germanic systems spend the first 10–15 years of their career within the familiar networks of their academic mentors. This is not necessarily a blessing, because in the Germanic context the term 'assistant' usually carries the implication, that young academics will assist their mentors. After all, they are not yet regarded as being independent academics, but seen as passing through their qualification phase.

- Thirdly, there is an important difference in the procedure for attaining a professorship. Since the professoriate in the US is a professional career, not an academic estate, once academics are promoted to associate professors with tenure, they can be promoted to full professors after another period of probation.[11] In Germanic systems, the cleavage between the lower and the higher academic estate is irreconcilable. A promotion from a junior position to full professor is not possible. Professors are 'called', and such a 'call' requires a vacancy in the professorial estate of a certain university. The higher academic estate is by nature – in terms of quantitative availability of positions – significantly smaller than the lower estates. The concept of a 'call' carries connotations alien to an application. Originally, private docents could not apply actively for a professorial position. Firstly, these positions were not advertised, but more importantly, the normative assumption was that candidates have two wait for an invitation,[12] the quasi-sacral act of a 'call'.

To summarise, the Germanic structure of academic careers has still preserved important features of the chair system. Most importantly, recruitment at the early phases takes place internally. It is a usual pattern that professors offer assistant positions to talented graduate students (even if these posts formerly have to be advertised). In many cases, these assistants have not yet completed their PhD, and even if they have done so, they are not regarded as independent academics but as part of the auxiliary network of their professorial mentors. Once assistants have completed their habilitation, they meet the formal qualification for the professorship. However, since a 'call' for a professorship requires a vacancy in the professorial estate, a large part of 'middle-rank' academics with habilitation has no chance of being promoted.

[11] The typical situation in the US is the 'appointment of more than one professor in the same field, and a regular graded set of salaried academic ranks that together comprised the academic career. Moreover, in the United States a full professorship became the normal expectation of every academic man or woman, as the terminal grade of the career.' (Trow 2010, p. 323).

[12] It was a widespread metaphor in the 1800s to compare the situation of a private docent who was waiting for a 'call' with a young woman eager to get married (cf. Schmeiser 1994, p. 66).

The quantitative relations between the different academic status groups illustrate the opportunity structures for junior faculty to end up as a full professor: for each professor there are approximately two assistants with habilitation and almost six assistants without habitation. This steep hierarchical structure is in contrast to the American system where the quantitative relations between the different status groups are more or less even.

The key factor for the persistence of academic estates in the Germanic system is the 'unbridged disjunction' (Ben-David 1991, p. 198) between the professor and all other academic positions. Some scholars (Ben-David 1991; Schmeiser 1994; Clark 2006) have used Max Weber's concept of 'charisma'[13] to characterise the role of the professor in the chair system. The outstanding position of the professor is thus due to the fact that research requires exceptional qualities, a divinely conferred talent.[14] The concept of a gradual promotion within a career scheme is not compatible with the notion of academic charisma.

Charisma cannot be learned, trained, or gradually acquired. It has to reveal itself in an appropriate setting. The academic oligarchy in the Germanic pattern considered (and to a certain degree still considers) the unsecured situation of young would be academics as an appropriate 'charismatic mode of selection' (Schmeiser 1994, 37) for the academic career. Only if young researchers are really devoted to that career, only if they feel an 'inner calling', will they be ready to make the hazardous choice that Weber refers to. And only if they show total devotion – demonstrated by their willingness to shoulder economic sacrifices[15] – do they deserve a 'call' for a chair position.

6.4.3 The Austrian Version of a Tenure Track

Comparing the American and the Austrian career structure at universities is appealing as the American tenure track system has recently served as a role model in Austrian higher education reform. The collective agreement between the Association of Universities and the unions explicitly refers to that model and even borrows the American terminology: it distinguishes (in English language) between the career

[13] 'Charisma is a certain quality of an individual personality by virtue of which he is set apart from ordinary men and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary…' (Weber 1947b, p. 358).

[14] In the late 1800s, when tensions between ordinary professors and the lower ranks of academics intensified, professors defended their social position by referring to these exceptional qualities. For example, the psychiatrist Emil Kraepelin states: 'With some talent, effort, and persistence one can become a competent civil servant; one is a researcher by grace of God.' (cf. Schmeiser 1994, p. 35).

[15] Up to the early 1900s, sacrifices were not just economic in nature – a willingness to postpone marriage was also considered a sign of devotion (cf. Schmeiser 1994, p. 39).

steps of an assistant, an associate, and a full professor. However, even this Austrian tenure track model is shaped by the persisting notion of academic estates.

There are two important characteristics of this Austrian tenure track that point to path dependency within the Germanic pattern.

- Firstly, the Austrian model sticks with the tradition of internal recruitment at the early stages of the academic career. §27 of the collective agreement defines the assistant professor as a position with whom the university has concluded a 'qualification agreement'. Universities may 'offer' such an agreement to promising young graduates with either a master's or a doctoral degree. It is obvious that the definition of an assistant professor and the recruitment procedure for that position is very different from the standards of the American tenure track.
- Secondly, the Austrian tenure track ends with the position of the associate professor. Again, this model sticks with the tradition of two irreconcilable academic estates that does not allow for a regular promotion. The only way to attain the full professorship is the 'call' to the higher academic estate.

References

Ben-David, J. (1991). The profession of science and its powers. In *Scientific growth. Essays on the social organization and ethos of science* (pp. 187–209). Berkeley: University of California Press.

Bruch, R. (1984). Universitätsreform als soziale Bewegung. Zur Nicht-Ordinarienfrage im späten deutschen Kaiserreich. *Geschichte und Gesellschaft 10.Jg.*, H.1, 72–91.

Busch, A. (1963). The vicissitudes of the 'Privatdozent': Breakdown and adaptation in the recruitment of the German university teacher. *Minerva, 1*, 319–341.

Clark, B. R. (1983). *The higher education system. Academic organization in cross-national perspective*. Berkeley/Los Angeles: University of California Press.

Clark, W. (2006). *Academic charisma and the origin of the research university*. Chicago: The University of Chicago Press.

Cohen, G. B. (1996). *Education and middle-class society in imperial Austria, 1848–1918*. West Lafayette: Purdue University Press.

Federal Ministry of Science and Research. (1969, 1972, 1975, 1978, 1982, 1987, 1992, 1996, 2002). Hochschulbericht [Report on Higher Education]. Available online at www.bmbwk.gv.at

Federal Ministry of Science and Research. (1999–2011). *Statistisches Taschenbuch* [Statistical Yearbook]. Wien. Available online at www.bmwfw.gv.at

Franck, E., & Opitz, C. (2007). The singularity of the German doctorate as a signal for managerial talent: Causes, consequences and future developments. *Management Revue, 18*(2), 220–224.

Götz, E. (1993). Chronologie der Studienreform 1962–1966. In BMWF (Hrsg.), *Materialien zur Studienreform I.* Wien: BMWF.

Höflechner, W. (1989). Wissenschaft, Staat und Hochschule in Österreich bis 1938. In C. Brünner & H. Konrad (Hg.), *Die Universität und 1938* (pp. 57–74). Wien/Köln: Böhlau.

Kleiner, H. (2011). Ernst Topitsch und sein schwieriger Weg zur ideologiekritischen Weltanschauungsanalyse. In K. Acham (Hg.), *Kunst und Wissenschaft aus Graz: rechts-, sozial- und Wirtschaftswissenschaften aus Graz* (pp. 151–192). Böhlau.

Kreckel, R. (Hg.). (2008). *Zwischen Promotion und Professur. Das wissenschaftliche Personal in Deutschland im Vergleich mit Frankreich, Großbritannien, USA, Schweden, den Niederlanden, Österreich und der Schweiz*. Leipzig: Akademische Verlagsanstalt.

Metzger, W. P. (1987). Academic profession in United States. In R. C. Burton (Ed.), *The academic profession. National, disciplinary, institutional settings* (pp. 123–208). Berkeley: University of California Press.

Pechar, H. (2004). The changing academic workplace: From civil servants to private employees. In J. Enders & E. Weert (Eds.), *The international attractiveness of the academic workplace in Europe* (pp. 32–51). Frankfurt/Main: GEW.

Pechar, H. (2005). Hire and fire? Akademische Karrieren unter den Bedingungen des UG 2002. In H. Welte, M. Auer & C. Meister-Scheytt (Hrsg.), *Management an Universitäten. Zwischen Tradition und (Post-)Moderne* (pp. 317–337). München: Rainer Hampp.

Preglau-Hämmerle, S. (1986). *Die politische und soziale Funktion derr österreichischen Universität*. Innsbruck: Inn-Verlag.

Ringer, F. (1969). *The decline of the German mandarins. The German academic community 1890–1933*. Cambridge: Harvard University Press.

Schmeiser, M. (1994). *Akademischer Hasard. Das Berufsschicksal des Professors und das Schicksal der deutschen Universität 1870–1920*. Stuttgart: Klett.

Trow, M. (2010). The American academic department as a context for learning. In *Twentieth-century higher education. Elite to mass to universal* (pp. 319–342). Baltimore: The Johns Hopkins University Press.

Weber, M. (1947a). Science as a profession. In H. H. Gerth & C:W. Mills (Eds.), *From Max Weber: Essays in sociology* (pp. 129–156). London: Kegan.

Weber, M. (1947b). *The theory of social and economic organization* (A. M. Henderson and Talcott Parsons, Trans.). Free Press.

Chapter 7
The Academic Profession in Germany

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7.1 Introduction

The frequent use of the term 'academic profession' in international discourse to describe the people in charge of the core tasks of higher education – certainly teaching and research, but possibly others – suggests that the people in charge of these tasks have much in common across all the segments of higher education: positions and career stages, institutional types, disciplines, etc. The political will to create a system of tertiary education within Europe with high international convergence may lead to the notion that the activities and attitudes of academics of different European countries might become increasingly similar over the years. In contrast to the concept of growing isomorphism of organizations within a comparable institutional framework, it may be argued also that organizations such as universities show an entrenched resistance to such efforts of change. Based on national traditions and on specific contexts as prerequisites of political options, the said convergence may turn out to be merely claimed rather than to exist in reality. Following that assumption, the 'persistency of divergent models' (Teichler 1990a) of university systems would result in characteristic differences within the field of the academic profession that might exhibit a degree of stability over the years (see the overview in Enders 2006).

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Bearing this in mind, one has to draw attention to the fact that it is not given that there should be a solitary and consistent concept of the academic profession within a country (in the context of this paper: Germany). Instead, the German language does not even offer a single term for the 'academic profession': 'Hochschullehrer' and 'wissenschaftliche Mitarbeiter' are the terms employed most frequently (i.e. terms suggesting a division based on rank). In addition to this division between senior and junior academics, professors at universities and at 'Fachhochschulen' have organized separate professional bodies. Moreover, the sector of public research institutes outside higher education, which is larger in Germany than in most other European countries, might be a source for an additional division of identity and practice. In contrast, academics are assumed widely to be one of the most internationalized professions; therefore, one might expect that they are similar in their views and activities across countries. The research project 'The Academic Profession in Europe: Responses to Societal Challenges' (EUROAC) provides the opportunity to compare 12 national questionnaire surveys of the academic profession undertaken from 2007 to 2010 and thereby to examine whether these assumptions are appropriate (Teichler and Höhle 2013). In this article we intend to identify the extent to which academics in Germany vary according to career status and institutional home in their views and activities and the extent to which academics in Germany are similar or different in their views and activities to their colleagues in other European countries.

7.2 The Conventional View and Perceived Recent Changes

In the first place, it is widely believed that university professors in Germany can be traditionally thought of as being strongly research-oriented. Second, they seem to be protected by a high degree of academic freedom to pursue knowledge for its own sake or to opt individually for other emphases in research and teaching. Third, professors in Germany traditionally are relatively powerful in the internal decision-making processes within universities. Fourth, they tend to be relatively well-supported as chair-holders with personnel and material resources (see Teichler and Bracht 2006).

With respect to academic careers, research on higher education in Germany as well as on the situation of junior academics point to three traditional characteristics. First, the existence of a comparatively large number of relatively young junior academics: Universities in Germany employ large numbers of graduates soon after graduation – short-term and often part-time to conduct research and concurrently work on their doctoral dissertation; more than half of doctoral candidates are employees at universities – either paid through university positions, with the help of research grants or scholarships. Second, a long period of high selectivity and dependence: Junior academics are expected to survive a long period of dependence and social uncertainty before becoming independent and socially secure scholars (Höhle 2016). Third, late formal qualification for the professoriate: The Habilitation, an academic qualification based on several years of academic work beyond the doctorate, is in Germany and some other European countries the traditional entry qualification for the university professoriate.

It is certainly indicative of the status gap between professors and junior academics that the German terminology on higher education does not provide any equivalent term to describe the 'academic profession'. Rather, there are distinct terms for senior academics – 'Hochschullehrer/innen' – and junior academics – 'wissenschaftliche Mitarbeiter/innen'. Only recently, the 'Hochschulverband', the major association of university professors, began accepting members in ranks lower than those corresponding to an associate professor in U.S. terms, namely 'Juniorprofessors' (a new category introduced in 2004). Moreover, professors at other institutions of higher education are excluded and are still members of a different association.

In describing the German system of higher education (cf. the overviews in Teichler 1990b, 2005; Kehm 1999, 2006; KMK 2003), there is a tendency to refer to the 'idea' of the university put forward by Wilhelm von Humboldt at the beginning of the nineteenth century. First, the 'unity of teaching and research' is most frequently cited because it has spread throughout the world and, accordingly, contributed to the belief that professors at 'real universities' are in charge of both teaching and research and that this link has a 'cross-fertilization' effect both on the quality of teaching and research. Second, 'solitude and freedom' is reflected in the widespread claim that academic freedom in the pursuit of knowledge is the best way of guaranteeing high quality academic work and, possibly, of ultimately contributing to the social relevance of research and teaching. Third, the concept of a 'community of teachers and learners' has achieved less resonance world-wide and has undergone a broad range of re-interpretations, both in Germany and in other countries.

At the beginning of the twenty-first century, the nineteenth century concepts of the university impact German higher education in various general respects, and the conditions of the academic profession in particular; and this impact may continue into the future. In other respects, we note major changes. Thus, we often observe a debate in Germany about whether Humboldt is 'dead' or still 'alive'.

As regards governance and steering (see the overview in Teichler 2011; cf. also Kehm and Lanzendorf 2006), first, government tends to be viewed in Germany as providing the major resources for higher education. Thus, it does not come as a surprise that most institutions of higher education even today are public institutions or, even if they are transformed into foundations, have a quasi-public character. Professors, as a rule, are civil servants, even if their university is formally a foundation. It should be noted, however, that most junior academic staff in public higher education institutions are regular employees (i.e. similar to employees in the private sector), and the majority of them do not have a permanent contract.

Second, government has a mixed function vis-à-vis the universities. On the one hand, it is the 'guardian angel' of academic freedom. After World War II, the freedom of research for university professors even was embedded into the constitution of the Federal Republic of Germany. On the other hand, government has strong mechanisms of control over higher education. These were most pronounced in the administration of resources, the rules of access and admission and the appointment of professors. Until about 2000, higher education institutions in most German Länder (federal states) had to present the government with a list of the three possible

candidates for a professorship. The government in charge was free to appoint the first, second or third candidate, or even to send the list back to the university for reconsideration. Even after the right to choose one of the three candidates recommended by the department and the senate was conferred on the university president, government still had to confirm the final candidate in order to appoint him or her as a civil servant, which could be refused. In contrast, the employment of individual members of junior academic staff who, as a rule, are not 'civil servants' is, traditionally, completely at the discretion of the individual higher education institution, albeit highly regulated.

Third, a close link is clearly defined between research and teaching for university professors in Germany. Almost all of them have an identical teaching load of 8–9 h per week when classes are in session, and the university is obliged to provide some basic funding for research. Junior staff paid by the university have a smaller teaching load in order to have time for the research needed to prepare for a senior academic career; moreover, many junior academics are paid through research grants and are only required to conduct research. Some academics employed by universities have a larger teaching load, if a close link of teaching with research is not considered essential, e.g. teaching for languages. Professors at Fachhochschulen (translated as 'universities of applied sciences'), established in the 1970s as a response to the growth of student enrolment, have a teaching load which is more than twice that of university professors. They may do research voluntarily and some of them might be granted a reduction in their teaching load for research purposes. Finally, many public research institutes in Germany are organized as a separate sector, although researchers from the institutes might have arrangements with universities to teach part-time.

Fourth, there is a tradition in Germany of mandatory career mobility, known as 'Hausberufungsverbot'. Universities recruit professors from outside the institution. Also, there is no internal promotion of professors from the lower to the upper professorial rank. Only if a professor from the lower rank receives an offer of a higher-ranking professorship at another university, his or her university might make a counter-offer that may eventually lead to internal promotion.

Major changes have taken place in German higher education in the 1990s and the first decade of the twenty-first century, either directly focused on the academic profession or primarily aimed at other areas which also have a strong impact on the academic profession. Analyses of the academic profession in Germany tend to identify three major areas of change in recent decades (see Teichler 2011; cf. also Enders 2001, 2004; Janson et al. 2007; Teichler 2007; Jacob 2011).

First, we note substantial changes in the 'power' of the academic profession within German higher education. Until the 1960s, universities were characterized by the strong influence of both professors and the government on decision-making, while university leadership was habitually weak. In the 1970s and the 1980s, a participatory model prevailed in academic self-regulation, with around half the committee positions being filled by junior academic staff, administrative and technical staff as well as students; concurrently, the power of government and university leadership grew to some extent. Since the late 1990s, German higher education followed

the trend, common to other countries, towards the 'managerial university', with an increasingly powerful university leadership (and, in some cases, departmental leadership) and towards the 'evaluative university' with a substantial rise in the assessment of activities in teaching and research. This made possible both greater self-reflection within the profession and the external control of academics. The details of the changes in governance and management of higher education cannot be described here because of the diversity and complexity of the arrangements. The 16 Länder of the Federal Republic of Germany are predominantly in charge of higher education legislation as well as the supervision and funding of individual institutions of higher education, while the national (Federal) level has supplementary functions of coordination and funding.

Obviously, German higher education has moved somewhat cautiously, with the 'evaluative' approach and the 'managerial university' appearing at a comparatively late stage. Most experts suggest that a combination of factors might explain this. After the mixed results of the move towards the relatively radical model of the 'participatory university' around 1970, there was no inclination to be in the vanguard of another administrative experiment. 'Organisational quietness' (Organisationsruhe) became a slogan in the 1980s. Moreover, considerable energy was absorbed in coping with a substantial increase in student numbers as a consequence of a temporary demographic spike amidst moderate resource growth. This conjuncture was compounded by the unification of Germany after the collapse of the Eastern European regimes, keeping all German higher education experts and key actors busy implementing a new integrated system predominantly following the model prevailing in the West. Obviously, 'managerialism' was viewed with mixed feelings, so that the actual implementation of the new managerial system might have had a less profound impact on higher education in Germany than in various other European countries.

Second, the employment and work situation of junior academic staff at German universities, for a long time having been the subject of heated debates and repeated reforms, became a crucial area of reform (see BMBF 2008; Burkhardt 2008; Kreckel 2008; see also Enders and de Weert 2004). Many observers describe the traditional relationship between junior staff and professors as creating a sense of dependency and subordination to the powerful Ordinarius. Doctoral candidates were supervised by individual professors, while the majority of them were employed either in a university post or with the support of research funding. Mid-level staff with a doctoral degree often clearly felt subordinated to professors, while their title and official functions changed from 'assistant' to 'assistant professor' and back again to 'assistant'. The spread of doctoral programmes as well as the introduction of a 'junior professor' position, together with a relativation of the Habilitation as typical entry qualification into the professoriate, are viewed widely as major steps towards strengthening the position of junior academic staff (Höhle 2015).

Third, the daily work of academics has become more regulated in recent years. Various mechanisms of evaluation have spread since the mid-1990s (Schade 2004; see also Schwarz and Westerheijden 2004). More recently, the remuneration system was modified to include a stronger emphasis on incentives. In the past, salary scales

dominated the scene with financial increments linked to age or years of service, so that full-time junior academic staff earned about 50–60 % of what university professors earned, and lower ranking university professors as well as professors at universities of applied sciences earned about 80–85 %. Only full university professors could negotiate higher salaries if they were offered a professorship from another university or an equivalent job offer from outside. Now, professors no longer receive increments based on their years of service; rather, their achievements are assessed every 5 years, and their salary can be raised according such assessments as well as for taking over specific functions and, as before, if they have been offered an attractive external position. However, this new system was only in force for a minority of professors surveyed in 2007, because those already employed prior to the implementation of the new remuneration system could remain in the old system if they wished and, in the event, the majority did not transfer.

It should be added that universities of applied sciences do not award doctoral degrees (although this issue is being discussed) and are not in charge of training junior academic personnel. Most academics employed there are professors.

7.3 A New Information Base: The Survey Undertaken in 2007

This section seeks to examine the extent to which the academic profession in Germany actually resembles the traditional image and the degree to which higher education reforms have created a new situation for the academic profession. To this end, the subsequent analysis will concentrate on the findings of a survey of the German academic profession undertaken in 2007 (see Jacob and Teichler 2011).

The questionnaire was sent from January to July 2007 to more than 5700 regularly employed, university-trained people, active in departments or special units in charge of teaching and/or research within universities, public research institutes, fine arts colleges and Fachhochschulen (FH) in Germany. Altogether, 1668 people responded. By excluding people not reached or informing us that they do not belong to the target group of the survey, we calculate a response rate of 32 % (i.e. an above average rate compared to the countries included in the following analysis). The analysis is based on the responses from 324 university professors (including those from colleges of fine arts), 695 other academic staff at universities (junior staff, mature staff not promoted to professorial positions) and 215 academics from FHs. The academics employed at German public research institutes as well as the junior staff at FHs are not included in the following analysis – the former because they cannot be compared with those of other countries in the framework of this analysis, and the latter, because they are a small and quite heterogeneous category.

The survey initially was undertaken as part of the comparative survey 'The Changing Academic Profession' (CAP) which was initiated in 2004. The CAP survey comprised 18 countries – seven of which in Europe – as well as the Special

Administrative Region of Hong Kong and has yielded altogether almost 26,000 responses (mostly in 2007, in a few cases in 2008 and in the case of the Netherlands in 2010). In 2009, some European scholars initiated the project entitled 'The Academic Profession in Europe – Responses from Societal Challenges' (EUROAC). A further six European countries employed a slightly modified version of the CAP questionnaire and undertook their own survey in 2010. While data for the different disciplines in one of the countries remains incomplete, five further countries could be included, and thus altogether providing 12 European countries in the final EUROAC data, set based on more than 16,000 responses. The 12 countries covered are Finland, Germany, Italy, Norway, Portugal and the United Kingdom surveyed in 2007 and Austria, Croatia, Ireland, the Netherlands, Poland and Switzerland surveyed in 2010 (see Teichler and Höhle 2013).

The data presented in the subsequent analysis are not identical with those from the initial comparative data set. Rather, they are weighted according to academic rank, current academic discipline, institutional type, and gender. This weighting has been undertaken in order to counterbalance under and over-representations of subgroups as a consequence of the lack of representativeness in the sampling and/or the responses received. It should be noted, though that some publications prior to this essay present slightly different data. This is because the 2011 data set presented here has undergone various stages of weighting and data cleaning.

In the following analysis, the views and activities of the academic profession in Germany are presented in comparison with those of their colleagues in other European countries. In most cases, they will be compared with the average (country mean) of all 12 European countries (or fewer if data are not available for all countries); only in a few cases will reference be made to other individual European countries.

In order to measure change over time, the findings for the German academic profession are occasionally compared to those of a survey undertaken in 1992. The Carnegie survey had been part of a comparative project that was initiated in the early 1990s by the Carnegie Foundation for the Advancement of Teaching (see Boyer et al. 1994; Altbach 1996; Teichler 1996). While it comprised more than a dozen countries, only Germany, the Netherlands and the United Kingdom are comprised both in the Carnegie study and in the EUROAC 12-country European study. It was only occasionally possible to make comparisons over time, from the 1990s to the recent past, as only some parts of the questions were identical or similar in both questionnaires. The questionnaire was revised substantially over time as the scholars involved became convinced that many issues of the academic profession have undergone change (see Kogan and Teichler 2007; Locke and Teichler 2007) and that some enhancements to the quality of the questionnaire were desirable.

The German 1992 survey (see Enders and Teichler 1995a, b) elicited about 2800 responses, but achieved a response rate of only 27 %. The increase in the response rate from 1992 to 2007 is remarkable, given the growth in survey fatigue in many countries. In contrast to 2007, East German higher education institutions had been excluded from the 1992 survey, because the adaptation of Eastern German higher

education to the Western model had only just begun at the time the survey was conducted.

It should be mentioned that both German surveys were funded by the German Ministry of Education and Research (BMBF). The EUROAC study has been supported by the European Science Foundation (ESF) as well as national research promotion agencies, such as the Deutsche Forschungsgemeinschaft (DFG) in the case of the German participation. In addition to the authors of this article, Oliver Bracht, Florian Löwenstein and René Kooij were involved in the data analysis of the German 2007 survey (cf. the already available publication on Germany in Teichler and Bracht 2006; Teichler 2007, 2008; Jacob and Teichler 2009, 2011; Teichler 2011); moreover, Jacob (2011) investigated the employment relations at universities in Germany and Norway by also using qualitative data from interviews with academics in the two countries. Höhle was active in multi-country comparative analysis (cf. Höhle 2017).

7.4 Socio-biographic Characteristics

The average age of German university professors is 53 according to the recent survey. This is 1 year older than that of professors surveyed in the early 1990s, and it is close to the European average of 52 years. However, the proportion of professors in Germany under 40 – only 4 % – is among the lowest in the 12 European countries surveyed (11 % on average). Professors at German Fachhochschulen are on average 1 year younger than university professors; across Europe, professors at other institutions of higher education as well are 1 year younger than their colleagues at universities.

Junior academics at German universities are 37 years old on average according to the recent survey; this is 2 years older than in the early 1990s. One quarter of the respondents of this category in the recent survey is under 30, half between 30 and 40, and one quarter over 40. On average across Europe, junior academics are 39 years old. Various factors come into play: Germany belongs to those countries where many academics are employed by their university already at the doctoral stage. Moreover, many junior academics in Germany are employed short-term for contract research; thus, the average chance to 'survive' for a long time in the higher education system without having been appointed to a professorial position is certainly below the European average.

Only 18 % of the university professors in Germany are women according to the recent survey. This is one of the lowest rates in the European countries surveyed: the average rate across countries is 26 %. Similarly, the proportion of female professors at German universities in the applied sciences is 20 % – clearly lower than the European average of 34 %.

One has to bear in mind, though, that the share of women among academics at German universities has increased relatively quickly from a low level. In the early 1990s, women comprised only 6 % of university professors and 22 % of junior

academics. By 2007, 18 % of professors and 38 % of junior staff were women. This shows that between these two points women had almost the same chance as men to reach a position as professor and that the past trend does not indicate any 'glass ceiling' in the growth of women in academia. In extrapolating this trend, we can predict that women will comprise about one third or slightly more in the next generation of university professors in Germany.

More than four fifths of the academics surveyed in Germany are married or live in a permanent partnership (slightly more than in the early 1990s) – more so among professors than among junior academics at universities. Female professors at universities or universities of applied sciences are much more likely to be single with no children than their male colleagues. These findings confirm the general view that it is easier to combine family and academic profession for male persons with a higher income and a partner without professional engagement – this is typical of findings in German society as a whole and not just for academics.

This finding may be contrasted with the situation in Scandinavia (e.g. Norway), where affirmative action on behalf of the equal status of women and men has been taken in the past. While it is still the case that the share of women declines with increasing hierarchical position, this share is considerably higher than in Germany (reaching exactly 50 % for junior staff at universities), and professional engagement of the partner is considered the rule even for members of the top ranks. During the course of 39 interviews held both in Germany and in Norway, it was unanimously stated that the chances of combining career and family – not limited to, but including academics – are more favourable in Scandinavia (see Jacob 2011).

7.5 Career Path

A doctoral degree is more or less a 'must' for an academic career in many economically advanced countries. Actually, 93 % of university professors in Germany hold a doctoral degree, as compared to an average of slightly over 80 % in the 12 European countries surveyed. On average, current university professors in Germany have obtained their doctoral degree at the age of 30; this is among the lowest in Europe, where on average a doctorate is awarded at age 33 years, actually ranging from 29 to 39 years.

In Germany, a post-doctoral degree – Habilitation – is viewed traditionally as the normal entry qualification to the professoriate. A recent survey in Germany found that 77 % of university professors hold such a degree; only a few other European countries have widespread habilitation adoption: Austria (74 %), Switzerland (66 %) and Poland (52 %).

In contrast, the expected entry qualification to the professoriate at a German Fachhochschule include a doctorate and 5 years of post-doctoral professional experience, at least 3 years of which should be outside academia. Actually, 86 % of professors of this second type of higher education in Germany hold a doctoral

degree (this is among the highest in Europe and far above the average), and 9 % have completed a Habilitation.

There is a tradition of enforced inter-institutional mobility of academics in German-speaking countries. As a matter of principle, academics will not be appointed to a professor position at the institution that provided their immediate prior employment ('Hausberufungsverbot'). One could assume, therefore, that inter-institutional mobility of university professors is quite high in Germany. Actually, they report that they have been employed altogether at an average of 4.1 institutions since their first degree was awarded, with 0.8 of them outside academia. This is in-line with the European average.

Professors at FHs in Germany have to be mobile as well, because they are expected to be experienced in the professional area in which their students are likely to be employed. However, being employed by a total of 3.6 institutions (on average) they are in reality somewhat less mobile than both university professors and senior academics of this institutional type across European countries (4.4).

Germany belongs to those countries in Europe where only a small proportion of those taking their first academic steps eventually end up in a professorial position. Statistics show that only about 15 % of academics employed at universities are in a senior (as a rule professorial) position. By comparison: About 60 % of academics employed at institutions of higher education with at least bachelor-level programmes in the United States of America are full and associate professors. A recent study estimated that about 10 % of graduates from German institutions of higher education are eventually awarded a doctoral degree and that 8 % of those awarded a doctoral degree eventually become professor at a university or a university of applied sciences. In contrast, selectivity in the U.S. is higher between the first degree and the academic doctorate (only 4–5 % are awarded a PhD), while selectivity between the PhD and the professoriate is lower (about 20 % of PhD holders become associate and full professors) (see Janson et al. 2007).

Norway has still yet another career system. Selection also occurs quite early. However, while the German system may be described as 'competition-based' – positions (especially of the top ranks) are attributed to external applicants only after going through the typical, tournament-like situation of being chosen by a jury and appointed by official authorities – in Norway it is 'competence-based': an expert jury assesses additional qualifications (especially in research), which, if evaluated positively, can mean promotion to the next position in the hierarchy ('kompetanseopprykk'), including professorships and chairs, even within the same institution (cf. Jacob 2011).

7.6 Employment Conditions

The salary structure at German public institutions of higher education, which comprise about 97 % of the system, is relatively homogeneous across disciplines. However, there are differences across disciplines for professors and to some extent

other academic staff, with opportunities for earning moderate supplementary income from their higher education institution and substantial levels of side income (cf. Teichler 2008). For other academic staff at universities, the difference between those in full-time and those in part-time positions plays an important role.

The average gross annual salary (including supplements) of university professors in Germany in 2007 was about €72,000 (€79,000 for the higher-ranking professors and €61,000 for the lower-ranking professors). Senior academics at universities of applied sciences in Germany earn slightly more than €57,000. Junior academics at universities with a doctoral degree earn about €40,000 on average (including part-timers) and €48,000 for full-time work; while those without a doctoral degree currently earn about €30,000 (including part-timers) and €37,000 for full-time work.

Weighted using consumer price levels, the income of university professors in Germany is above the average of the 12 European countries included in the above named survey. The weighted income is substantially lower than in Switzerland and somewhat lower than in Norway; it is more or less equal to that in Austria, Finland and the Netherlands, higher than in Italy, Portugal and the United Kingdom and substantially higher than in Poland.

In counting all employed persons (including those employed half-time), we note that junior academics at universities in Germany earn on average half of what a professor earns. This difference is less pronounced than in Switzerland (about two-fifths) and about the same as in Austria, but higher than in the other countries surveyed: In half of them, junior academics earn on average about two-thirds as much as senior academics.

As a rule, professors in Germany are employed permanently (mostly as civil servants) and full-time. Actually, only 4 % of the professors at universities and 2 % at FHs are fixed-term employed, and 1 % and 6 % respectively are not full-time employed. Such a stable employment situation has been considered typical for professors in Europe for a long time, but some countries have revised the employment conditions in recent years; according to the recent study, more than one quarter of university professors are fix-term employed in Finland, Poland and Switzerland and part-time employed in the Netherlands.

Of the junior academics at German universities, only 65 % are employed full-time and only 20 % are employed permanently. In those two respects, junior staff find their employment situation to be less satisfactory in Germany than in most other European countries.

Again, one has to bear in mind that the German universities offer many positions for young staff to explore themselves on the first step within a highly selective career. The comparison between Germany and Norway by Jacob (2011) shows that confidence in life-planning is substantially lower among German young scholars than among their Norwegian colleagues. This is because the ‘bottle-neck’ for achieving a higher position or for continued employment is located at a later career stages in Germany than in Norway, where selection is most evident when applying for a doctoral fellowship. This factor – in conjunction with the overall favourable economic situation – certainly contributes to the fact that those who have succeeded

to get 'their foot' into Norwegian academe feel less insecure about their professional future.

It is not true, however, as often claimed, that until reaching a position as a professor, junior academics in Germany are in an exceptionally precarious employment situation:

- Certainly, only 1 % of junior academics without a doctoral title employed during the first 6 years after graduation are permanently employed, but – with many fellow-colleagues having to leave academia – 55 % of junior staff with a doctoral degree who have graduated more than 12 years ago are permanently employed.
- Only 46 % of the former category are employed full-time, but this rises to 69 % for the latter category.

It has been frequently argued that fixed-term contracts for junior academics have increased in recent decades in Germany as a consequence of a more incentive-based and sanction-based personnel policy in academia and as a consequence of a growing pressure on universities to raise external research grants. However, the two surveys compared here, undertaken in early 1992 and recently, suggest that the rate of fixed-term employment has remained more or less constant.

7.7 Working Time

The questionnaire surveys cited above asked academics to estimate the number of hours they spend on various functions each week, both when classes are in session and when classes are not in session. These estimates are helpful to establish the extent to which academics – in their view – work beyond usual office hours, as well as to examine how they allocate their working time to various tasks and functions. The following data are estimates for the whole year based on the assumption that classes are in session for six out of every ten working weeks. Moreover, the analysis comprises only those academics employed full-time.

University professors in Germany work 52 h per week on average; this is the highest figure in Europe (alongside Switzerland) while the average across Europe is 47 h per week. Full-time junior academic staff in Germany work 42 h; this corresponds to the European average. Finally, senior academics at universities of applied sciences also work 42 h – this is 2 h more than senior academics at other higher education institutions across the various European countries. This habit and ethos of working long hours, as Jacob (2011) has shown in her qualitative inquiries, are deeply rooted within the self-perceived professional image of German academics. Independent of whether this is seen as positive (taking additional working time as a source of scientific productivity) or negative (as a threat to personal work-life-balance), the German interviewees unanimously reported an implicit expectation of working overtime within academe. This is a very different reality to the findings in Norway, where meetings tend to be scheduled to prevent undue professional strain.

University professors in Germany spend 28 % of their working time on teaching, 38 % on research and 34 % on other tasks and functions (e.g. service and administration). This allocation of time is close to the average across the European countries surveyed. Thus, over the course of a year, they spend about one and half times as much time on research as on teaching – only marginally more when classes are in session and substantially more when classes are not in session. Across Europe, time spent on research varies from one extreme, where almost twice as much as time is spent on research as on teaching, to the other extreme, where time is more or less equally divided between research and teaching. On the one hand, university professors in Switzerland, Austria and Ireland lean more strongly towards research in their time budgeting; on the other hand, those in Portugal, United Kingdom, Finland and Norway do not spend substantially less time on teaching than on research.

It is interesting to note how the proportions of the time spent by university professors in Germany have changed over time:

- The proportion of time spent on research has hardly changed from 1992 (39 %) to 2007 (38 %), and
- the share of time devoted to teaching and related activities has declined from 33 to 28 %, while
- time absorbed by services, administration and other tasks has increased from 28 to 34 %.

The study undertaken in the early 1990s found that university professors in Germany spent two and a half hours on teaching-related activities (preparation of classes, examinations, guidance, curriculum development, etc.) per teaching hour. As the teaching load has not declined during this period, teaching-related activities per teaching hour seem to have declined to 2 h. As the student-teacher-ratio has increased during this period and university professors in Germany tend to spend a substantial time on examinations outside the classroom arrangements, time for preparation, guidance and curriculum development certainly has declined even more than one fifth.

Junior academics at German universities spend 51 % of their annual working time on research, 21 % on teaching and 28 % on other tasks. Germany belongs to those countries in Europe where junior academics on average have fewer teaching hours than university professors. The distribution of time across these three functions, however, is close to the average of the 12 countries surveyed.

Senior academics at German Fachhochschulen spend 41 % of their working time on teaching, 20 % on research and 38 % on other tasks. From 1992, the proportion of time spent on teaching has declined by 7 %, and the share of time spent on research remained the same, while the time devoted to other tasks increased by 7 %. In absolute numbers of hours, FH professors spend only about one-sixth more time on teaching than university professors although their teaching load is twice as high. Obviously, FH professors altogether spend less time on teaching-related activities outside classes than university professors do, and they spend less than half as much time on teaching-related activities per classroom hour.

7.8 Teaching and Research

Universities are understood in Germany – as well as across Europe – to be institutions more or less equally in charge of both teaching and research. It is widely assumed, however, that the German university professor has a clear preponderance for research and often considers teaching as an additional task of knowledge transmission. The survey findings do not challenge this view completely, but certainly call for a modification of this stereotype.

Some 83 % of university professors in Germany state that they are interested in both research and teaching. Only 12 % point to a clear preference for research and 5 % for teaching. Among those expressing interest in both, however, 63 % lean towards research and only 20 % towards teaching. Thus, altogether 75 % of professors at German universities are predominantly interested in research and 25 % in teaching. This hardly differs from the European average across countries, where 73 % are predominantly interested in research and 27 % in teaching. There is an increase, however, among university professors' preponderance for research over time: this share of German respondents grew from 65 % in 1992 to 75 % in 2007.

The preferences for research versus teaching among junior academics at universities in Germany do not differ substantially from those of university professors. More of the former, however, show a clear preference for research instead of being in favour of both teaching and research (those leaning towards research).

As one might expect, senior academics at German universities of applied sciences place more emphasis on teaching than university professors. Only 1 % expresses a clear preference for research and 22 % lean towards research. In contrast, 42 % express a clear preference for teaching and another 35 % lean towards teaching. One could have expected a shift towards research from 1992 to 2007, but this does not hold true. On the contrary, the proportion of FH professors predominantly interested in teaching rose over time (from 29 to 42 %).

Resources for academic work (classrooms, technology for teaching, laboratories, research equipment, computer facilities, library facilities, office space and telecommunications) are on average rated as good by slightly more than half (54 %) of the professors at German universities. This rating is slightly worse than the average across European countries: clearly worse than in Switzerland (78 %), Finland (69 %) and Austria (63 %), but the same as in Portugal and more positive, for example, than in Italy and the United Kingdom (44 % each).

It is interesting to note that ratings of resources by university professors in Germany are similar in 2007 to those 15 years before. In response to a question on how the resources have developed in the last 5 years, however, the majority of university professors – in Germany as well as in many other countries – note a deterioration. Obviously, responses to such retrospective questions are influenced by nostalgia.

Junior academics at German universities and senior academics at German FHs rate the resources slightly more positively than university professors (57 % each).

They might have somewhat lower expectations, but certainly they do not feel disadvantaged in this respect.

When asked to characterize their teaching approaches, three quarters of university professors in Germany state that they emphasize practically oriented knowledge and skills. The respective average across European countries is 60 %. Of course, a practice-oriented approach to teaching is reported more frequently by FH professors in Germany (93 % as compared to 77 % on average across Europe). Values and ethics are not incorporated into the course content of as many university professors in Germany – in this respect they take a similar approach (57 %) to many other European academics (54 % on average across Europe).

Classroom lecturing is assumed to be the most frequent teaching method. But other teaching methods are often viewed as highly valuable ways of motivating the students and enhancing their competences. To this end, the academics participating in the above named study were asked how frequently they employ seven other methods of teaching and instruction (individualised instruction, learning in projects, practice instruction or laboratory work, ICT-based learning or computer-assisted learning, distance education, face-to-face interaction with students outside class and electronic communication – e-mail – with students). Professors at German universities on average only employ 2.8 of these teaching methods. This is second lowest among the European countries (2.3 in Austria) and clearly below the average across European countries (4.0). Junior academics have a smaller repertoire of teaching methods in the countries surveyed than senior academics: Again, German junior academics report clearly fewer methods (2.3) than the average across Europe (3.4). Senior academics at FHs employ a broader range of teaching methods than academics at universities, but again German respondents (3.2) are clearly below the average across European countries (4.5).

Asked about the functions of research and scholarship, most academics in Germany and other European countries highlight that original research should be generated and disseminated. However, only slightly more than 60 % of university professors in Germany state that synthesising findings, applying knowledge and the societal relevance of research should be emphasised as well. These scores do not differ substantially from the average across European countries. Comparing senior academics at German universities of applied sciences with university professors, the former were more often found to place importance on synthesizing findings (72 % as compared to 61 %) and substantially more often found to place importance on the application of research findings (87 % as compared to 62 %).

Professors at German universities are quite active in writing and editing scholarly texts. Within 3 years they have

- authored or co-authored an average of 1.3 books,
- edited or co-edited 1.7 books,
- written 5.9 articles in books or journals,
- written 2.7 research reports,
- presented 6.1 papers at conferences, and
- written 4.2 professional articles for newspaper and magazines.

In merging these various types of publication activities into a single publication index, we note that professors at German universities (Index score 56) and their colleagues in Switzerland (55) publish more than their peers in other European countries: mostly around 40, but less in the United Kingdom (29), Norway (28) and by far the fewest in Poland (14).

The respective index score for junior academics at German universities is substantially lower, i.e. 20. This corresponds to the average across countries (19). The index score for senior academics at German FHs is about the same (19), and this corresponds as well to the average across European countries surveyed.

7.9 Internationality

The recent study on the academic profession in Europe has addressed three themes in the domain of internationality of higher education: border-crossing mobility, visible international activities and the use of foreign language in international activities. In these three areas, German academics in many respects seem to be less international than the average for European countries involved in this study; in a smaller number of areas, however, they are close the European average.

First, 21 % of the professors at German universities are migrants or have been internationally mobile (in equal proportions) during the course of study or work on their dissertation. The respective rate is 30 % on average for the 12 European countries surveyed. Only 1 % of university professors in Germany – compared to 7 % on average across European countries – have undertaken their doctoral study abroad. Among professors at German universities of applied sciences, 18 % are migrants or have been mobile. Again, this is clearly below the average of 28 % across European countries.

Second, asked whether they are internationally active in recent years, professors at German universities respond affirmatively to an average of 4.3 aspects out of a total of eight teaching and research aspects (international content of teaching, teaching many international graduate students, teaching abroad, international scope of research, international research collaboration, raising of international research funds, joint publications with authors abroad, publishing abroad). This corresponds to the European average. Junior academics at German universities are less internationally active than their European peers on average across countries (2.6 as compared to 3.2). The same holds true for professors at German FHs (2.2 as compared to 2.8).

Third, teaching and communicating in research activities in a foreign language has substantially spread in recent years. Some 37 % of the professors at German universities report that they teach at least one course in a foreign language. This corresponds to the average across European countries (38 %). On average, fewer junior academics at German universities teach in a foreign language (20 %) than their colleagues in the European countries surveyed (26 %). This is true as well for professors at German FHs (24 % as compared to 32 %).

In Germany, 54 % of university professors report that they use a language other than their mother tongue in their research activities, as compared 72 % of universities across European countries where English is not the dominant language. The corresponding figures are 52 % (as compared to 63 %) for junior academics at universities and 28 % (as compared to 42 %) for senior academics at other institutions of higher education.

Professors at German universities who have published during the previous 3 years report that 56 % of their publications are in a foreign language – fewer than the respective proportion of university professors on average for European countries where English is not the dominant language (63 %). Junior academics, however, publish about as much as the European average in a foreign language (60 % as compared to 62 %). Professors at German FHs publishing in recent years are substantially less likely to do so in a foreign language (25 % of their publications) than their colleagues on average across the European countries (45 %).

It would be questionable, though, to interpret these findings as a clear indication that Germany is lagging behind in the internationalisation trend in higher education. By and large, we note that academics in small European countries make more of an attempt to study abroad, to communicate with scholars from other countries and to employ a foreign language – notably English as the lingua franca.

7.10 Steering

The academic profession in Germany has experienced increasing efforts to steer academic work – with the help of regulations, evaluations, incentives and sanctions, as well as through growing managerial power in general. This occurred at least a decade later than in some other European countries, e.g. the Netherlands and the United Kingdom. It was only around the mid-1990s when momentum starting building behind such efforts in German higher education. It could be concluded that changes of this sort have not gone as far as they have in some other European countries. It may also be that academics in Germany are still tentatively reacting to these changes. Finally, one could assume that German higher education has learned from the trial and error in 'managerialism' in other countries and has moved toward a more balanced solution from the outset.

Teaching and learning is most clearly regulated in Germany by defining the weekly teaching load. But other regulations and institutional expectations as regards teaching are also perceived to exist:

- Funding of departments is substantially based on the number of students, according to the stated opinion of 50 % of the professors at German universities as compared to 53 % on average for European countries (42 % as compared to 50 % according to junior staff and 65 % as compared to 59 % at other institutions of higher education)

- Academics are encouraged to improve instructional skills in response to teaching evaluations, according to 37 % of university professors in Germany as compared to 39 % across Europe; the respective figures are 31 % and 40 % for junior staff as well as 48 % and 41 % for senior academics at other higher education institutions.
- Departmental funding is substantially based on the number of graduates according to 33 % of university professors in Germany as compared to 35 % across Europe. The respective figures are 21 % and 33 % for junior academics as well as 41 % and 35 % for senior academics at other institutions of higher education.
- Teaching quality is taken into consideration in personnel decisions according to 28 % of university professors in Germany as compared to 34 % across Europe. The respective figures are 21 % and 20 % for junior academics as well as 51 % and 38 % for senior academics at other higher education institutions.

In sum, we note that professors at German Fachhochschulen consider that their teaching tasks are more strongly shaped by regulations and institutional expectations than their peers in other European countries. Professors at German universities, though, consider such regulations and expectations less influential than FH professors; as such, their views are close to the average for university professors across Europe. In contrast, junior academics at German universities clearly see less of a role for such regulations and expectations when compared to professors and also when compared to the average for junior academics across Europe.

With regard to research, academics have been asked whether certain expectations could have undesirable side effects:

- 48 % of university professors in Germany are convinced that high expectations of increased research productivity are a threat to the quality of research – clearly fewer than on average across Europe (63 %). The respective figures are higher among junior academics: 53 % in Germany as compared to 76 % across Europe, but lower among senior academics at other institutions of higher education: 44 % in Germany as compared to 60 % in the various European countries.
- 58 % (i.e. clearly more) professors at German universities believe that high expectations to produce useful results are a threat to the quality of research – exactly as many as across Europe. The respective figures are 54 % and 56 % for junior academics. Finally, only 35 % of professors at German universities of applied science see such a conflict, compared to 48 % for senior academics at other institutions across Europe – a finding reflecting the emphasis FHs have on applied research.

Thus, fewer academics in Germany across all three categories note a conflict between academic productivity and research quality, and fewer FH professors note a conflict between expectations of useful results and quality of research. In contrast, academics at German universities perceive a conflict between expectations of useful results and quality of research as often as their colleagues in other European countries.

Academics at German universities view the power of management at higher education institutions to decide on a multitude of aspects related to academic activities to be as pronounced as the average for the European countries surveyed. On average, across 11 aspects addressed in the questionnaire survey cited above (e.g. choosing new academics, promotion, determining budget priorities, evaluating teaching, setting internal research priorities, etc.), 46 % of professors and 51 % of junior staff at German universities feel that the executive powers within the university (presidents, deans, etc.) exert the strongest influence. These proportions are close to the average for European countries (48 % and 46 %, respectively) but clearly lower than in Austria and, in the case of professors, also somewhat lower than in the Netherlands.

The perspective of senior academics at German universities of applied sciences (53 %) is similar to those at universities, but this is clearly a lower level than the average across Europe at other institutions of higher education (61 %). On average across Europe, the management at other institutions of higher education regulates the academic life more strongly than the management at universities. In this respect, the FHs in Germany seem to be closer to the universities.

Two examples might be provided showing how the academics perceive the prevailing management styles at institutions of higher education:

- A top-down management style is reported by 43 % of university professors and 44 % of junior academics, but fewer FH professors in Germany (35 %). Across Europe, top-down management seems more widespread than in Germany as slightly more than half of the academics in all three categories respond affirmatively in this respect.
- Relative to those reporting top-down management, somewhat fewer academics in Germany are convinced that top-level administrators provide competent leadership. The respective proportions – 36 % among university professors, 30 % among junior academics at universities and 37 % among FH professors in Germany – are close to the average across Europe in all three categories.

As strong management does not automatically create constraints for the academic profession, the academics surveyed have been asked how influential they consider themselves in shaping key academic policies. The responses show that:

- Professors at German universities consider themselves quite influential: 63 % at faculty level (the second highest proportion in Europe and compared to an average of 35 % across the European countries surveyed) and 26 % at university level (compared to 15 %).
- Professors at German FHs consider themselves to be as influential at their institution as university professors (66 % and 28 % respectively), and they also rate their influence more highly than their colleagues across Europe (39 % and 24 % respectively).
- As one might expect, junior staff at university consider their influence to be marginal. The statements by German respondents – 9 % at faculty level and 4 % at university level – do not differ from the average across Europe (10 % and 4 % respectively).

In sum, to some extent Germany also seems to have developed a tendency for strong institutional management in higher education. However, German academics consider themselves to be exposed to a lesser extent to a top-down management style as well as to a conflict between the prevailing efficiency-oriented and relevance-oriented policies and academic quality, than academics across Europe. Additionally, they also consider their influence on academic policies to be stronger than their colleagues (on average) across European countries.

7.11 Satisfaction

Professional satisfaction can be expressed in various ways:

- About half (48 %) of professors at German universities characterize their job as a source of personal strain; this is more frequent than the average across Europe (41 %). In contrast, junior academics at German universities (36 %) and senior academics at German Fachhochschulen (34 %) consider their job a source of personal strain notably less often than university professors in Germany, and also slightly less often than their peers across Europe (41 % and 38 % respectively).
- 42 % of professors and 44 % of junior academics at German universities support the view 'This is a bad time for any young person to begin an academic career in my field', but only 22 % of senior academics at FHs in Germany hold such a view. In all cases, these proportions are about 5 % lower than the average across European countries.
- Only 17 % of professors and 19 % of junior academics at German universities react affirmatively to the statement 'If I was starting again, I would not become an academic'. Again, satisfaction is higher among academics at German FHs with only 7 % supporting such a view. The respective averages across Europe are 14 %, 19 % and 12 %.

Asked about their overall professional satisfaction, 71 % of university professors, 66 % of professors at universities of applied sciences and 55 % of junior academics at universities in Germany express a high degree of satisfaction; the average score on a five-point scale is 2.2, 2.3 and 2.5 respectively. All these figures are close to the average across the European countries surveyed (cf. Höhle and Teichler 2013).

It is interesting to note that German academics surveyed recently report higher levels of satisfaction than those surveyed in the 1990s (the average rose 0.2 points among professors both at universities and at universities of applied sciences). Junior academics at German universities had been the least satisfied across countries in the survey of the early 1990s. This has been interpreted as an indication that junior academics have felt a lack of recognition as productive scholars (Enders and Teichler 1995b). In the recent survey, however, junior academics increased their job satisfaction rating by 0.4 points, and they are now on par with the average of junior academics across European countries.

7.12 The Academic Profession in Germany – Lessons from Survey Research

There is a wealth of information on phenomena such as the academic profession, and this information tends to be condensed into conventional wisdom. The available literature provides us with certain characteristics of the academic profession in Germany. The results of questionnaire surveys help us to get a more valid picture, because representative surveys can overcome the sequences of anecdotes based on an incomplete knowledge of the whole spectrum of people under consideration. As such, questionnaire surveys might provide a better picture of the current views and activities of academics. Moreover, a comparative survey of the academic professions allows us to control whether often-claimed characteristics, many times based on implicit comparison, hold true explicitly as visible distinctions from other countries. We have to bear in mind, though, that survey questions might simplify issues; moreover, they are only able to present the views and notions of facts as reported by the academics themselves and thus might be subjectively biased. Altogether, however, we certainly can consider the academics' views and notions as a valuable source in this framework.

The previous survey on the academic profession in Germany, undertaken in the early 1990s, has been already successful, at the same time both reinforcing and challenging conventional assumptions on how academics in Germany think and act. German university professors have turned out to be hard-working and productive people. They are not for the most part completely geared to research, but most of them appreciate the linkage between teaching and research, even if the majority lean more strongly towards research. In turn, the pressure of student numbers has not forced them to concentrate most of their time on teaching and related activities; rather, time spent on research still exceeds time spent on teaching over the whole year. Junior academics in Germany have expressed similar views to senior academics regarding the functions of higher education and what constitutes a desirable academic, but they have clearly differed as far as employment conditions are concerned and to a certain extent as well as regards work tasks. Academics at German universities of applied sciences have to spend more time on teaching and, if they are active in research, they are expected to emphasize applied academic work. Last, but not least, the 1992 survey has shown that academics in Germany are not as highly satisfied with their professional situation as academics in some other countries. Notably, junior academics in Germany have been clearly less satisfied than senior academics, and also somewhat less satisfied than junior academics in other European countries surveyed.

The 2007 survey compared the situation of academics in 12 European countries. The analysis of the academic profession in Germany, as reflected in the survey, provides such a wealth of interesting findings that a brief summary is bound to selective. Some findings, though, are certainly worth highlighting.

The share of women among university professors was quite low in Germany in the early 1990s. However, the share of women among junior academics was three

times as large at that time – this then translated to a similar share among university professors 15 years later. We might assume that the share of women – less than one fifth in the most recent survey – is likely to reach a third in the next generation.

Compared to professors, the employment situation (job security, remuneration) of junior academics at German universities has not changed very much between those two surveys. Yet the climate of appreciation of junior academics might have changed: We note a clear increase in junior academics' overall job satisfaction (as compared to the moderate increase seen for professors at both universities and universities of applied sciences).

Academics in Germany have to change university when first promoted to professorships and again for any further promotion; professors at universities of applied sciences must have been professionally active outside academia. The survey, however, shows that inter-institutional mobility of German academics is no greater than the European average.

University professors in Germany spend much time on professional work and publish more than their colleagues in most other European countries. Most of them favour a close link between teaching and research, although the proportion of those tending to lean towards research has increased in recent years. They activities include only a relatively small range of teaching methods. Professors at German universities of applied sciences, in contrast to popular opinion, are currently even more strongly teaching-oriented than in the early 1990s.

Comparing the two surveys, professors both at universities and FHs in Germany now spend about the same amount of work time on research, more work time on other functions, and less work time on teaching. As the teaching load has hardly changed during this period and the student-teacher ratio has grown, obviously time spent on teaching-related activities, such as preparation and guidance, has become scarce.

Academics in Germany are less international than the average for academics across Europe, as judged by their mobility and migration, visible international activities and use of a foreign language. The conclusion here is not necessarily a lack of interest in the international dimension, but rather seems to be a normal perspective for a relatively large country.

Academics in Germany have noticed growing managerial power and an increase in regulations, incentives and sanctions. However, both, professors and junior staff in Germany continue to consider that their degree of influence on academic policies at their department and university is higher than their peers across Europe.

Academics have remained sceptical of the growing expectations to be more visibly relevant and to be more visibly efficient in their academic work. About half of all academics fear that such emphases are endangering the quality of academic work. Such a critique of the visible relevance of academic work, however, is less pronounced among academics at universities of applied sciences, as they have a mandate to emphasize the application of knowledge.

Most public debates on higher education in Germany suggest a degree of dissatisfaction among the academic profession. Some reforms have met with strong criticism. The student-teacher ratio grows. There are controversial debates regarding

resources for teaching and research. The employment situation for junior academics is often criticised as having de-motivating effects. However, this critique might more accurately reflect the concerned voice of associations representing the interests of junior staff, professors and universities, than the actual academics' views. As already pointed out, the overall professional satisfaction of academics in Germany has increased from the early 1990s to recent years.

At the time of the first survey discussed here, there was a widespread view that the academic profession considered itself to be 'a profession under pressure': an expectation existed to do more with less and academics were felt to be the 'losers' rather than the 'winners' from the growing role of higher education in society. Recent years have seen a tendency for growth in strong external expectations and managerial power, however, at the same time the opportunities and risks are becoming more diversified and more individualized. As this may be, these observations are also true for many European countries. Why academics' views and working practices remain so different in a substantial number of areas (despite international discourse on similar studies across countries) provides an interesting topic for future research.

References

Altbach, P. G. (Ed.). (1996). *The international academic profession: Portraits of 14 countries*. Princeton: Carnegie Foundation for the Advancement of Teaching.

Boyer, E. L., Altbach, P. G., & Whitelaw, M. J. (1994). *The academic profession: An international higher perspective*. Princeton: Carnegie Foundation for the Advancement of Teaching.

Bundesministerium für Bildung und Forschung (BMBF) (2008). *Bundesbericht zur Förderung des Wissenschaftlichen Nachwuchses (BuWiN)* (Federal report for the promotion of junior academic staff). Berlin: Bundestag.

Burkhardt, A. (2008). *Wagnis Wissenschaft: Akademische Karrierewege und das Fördersystem in Deutschland (Courage science: Academic careers and the support system in Germany)*. Leipzig: Akademische Verlagsanstalt.

Enders, J. (Ed.). (2001). *Academic staff in Europe: Changing contexts and conditions*. London: Greenwood.

Enders, J. (2004). Von der Ordinarienuniversität zum kognitiven Dienstleister: Die Veränderung der Rahmenbedingungen wissenschaftlicher Arbeit an den Hochschulen (From the university of ordinarii to cognitive service persons: The context change of academic work at institutions of higher education). In F. Gützkow, & G. Quaißer (Eds.), *Hochschule gestalten – Denkanstöße aus Hochschulpolitik und Hochschulforschung. Festschrift zum 60. Geburtstag von Gerd Köhler* (To shape higher education – challenges form higher education.policy and higher education research. Festschrift on the occasion of the 60th birthday of Gerd Köhler) (pp. 53–68). Bielefeld: Universitätsverlag Webler.

Enders, J. (2006). The academic profession. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 5–21). Dordrecht: Springer.

Enders, J., & de Weert, E. (Eds.). (2004). *The international attractiveness of the academic workplace in Europe*. Frankfurt/Main: Gewerkschaft Erziehung und Wissenschaft.

Enders, J., & Teichler, U. (1995a). *Berufsbild der Lehrenden und Forschenden an Hochschulen* (The professional image of teachers and researchers at higher education institutions). Bonn: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie.

Enders, J., & Teichler, U. (1995b). *Der Hochschullehrerberuf im internationalen Vergleich* (The academic profession in international comparison). Bonn: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie.

Höhle, E. A., & Teichler, U. (2013). Germany: Determinants of academic job satisfaction. In P. Bentley, H. Coates, I. R. Dobson, L. Goedegebuure & V. L. Meek (Eds.), *Job satisfaction around the academic world* (The Changing Academy - The Changing Academic Profession in International Comparative Perspective) (pp. 125–144). Dordrecht: Springer.

Höhle, E. A. (2015). From apprentice to agenda-setter: Comparative analysis of the influence of contract conditions on roles in the scientific community. *Studies in Higher Education, 40*(8), 1423–1437.

Höhle, E. A. (2016). Bildungsexpansion – wissenschaftliche Karriere – Befristung: Ein Vergleich in Europa (Higher education expansion – Academic career – Temporary emplyoment – A comparison inside Europe). In J. Schmid, K. S. Amos, J. Schrader & A. Thiel (Eds.), *Internationalisierte Welten der Bildung – Bildung und Bildungspolitik im globalen Vergleich*. Series Wirtschafts- und Sozialpolitik (pp. 163–185). Nomos.

Höhle, E. A. (2017, forthcoming). Befristung in der Wissenschaft. Eine Makroanalyse über 22 Länder (Temporary employment in academia. A macro-analysis across 22 countries). *WSI-Mitteilungen, 5*.

Jacob, A. K. (2011). *Beschäftigungsverhältnisse an Hochschulen: Ein problemorientierter Ländervergleich Deutschland-Norwegen* (Employment conditions at higher education institutions: A problem-oriented comparison between the countries of Germany and Norway) Flensburg: Universität Flensburg 2011 (doctoral dissertation). Online document. https://www.zhb-flensburg.de/fileadmin/content/spezial-einrichtungen/zhb/dokumente/dissertationen/jacob/dissertation-jacob-anna-katharina.pdf

Jacob, A. K., & Teichler, U. (2009). The changing employment and work situation of the academic profession in Germany. In *The changing academic profession over 1992–2007: International, comparative, and quantitative perspectives* (pp. 253–269) (RIHE International Seminar Reports, No. 13). Higashi-Hiroshima: Research Institute for Higher Education, Hiroshima University.

Jacob, A. K., & Teichler, U. (2011). *Der Wandel des Hochschullehrerberufs im internationalen Vergleich: Ergebnisse einer Befragung in den Jahren 2007/08 (The change of the academic profession in international comparison: Results of a surey conducted in the years 2007/08)*. Bonn/Berlin: Bundesministerium für Bildung und Forschung.

Janson, K., Schomburg, H., & Teichler, U. (2007). *Wege zur Professur: Qualifizierung und Beschäftigung an Hochschulen in Deutschland und den USA (Paths towards professorships: Learning and employment at institutions of higher education in Germany)*. Münster: Waxmann.

Kehm, B. M. (1999). *Higher education in Germany*. Bucarest/Wittenberg: CEPES and Institut für Hochschulforschung.

Kehm, B. M. (2006). Germany. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 729–745). Dordrecht: Springer.

Kehm, B. M., & Lanzendorf, U. (Eds.). (2006). *Reforming university governance: Changing conditions for research in four European countries*. Bonn: Lemmens.

KMK (Kultusministerkonferenz) (Ed.) (2003). *The education system in the Federal Republic of Germany 2003: A description of responsibilities, structures and developments in education policy for the exchange of information in Europe*. In cooperation with the German EURYDICE Unit of the Federal Government in the Federal Ministry of Education and Research. Bonn: KMK.

Kogan, M., & Teichler, U. (Eds.) (2007). *Key challenges to the academic profession* (Werkstattberichte, No. 65). Paris/Kassel: Unesco Forum on Higher Education, Research and Knowledge und International Centre for Higher Education Research Kassel.

Kreckel, R. (Ed.) (2008). *Zwischen Promotion und Professur: Das wissenschaftliche Personal in Deutschland im Vergleich mit Frankreich, Großbritannien, USA, Schweden, den Niederlanden, Österreich und der Schweiz* (Between the doctoral degree and the professorship: Academic

staff in Germany as compared to France, United Kingdom, United States of America, Sweden, the Netherlands, Austria and Switzerland). Leipzig: Akademische Verlagsanstalt.

Locke, W., & Teichler, U. (Eds.) (2007). *The changing conditions for academic work and careers in selected countries* (Werkstattberichte, No. 66). Kassel: International Centre for Higher Educa¬tion Research Kassel, University of Kassel.

Schade, A. (2004). Shift of paradigm in quality assurance in Germany: More autonomy but multiple quality assessment? In S. Schwarz & D. F. Westerheijden (Eds.), *Accreditation and evaluation in the European Higher Education Area* (pp. 175–196). Dordrecht: Kluwer Academic Publishers.

Schwarz, S., & Westerheijden, D. F. (2004). Accreditation in the framework of evaluation activities: A comparative study in the Europen Higher Education Area. In S. Schwarz & D. F. Westerheijden (Eds.), *Accreditation and evaluation in the European Higher Education Area* (pp. 1–41). Dordrecht: Kluwer Academic Publishers.

Teichler, U. (1990a). *Europäische Hochschulsysteme: Die Beharrlichkeit vielfältiger Modelle* (European higher education systems: The persistence of varied models). Frankfurt/M.: Campus Verlag.

Teichler, U. (1990b). Das Hochschulwesen in der Bundesrepublik Deutschland: Ein Überblick (Higher education in the Federal Republic of Germany: An overview). In U. Teichler (Ed.), *Das Hochschulwesen in der Bundesrepublik Deutschland* (Higher education in the Federal Republic of Germany) (pp. 11–42).Weinheim: Deutscher Studien Verlag.

Teichler, U. (1996). The conditions of the academic profession. An international comparative analysis of the academic profession in Western Europe, Japan and the USA. In P. A. M. Maassen & F. A. Van Vught (Eds.), *Inside academia: New challenges for the academic profession* (pp. 15–65). Utrecht: Uitgeverij De Tijdstrom.

Teichler, U. (2005). *Hochschulstrukturen im Umbruch. Eine Bilanz der Reformdynamik seit vier Jahrzehnten* (Patterns of higher education systems in radical change: An account of reform dynamics since four decades). Frankfurt a. M./New York: Campus.

Teichler, U. (2007). Germany and beyond: New dynamics for the academic profession. In W. Locke, & U. Teichler (Eds.), *The changing conditions for academic work and careers in selected countries* (pp. 15–38) (Werkstattberichte, No. 66). Kassel: International Centre for Higher Education Research Kassel, University of Kassel 2007.

Teichler, U. (2008). Academic staff in Germany: Per aspera ad astra? In *The changing academic profession in international comparative and quantitative perspectives* (pp. 131–152) (RIHE International Seminar Reports, No. 12). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Teichler, U. (2011). Germany: How changing governance and managements affects the views and work of the academic profession. In W. Locke, W. K. Cummings, & D. Fisher (Eds.), *Changing governance and management in higher education* (pp. 223–241). Dordrecht: Springer.

Teichler, U., & Bracht, O. (2006). The academic profession in Germany. In *Reports of changing academic profession project workshop on quality, relevance, and governance in the changing academia: International perspectives* (pp. 129–150) (COE Publication Series, No. 20). Hiroshima: Research Institute for Higher Education, Hiroshima University.

Teichler, U., & Höhle, E. A. (Eds.) (2013). *The work situation of the academic profession in Europe: Findings of a survey in twelve countries*. Dordrecht: Springer.

Chapter 8
Between Tradition and Transition: The Academic Career in Italy

Massimiliano Vaira

8.1 Introduction

Several changes have affected the Italian university sector since the Second World War. Political and societal conditions have impacted the system, which have challenged not only its structures and workings but also the main actors working inside it: The academics.

In this chapter, I focus on a particular and crucial aspect of the academic profession – the recruitment and career system and how it has changed through time. The civil servant status enjoyed by academics means that access to and career development in the profession is regulated by the State. Thus, the main source of change originates with centrally located policy making activities. At the same time, access and career decisions within the regulative framework are largely dominated by the academic community, in particular by full professors. These two structural features create a particular type of structure of coordination, where the academic oligarchy is able not only to influence the State and its regulative activities (Clark 1983), but also to de-couple substantive decision making processes from regulations which work as a legitimating formal framework for decisions, or in Meyer and Rowan's (1977) terms as a ceremony. This, in turn, is due to the organisational nature of the university as a professional bureaucracy. On the one hand, the university depends on formal mandatory rules of operation (the bureaucratic and formal side); on the other hand, given its professional-based organisation, actors enjoy quite a large degree of autonomy in their decisions and operations; as professional organisations, they are necessarily based on a logic and practice of members' cooptation.

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Special attention is given here to changes affecting the recruitment and career system between the late 1990s and the first decade of the 2000s. This period saw the institutional framework governing the recruitment and career system changed several times, significantly altering its conditions and dynamics. This, in turn, has produced a challenging environment for academics and for the logic and the practice governing recruitment and career advancement that characterises the academic profession. I will show how the academic community responded to those changes and alterations in the period between 1999 and 2014, albeit the effects and responses of 2010 reform cannot be fully assessed, since the recruiting procedures are currently ongoing (August 2014).

The chapter is organised in five sections. In the first section, I will sketch out a historical perspective of how the Italian professoriate has evolved between the Second World War and 2010. The second section will deal with the changes to the institutional framework regulating the recruitment and career system in the same period, highlighting the various regimes regulating and governing the academic profession and identifying their distinctive features. The third section considers the process of institutionalisation of non-tenured and fixed-term academics; while various precarious roles have always characterised the academic profession (especially for new entrants), new regulations institutionalised this de facto state of affairs, creating an academic periphery and a highly stratified profession. The fourth section will focus on the academics' responses to recruitment and career system reform in the period 1998–2014. Here I will show how the traditional guild-type structure had been combined with the new regulative environment and the financial constraints introduced by the law. I will also discuss the effects this combination produced, which were used as a legitimating argument to introduce a new wave of reforms. Finally, in the last section I will deal with how academics perceive and evaluate the conditions affecting their career opportunities and perspectives, drawing on the Changing Academic Profession (CAP) survey.

8.2 The Historical Evolution of the Professoriate – 1946–2010

The end of the Second World War allowed Italy to become a democratic republic. On the 1st of January 1948, the republican constitution came into force and a process started of dismantling the fascist era norms and administrative apparatus.

In 1958, a new law governing academic staff meant that professors were recruited through a national public competitive exam and they were granted freedom in their teaching and researching duties. Every detail of academic staff matters was regulated centrally, bestowing civil servant status on the professoriate. The Italian university system was able to preserve its historic elitist structure for the whole of the next decade. Access to university at this time was reserved for those students coming from academic oriented upper secondary schools (Lyceum) and strict limitations

were placed on students coming from professional upper secondary schools (like commercial schools) who could only enrol in study courses like economics and agricultural science. This elite feature is reflected in the number of academic staff: 1809 full professors. Full professors were aided by various non-staff academics (appointed by the Ministry of Public Education), some hired on fixed-term contracts, some collaborating on a voluntary base (appointed by rectors) and others under precarious forms of employment. The academic staff, appointed by the ministry and hired on fixed term contracts, that comprised the professoriate amounted to less than 4000 up until the early 1960s, while enrolled students totalled some 335,000 (source: ISTAT 1997).

Although there were limits on intake, university enrolments kept growing constantly over the decade, as the result of the expansion of upper secondary students. The younger cohorts of society exerted growing pressure for an open-door system for university access, which was finally instituted in 1969. This point marked the beginning of the massification of the university system, albeit only in terms of access and without changing its organisational features. This law affected university and the academics dramatically: while the teacher/student ratio was 1/45 in the academic year 1966–1967, the ratio reached at 1/60 in the academic year 1970–1971 (ISTAT 1997). The response to this situation was to increase the number of full professors and other academic non-tenured roles. However, the non-staffed and precariously employed academics were adding increasing pressure to be employed as staff, backed by unions that exerted strong pressures on political and governmental structures.

This state of affairs quickly became unsustainable, and by 1973 a law had been passed resolving the problem of non-staff academics. This law was poignantly entitled ‘Urgent provisions concerning academic staff’. Notwithstanding its stated urgency, the law was implemented slowly and in a piecemeal fashion. This was a result of ministerial delays in issuing the competitive exams for career promotion. Thus, the few cases where upgrading to full professor took place made little change to the situation. Only in the 1980s did things noticeably start to change.

In that year a limited university reform was approved instituting the doctorate and departments as organisational units for research, alongside the faculty structure. More importantly, it resolved the academic staff issue, which could no longer be contained. This was tackled using two measures:

1. The academic career gained two new levels. The ‘associate professor’ was a new level hierarchically below full professor and the category of ‘researcher’ represented the first step in the academic career. Researchers were not supposed to have teaching duties, or where they did, they were very minimal. Both positions were permanent. The professoriate was, as such, structured over three levels;
2. Law stated that the 15,000 full professors, 15,000 associate professors and 16,000 researchers would be hired, to be staggered over the following 4 years after publication of the law. Moreover, this law stated that competitive exams for recruitment and career advancement should take place every 2 years.

At the end of the decade, the professoriate had reached around 41,000 academic staff, while about 1,300,000 students were enrolled. Yet over this same period, the number of competitive exams for both recruiting academics and career advancement started declining and at the beginning of the 1990s they become notably infrequent. Two factors affected this trend: first, recruitment and career advancement grew very quickly until the second half of 1980s, saturating the available positions as fixed by law; second, university funding constrained the number of competitive exams for new positions.

Thus, the 1990s saw the career dynamics of academic staff stagnate. Between 1990 and 1999 the professoriate grew only 4 %, reaching 49,000 academics by 1999. Meanwhile, student numbers grew remarkably in the same decade, registering an increase of 21 % (from 1,381,361 to 1,685,000) (source: Ministry of University and Research-Statistics Office).

Between 1996 and 2000, a centre-left government embarked on an overarching university reform aimed at widening the institutional autonomy. As part of this reform, a new law was passed in 1998 regulating the academic career and recruitment process. Competitive exams were devolved to the institutional level: each university was free (within its financial limits) to open a competitive exam for a position; those who qualified for that position (up to three qualifications were awarded for each position, except for the research position which awarded just one) could use it to be hired by a national university. This law stimulated the sector (especially in terms of career advancement) and between 1999 and 2007 academic staff became more dynamic. Academic staff growth over the period reached 22 % (rising from 50,901 to almost 62,000), while student growth over the same time was less than 6 %, (rising from 1,685,000 to 1,781,659) (source: Ministry of University and Research-Statistics Office).

In 2001, the centre-right won the general election. The new government sought to repeal the previous university reform. This goal was never to be fully accomplished, but over the next 5 years something did change, and that constituted the starting point for what was to happen between 2008 and 2010. In general terms, university sector policy-making became increasingly centralised and most university issues were de facto governed by the Ministry of Economy. This represented a new form of dirigisme and centralisation, leveraging control over public financing and diminishing institutions' autonomy.

A new reform of the juridical status of academic staff in this period – career and recruitment system, duties and rights and salary – was issued in 2005 at the end of the government's term in office. This law, although never fully implemented, nonetheless had consequences for the evolution of the professoriate. A first consequence was the reduction in the qualifications awarded by the competitive exams, from three to two. Secondly, and more importantly, no competition exams had been held since 2007, awaiting the full implementation of the new regulative framework for recruitment and career advancement. As a result, the growth of the professoriate turned negative, except for research positions which witnessed a small but quite constant growth. From 2007 to the end of 2010, full professors decreased from almost 20,000 to less than 16,000 (−24 %); assistant professors decreased from

19,000 to about 17,000 (around −10 %); and researchers grew from just over 23,000 to almost 25,000 (around +6 %). In total, the professoriate decreased in this period from almost 62,000 to less than 58,000, a decrease in percentage terms of 7 % (source: Ministry of University and Research-Statistics Office).

In 2006, the centre-left won the general election, but it governed for only 2 years. In 2008 a new general election was called and won by the centre-right. University funding had been veritably attacked, with a financial cut of almost 1.5 billion euros in 4 years; a new general reform was issued at the end of 2010 introducing strong centralisation and dirigisme. While the reform changed again the juridical status of academics, introducing a much more centralised as well as very baroque system (with severe limitations) of competitive exams, natural wastage from retirement continues to exceed new recruitments and career advancement: between 2006 and 2013 full professor decreased by 30 %, associate professors by 17 %; only researcher increased slightly in the period, by 3 %. On the whole tenured academic decreased by 14%; if we considered only the senior positions (i.e. full and associate professors) the decrease was equal to 36 % in the period (source: Ministry of University and Research-Statistics Office). In early spring 2014 the first round of national qualification for career advancement was accomplished and currently universities are taken up in local procedures to select and hire qualified academics. Given the enduring financial shortage and the constrains on personnel turn-over, those who will be hired will be far less than enough to compensate retirements in full and associate positions.

8.3 Changes in the Legal Framework of Academics

After the Second World War, the legal framework of the academic profession changed over time. Changes affected the structure surrounding the positions, the duties and, above all, the recruitment/promotion system.

From 1946 to 1980 only full professors enjoyed a tenured position, which corresponded to holding a chair in a given subject. As mentioned in the previous section, there were other academic positions, but none of them had tenure. Academics in such positions were subordinate to chair-holders who oversaw all activities (teaching, researching, holding examinations, supervising thesis and so on), as well as career perspectives. Non-tenured academics could gain a chair through a national competitive exam where they were awarded the qualification that made them eligible to be hired by a university throughout the country. The Ministry of Public Education established national competitions and the number of positions in each disciplinary field, according to the financial resources available.

The 1980 law reformed the chair system, introducing a new professorship position – the associate professor. Associate professors had and still have the same duties of full professors (teaching and all related activities, research and organisational/administrative duties). Access to both positions was through national

competitive exams. A third staffed position, the researcher, was also introduced. In contrast to associate and full professors, the law stated that researchers' duties are limited to research activities; only a small portion of their time could be devoted to teaching (small group seminars, practical work, support for laboratory experiments, and similar). The professorship positions were also different in that positions for researchers were awarded by a local competitive exam (rather than a national exam) held by a faculty of an institution. Candidates' were evaluated for the three positions based on their research productivity (publication of articles and books) while a simulated lesson was also included for researchers being considered for an associate position.

All three positions were subject to a 3-year probationary period where entrants had to prove their quality (in particular, research productivity). At the end of this period, a national commission carried out an evaluation; a positive evaluation meant new entrants were 'confirmed'; a negative evaluation meant that the candidate would be granted a 2-year extension to prove their quality. If the second evaluation was negative, they were expected to leave academia whereupon they may accept a placement as an upper secondary school teacher or in a public administration institution as a civil servant.

Apart from the provisions regarding the staff positions, the law also instituted doctoral courses that were, and still are, designed to be training courses for prospective academics. Access to doctoral courses was established by the Ministry, organised by individual university departments and subject to a public competition among candidates.

Now let us turn to look at the economic aspect of the academic career. As civil servants, the law determines academics' salaries and their growth over time. Once they have been 'confirmed', a ladder with different levels determines academics' salaries (a salary scale), with each position linked to seniority. Every 2 years academics automatically shift to the next salary level. Each of the first six biennial rungs on the ladder would increase an academic's salary by 8 %. Subsequent salary points increased pay by 2.5 %. The annual salary consists of 13 salary instalments (that is, Italian academics receive two payments in December).

For full professors there are 24 salary levels (a minority of them reaches the highest levels, because most reach retirement age first); for associate professors and researchers there are 20 levels (it is easier for them to reach the highest levels). Table 8.1 shows the salary scale and the gross salary corresponding to 4 of the total levels (upon entrance, the first year after 'confirmation', after 10 years in the position and at the end of the career. Data refer to full time academics and are correct as of 1/10/2010):

The university reform issued in December 2010 (law n. 240/2010), introduced a major change to academics' salary scale. The biennial automatic salary increases linked to seniority gave way to triennial increases linked to a performance evaluation focusing on research outputs and teaching quality (assessed by students). In this case, salary increases are only awarded to those who have been positively evaluated. Yet, this provision hasn't been operative so far, because of salary increase freezing since 2008 and currently ongoing due to financial laws aiming at reducing the public spending and debt.

Table 8.1 Salary scales and gross salary by position and seniority

Position	Salary level	Gross salary (€)
Full professor	Upon entrance	56,840
	First year after confirmation	60,158
		80,173
	Ten years after confirmation	120,000/133,000[1]
	End of career	
Associate professor	Upon entrance	43,023
	First year after confirmation	45,549
		59,519
	Ten years after confirmation	83,000/91,000[1]
	End of career	
Reseracher	Upon entrance (first year)	24,135
		24,481–24,827
	Upon entrance (2nd/3rd year)	34,897
		44,982
	First year after confirmation	63,000/67,000[a]
	Ten years after confirmation	
	End of career	

[a]The two values indicate the minimum/maximum salary at the end of career (25 years or more in a given position)

The recruitment/career system underwent three major reforms in 1998, 2005 and 2010. The 1998 reform changed the recruitment/careers system from being national/centralised to local/decentralised making institutions responsible for their own personnel policy, according to the goal of widening institutional autonomy. This entailed institutions advertising competitions (on the request of their faculties and within their financial limits), for each academic position; the responsibility for organising exams and evaluating candidates fell to the individual faculty. The new system awarded up to three qualifications for full and associate professors, while the same system was used for researchers as defined in the 1980 law. Qualifications allowed the holder to be hired by any Italian university.

The new system had been criticised for having created an excessive 'localism' in recruitment and career promotions: It was almost always the local candidates that were called by the institutions which opened the competition and those who gained the qualification were hired by their 'home' institutions. Later, data and explanations will be provided in respect of this phenomenon.

In 2005, a new reform of the juridical status of academics took place under the centre-right government. Although this law was not fully implemented, it is nonetheless important because the changes it introduced to the system for recruiting and promoting academics served as the basis for the 2010 reform. A first element of change altered the system of competition exams for full and associate professors. The new framework for career advancement was structured in two phases. The first phase was a qualifying round, consisting of national competitive exams (participa-

tion in the qualifying competitive exams was not subject to any restriction). Qualified candidates from the first phase become eligible to participate to the second phase; this was a comparative evaluation of eligible candidates carried out at the institutional level. Thus, the new framework was a mix of national and local mechanisms to evaluate and select those who aspire to promotion. Notably, universities continued to be allowed to hire eligible academics within their financial constraints (see note 5).

The position of researcher underwent a major change. The old, permanent position of researcher was abolished and a fixed-term position was introduced. Those who enter the career are hired on a 3-year contract, renewable for a further 2 years. If within 3 or 5 years a researcher has not gained the qualification for associate professor, they have to leave the university for a post in public administration or the school sector. To gain entry to the competitive exam for a research position, the candidate needs a doctoral degree or to have been awarded a research grant, in addition to authoring an adequate number of scientific publications.

In December 2010, the centre-right government passed a new general university reform. This reform had been carried out aggressively since 2008, when the Ministry of Economy decided to dramatically cut university funding by an amount totalling 1.5 billion euros, (equal to 15 % of the total funding). This cut was to be progressively implemented over 4 years. With a few exceptions, the reform of the recruitment/career system for academics was largely based on the previous law from 2005.

The position of researcher was left relatively unaltered by the 2005 law, with one new aspect: institutions could directly hire fixed term researchers (if their financial resources allowed) once they had passed the national qualification. In other words, the reform introduced something similar to a tenure-track system. On the contrary, the 'old' researchers have to go through the national qualification process and then pass the local evaluation and selection exams to be accepted for a position as an associate professor, and thus they cannot enjoy the tenure-track system. Since 2011, the recruitment of new researchers almost exclusively occurs with fixed term contracts, while the 'old' researcher position exams have been abolished. The career advancement procedures for full and associate professors continues to be covered by the 2005 law. Another change introduced regulated the salary increases of professors and 'old' researchers, as mentioned above, with the biennial automatic increases according to seniority being replaced by triennial increases linked to an academic's performance evaluation. Finally, the law states that a doctoral degree is a mandatory prerequisite for entry to the academic career.

These are the main changes and features of how the status of academics has changed over time. A synopsis presented in Table 8.2 shows the main events from 1980 to the present day:

Table 8.2 Changes to the juridical status of Italian academics 1980–2010

Time period	Positions	Juridical status	Formal requirements for entry	Recruitment/career formal system	Salary
1980–1998	Full professor	Civil servants	None	National competitive exams, evaluating publications.	Determined by law.
	Associate professor			Number of available posts fixed by the Ministry.	Biennial salary increases defined by a scale linked to seniority.
	Researcher			Teaching abilities were assessed only for those researchers wishing to become an associate professor.	
				A competitive exam for researcher positions, held locally	
1998–2005	Full professor	Civil servants	None	Local competitive exams held by university faculties evaluating publications.	Determined by law.
	Associate professor			Number of available posts fixed by each institution.	Biennial salary increases defined by a scale linked to seniority.
	Researcher			Teaching abilities were assessed only for those researchers wishing to become an associate professor.	
				A competitive exam for researcher positions, held locally	
				Recruitment/career linked to universities' budget limits.	
2005–2010	Full professor	Civil servants	Doctorate or research grant holder (up to 2010)	National competitive exams evaluating publications to qualify for associate and full professor positions and local choice based on comparative selection of eligible applicants.	Determined by law.
	Associate professor				Biennial salary increases defined by a scale linked to seniority. (up to 2010).
	Researcher	Contracted public employees	Doctorate (from 2010 on)		
	Fixed-term researcher				
				No restrictions on applying for qualification.	Triennial increases linked to each academic's performance evaluation (from 2010 on).
				Researchers recruited on a local basis and with a fixed-term contract	
				Recruitment/career linked to universities' budget limits.	

8.4 Non-Tenured Academics: From Patrimonialism to Institutionalised Precarization

Italian university academic staff had historically been characterised by the presence of non-tenured and non-staff positions. As noted in Sect. 8.1, these academics served a support role to full professors, depending on them for all their activities and for their academic career perspective. Following Weber ([1922] 1968), this system of dominance has been labelled as patrimonialism by Giglioli (1979). Giglioli described it as the personal and discretionary power of full professors, whom non-tenured academics completely depended on: from the 'call' of the master to enter the first step of the profession, to their socialization to profession, to their duties and tasks, up to their career perspectives. In this sense, the patrimonialistic system was a combination of the traditional guild system (Clark 1977) and personalism (Weber [1922] 1968). It is manifest that these academics were exposed both to work exploitation and to a high degree of uncertainty regarding their career. Non-tenured and non-staff academics were increasingly hired through this system to cope with the growing number of enrolled students since 1969 when the university system started mass expansion. It is worth noting that this job and career insecurity was 'regulated' by the tacit norms of the profession based on the power of the chair-holders and the principle of loyalty to the master.

Besides reducing precarization, the 1980 reform also sought to reduce the perverse effects of patrimonialism. Yet, the reform also allowed some auxiliary positions to be hired on a fixed-term contractual basis. Although this provision in the law was not widely used, it is worth noting that it represented a first step towards the formalisation and institutionalisation of non-permanent and precarious positions inside academia. In other words, for the first time the law formally regulated this kind of contracted academic position, which from the late 1990s grew more common, leading to the most recent developments.

Since the 1998 reform – which introduced grant-financed researchers –, the number of such fixed-term contracts for young academics has grown. These fixed-term researchers also had some teaching functions, (albeit generally not formally recognised), widely considered to be part of their socialization with the profession. This growth was largely due to financial reasons: Universities can save money by hiring these contracted academics whose costs are far less than tenured academics, and at the same time, they are able to rely on this low-cost and flexible work force for research and teaching purposes. Since 2008, the figure of a fixed-term researcher has been added as a new academic position, reflecting the 2005 and 2008 reforms as discussed above.

Table 8.3 shows this growth since 2003. It must be noted that contracted positions have been present since 1998, but ministerial data are not available for years before 2003. The most recent report of the National Committee for Evaluation of the University System (CNVSU 2011), highlights how about 50,000 young academics were hired since 1998 as grant-financed researchers.

Table 8.3 Number of young academics with research fixed-term contracts

Type of contract/years	2003	2004	2005	2006	2007	2008	2009	2010
Post-graduate research grants	n.a.	n.a.	n.a	n.a.	n.a.	3221	4649	6450
Post doc-grants	984	801	737	754	894	572	734	735
Research grants	9795	9872	9537	10,012	11,349	11,721	15,748	17,459
Fixed -term researchers	–	–	–	–	–	481	457	792
TOTAL	*10,779*	*10,673*	*10,274*	*10,766*	*12,243*	*15,995*	*21,588*	*25,436*

Overall, a growing academic periphery has been formally created and regulated. This is bound to grow in time, with the abolition of the 'old' stable researcher position and the introduction of the new fixed-term position. Data drawn from CNVSU for the first half of 2011 show that 1094 fixed-term researchers were recruited, representing a 38 % increase on the 2010 level over a period of 6 months. In 2010, this academic periphery accounted for 44 % of all academic personnel. This state of affairs is also generating a stratified structure in the academic profession, which can be illustrated as follows:

1. tenured academics with a stable position (researchers, associate and full professors);
2. new fixed-term researchers looking to attain a tenured position, although not linked to a real tenure-track system;
3. grant-financed researchers, looking to attain a fixed-term researcher position.

This stratification is not only the result of different kinds of contractual status, but mostly due to different degrees of uncertainty in the academic career paths – both between and within the three categories. In turn, career uncertainty largely depends on financial factors – the ability of an institution to recruit academics to tenured positions (associate and full professors) – and to the still enduring patrimonialistic logic which is still significantly affecting career prospects and paths.

8.5 Academic Responses to Recruitment and Career System Reforms

As noted above, between 1998 and 2010 the recruitment and career system has been reformed three times. It is not possible to assess the effects of the last two reforms (2005 and 2010), because the 2005 reform was never fully implemented and the 2010 reform is currently in progress with the hiring procedures of qualified

academics in the first round of national qualifications. As a result, competitive exams for career advancement have been blocked since 2008 and the number of academic staff is decreasing, as new recruits do not replace those that retire. Thus, to assess the effects of and how academics responded to changes in recruitment and the career system, I limit the analysis here to the period 1998–2004.

Considering the periods between 1997 (before the 1998 reform) and 2004 (before the 2005 reform was approved) and between 2005 and 2014 (the period of the two reforms) it is possible to identify four phases in recruitment and career advancement:

1. stagnation phase (1997–1998): This is the tail end of the wave of the hiring and promotion of academics started in the late 1980s, and preceding the implementation of the 1998 reform. All positions show flat growth;
2. thawing phase (1999–2002): In the first part of this phase, following the implementation of the reform (1999–2000), universities favour career advancement from positions as researchers to associate positions, in order to promote those researchers hired during the early 1980s waiting for a career advancement. The second part of the phase (2001–2002) is characterised by promotions from associate professor to full professor, while quite considerable growth also occurred in the two lower-ranking positions. This phase signals full implementation of the reform, both for recruitment and career advancement. In the thawing phase, growth in academics, in overall terms, was as much as 8.6 % (more than 4000 academics), the highest level since the early 1980s;
3. stabilisation phase (2003–2004): The rapid growth of the academic staff in the previous phase meant that universities had to accommodate the expenditure in their budget from promoting and recruiting academics. This meant that many universities reached, or came very close to reaching, the expenditure limit for personnel, thereby limiting further growth. In all positions, the number of retirements still exceeded the new recruits and promotions;
4. shrinking phase (2005–2014): The 2005 reform entailed a strong slow down in recruitment and career advancement dynamic. Figures in academic positions start showing negative values given to retirements not compensated by new recruitment and career advancements. In 2008 the financial cuts and the introduction of severe limits to academic personnel turn-over produce a blockage. The issue of the 2010 reform further worsened the situation: the professoriate has been witnessing a relevant shrinking in number because of retirements. As the first round of academics' national qualification

For the second phase, it is worth noting that the growth of recruitment and promotions in the three positions was strongly concentrated on promotions, none more so than in the case of full professors: Full professors grew by 34.8 %, associates grew by 15.9 % and researchers grew by 5.3 % (MIUR-Statistics Office). These percentages show how the reform was largely used by universities and the academic community to unlock career advancement, which had been blocked for about a decade.

Further, there are two, interrelated aspects that must be taken into account to understand the academic staff dynamic in this period.

Firstly, without doubt, the reform brought recruitment and career advancement closer to the actual development needs of the institutions. However, the reform acted in a peculiar way, affecting organisational features of the Italian university. From an organisational perspective, university had been historically a confederation of faculties inside which there had been hegemonic disciplines with powerful full professors garrisoning them. The institutional level had always been weak in all strategic matters, among which recruitment and promotion were the most important (Boffo et al. 2006; Clark 1977, 1983; Capano 1998, 2008; Rostan and Vaira 2011; Vaira 2008). Thus, personnel policy has always been implemented at the faculty level, while the institutional level serves to ratify decisions taken by faculties through negotiations between powerful academics based on the logic of cooptation. All together this enhanced faculties' power, with the combination of decentralised decision-making for personnel policy and the organisational features of the academe making recruitment and promotions an internal faculties' affair.

Secondly, the reform sought to stimulate the inter-institutional mobility of academics. The idea of the competitive exam for full and associate professors granting three qualifications, allowing the eligible academics to be hired by any other institution across the country, was meant to foster mobility, creating an academic labour market (Rostan and Vaira 2011). Universities responded largely by choosing to promote their own academics (CNVSU 2007). Between 1999 and 2004, most newly qualified full professors were hired by their own institutions (91 %); it is likely that the remainder (less than 9 %) had to move to another institution. New associate professors were slightly more mobile (around 25 %); three quarters of eligible candidates were hired by their own institutions. Associate professors had always been more mobile, although there was a tacit and informal agreement: after 3–5 years, those who moved away from the original institutions were called back by their alma mater, often with the perspective of gaining a full professorship.

This academic endogamy has been interpreted – especially at the political level – as a sign of academic familism based on the patronage system, strengthened by the local competitive exam mechanism. The familism and patronage system is a long lasting feature of the Italian university: for example, Clark (1977, 1983) defined this cultural trait as academic oligarchy based on the guild model, while Giglioli talked of academic patrimonialism (1979). Although true, this is just a part of history, for two important economic reasons: (a) since 2001, public funding of universities has been stable or received modest increases in nominal terms, while decreasing in real terms and (b) the institutions are bound by budget constraints on personnel expenditure. Those economic and financial factors combined make promoting the local candidates more convenient, because their marginal costs are far lower than a new full salary to be paid to candidates not belonging to the institution's academic staff.

On the whole, the aspects dealt with so far produce a particular career pathway, based on an internal labour market (Doeringer and Piore 1971; for the Italian case

see Bianco 2002; Boffo et al. 2004; Costa 2001; Rostan and Vaira 2011). In general, this kind of market works by promoting an organisation's internal human resources to occupy vacant positions instead of hiring them externally.

Although it is not yet possible to ascertain the effects of the 2010 reform on stabilized statistical data, it is possible to forecast its likely effects on the internal career dynamic, pondering whether it will be able to change the current state of affairs. One of the reform's main objectives is to reduce localism, introducing a system evaluating the candidate on two levels. As shown in Sect. 8.2, the first evaluation phase for the candidate takes place at the national level in a qualifying stage; qualified candidates are then evaluated for recruitment at the local level. It is precisely this second phase which raises several doubts about the ability of the reform to overcome localism. This is for a simple reason: institutions having to contend with financial constraints, as well as with funding cuts, find it far more convenient to hire the local candidates because of their lesser marginal costs. In other words, economic convenience will most likely reaffirm localism. Moreover, fixed-term researchers who qualified for promotion to associate professors will be hired directly, without any further evaluation, by their home institutions. Overall, reform will probably not be able to fulfil its purpose.

8.6 How Academics Perceive Their Career Conditions

Data from the Changing Academic Profession survey shows how Italian academics perceive their career conditions and how this perception has changed since their first appointment to a stable position. For the Italian case, data was collected between late 2007 and early 2008. This is important to note, because the survey took place before both the 2008 funding cut and the 2010 general reform that significantly worsened the general conditions in Italian universities and recruitment and career prospects in particular. Therefore, if the survey was repeated today, many interviewees' judgments, perceptions and representations on the topic would likely be far more negative than they were at the time.

Before discussing the data on the topic, it useful to present some basic background data related to the sample used as interviewees (shown in Tables 8.4 and 8.5). Table 8.4 shows how the sample compares to the whole academic population (based on data published by the Ministry of University and Research-Statistics Office on 31/12/2006); Table 8.5 provides data relating to the ages of the interviewees at different career points:

As Table 8.5 shows, academic careers take quite a long time to develop, particularly to reach a senior position. Careers also largely progress inside the same institution, confirming on a more general scale what has been noted in the previous section. These two aspects deserve further comment.

Firstly, the length of time needed for career development can be explained mainly by the fact that recruitment and promotion had been severely affected by the reform policies. This not only altered the institutional framework several times but also

Table 8.4 Comparison between the sample and the academic population

	Sample	Population
N.	1701	61,743
Male	66.8 %	67.1 %
Female	33.2 %	32.9 %
Full Professor	30.4 %	32.0 %
Associate Professor	31.6 %	30.8 %
Researcher	38.0 %	37.2 %

Table 8.5 Average age and number of years at different points in the career for the sample studied

	Years
Age when surveyed	50
Graduation age	25
Doctoral degree age (only those entering the academic career from 1986 onwards)	32.5
Age when appointed to first stable position	32.5
Age when appointed to the current position at the current institution	41
Years between graduation and current position	
Senior position (Full + associate professors)	20.2
Junior position (Researchers)	10.3
Years at the current institution	16
Years at a different institution	1.5

created long periods when career progression was blocked (the late 1980s, throughout the 1990s and from 2007 to the present). Financial shortages, both at a central and institutional level, contributed to this panorama. Such conditions have made recruitment and career progression a rather fragmented and drawn out process, besides creating a high level of uncertainty. Secondly, the low degree of mobility means that three features characterise the careers of Italian academics, namely: (i) a tendency for in-breeding and endogamy; (ii) the predominance of an internal labour market; and (iii) an engrained loyalty to the home faculty and powerful full professors acting as master and patron.

On balance, Italian academics are largely satisfied with their work conditions: About two thirds show rather a high level of satisfaction; in contrast, only 16 % are not satisfied. This judgement reflects the fact that the academic profession is expressive and vocational by choice. Nonetheless, three quarters of the interviewees perceive a sharp deterioration in the working conditions over time, notably so in the most recent years (in particular, this was the opinion of the younger academics). The financial situation is linked to this deterioration, directly impacting both work conditions (teaching and, especially, research) and recruitment and career dynamics. Those two opposing perspectives are only apparently a contradiction: On the one hand the expressive nature of academics signifies that their jobs are appreciated and valued; on the other hand, working conditions are the main source of frustration among aca-

demics. This is particularly true for researchers who perceive a high degree of uncertainty in their career development and, to a lesser extent, associate professors. In other words, the degree of pessimism is linked to the academic position: the lower the position, the higher the pessimism. This pessimistic outlook is also a result of the continuous waves of reform, constantly changing the institutional framework of the academic profession. Recruitment and career aspects were at the centre of these reforms, creating very unstable, uncertain and unpredictable conditions.

The respondents indicated that control over recruitment and career advancement is primarily in the hands of the faculties, where the main responsibility and decisions are taken. More specifically the faculty dean and the faculty board are seen as the major players in this area (about 33 % for both actors), followed by individual, powerful full professors (almost 25 %). This latter group are seen as influential at both the faculty (77 %) and department (58 %) levels, where decisions about recruitment and career are taken. This confirms the third point discussed in the previous section regarding the role of the faculty system and full professors.

The institutional level actors – the rector, academic senate and board of governors – have almost no role in such decisions (only between 2 and 3 % of respondents assign them a role in academic staff policy). Thus, apical actors – as has been noted in the previous section – act as ratifiers of faculty level decisions (within the university's budget availability and constraints). This reflects the traditional power structure in the Italian university, which has remained largely unaltered despite the various changes that occurred in the university sector and legislation. Although this argument is true, it should be remembered that universities are cooptative organisations everywhere, not only in Italy. As a result, those competent to judge who is entitled to enter the academic profession and to advance on the career ladder must be the academics themselves. This feature cannot be ignored when analysing academic recruitment and career progression.

However, it must be noted that the 2010 reform could potentially alter this state of affairs, because it gives more power to the institutional level for strategic decisions, including academic staff policies. At the time of writing (August 2014), it is not possible to assess whether this is happening, since career advancement under the new institutional framework is currently in its first stage of implementation, with the qualification process for evaluating academics being carried out at the national level. Yet, as noted in the previous section, the new reform will probably not be able to tackle and overcome the problem of localism and endogamic careers, because the financial cuts and constraints represent adverse conditions working against the changes the reform was intended to produce.

8.7 Conclusion

Although several changes occurred (both in society and in the regulative framework affecting universities, especially in the last three decades), recruitment and career dynamics still seem to be rooted in the traditional logic and practices of the

academic oligarchy. Nonetheless, changes – particularly those related to regulations governing the recruitment and career system – have been, and are, a source of consternation for the academic profession, which is experiencing a growing uncertainty and instability as well as deteriorating general conditions under which it operates.

Italian academics – and the university as a whole – are currently in the middle of the ford, between tradition and transition. In other words, they find themselves in a liminal situation (Vaira 2014), where they experience a set of conditions which are neither like those they were used to, nor are they so changed as to represent a new and different environment. This is mainly due to the several reform waves characterising the last decade, producing very unstable and ever-changing conditions, recently aggravated by the dramatic funding cuts accompanying the reform policies.

As far as recruitment and career issues are concerned, reform waves, especially those between 2005 and 2010, and the adverse financial conditions, since 2008, have produced not only instability, but also and more importantly, a blockage in the recruitment and career dynamics. As mentioned, between 2006 and 2013 the professoriate decreased by as much as 14 % with a peak equal to 36 % in the senior positions, while the current financing situation makes it likely that institutions will not be able to compensate this loss in the academic ranks with new qualified recruits.

In this perspective, the real and most dramatic challenge that universities and academics face is how to carry out their institutional goals effectively: education, research and knowledge transfer to society.

References

Bianco, L. (2002). Effetti della riforma dei concorsi universitari su carriere accademiche e dinamiche di genere. *Polis, 3*, 417–444.

Boffo, S., Moscati, R., & Vaira, M. (2004). The international attractiveness of academic workplace in Europe: The case of Italy. In J. Enders & E. de Wert (Eds.), *The international attractiveness of the academic workplace in Europe*. GEW: Frankfurt.

Boffo, S., Dobois, P., & Moscati, R. (2006). *Il governo dell'università. Rettori e Presidenti in Italia e Francia*. Milano: Guerini e Associati.

Capano, G. (1998). *La politica universitaria*. Bologna: Il Mulino.

Capano, G. (2008). Il governo degli atenei. In R. Moscati & M. Vaira (Eds.), *L'università di fronte al cambiamento. Realizzazioni, problemi, prospettive* (pp. 117–142). Il Mulino: Bologna.

Clark, B. R. (1977). *Academic power in Italy*. Chicago: University of Chicago Press.

Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. Berkeley: University of California Press.

CNVSU (National Committee for University System Evaluation). (2007). *Ottavo Rapporto sullo Stato del Sistema Universitario*. Roma: Ministero dell'Istruzione, dell'Università e della Ricerca.

CNVSU (National Committee for University System Evaluation). (2011). *Undicesimo Rapporto sullo Stato del Sistema Universitario*. Roma: Ministero dell'Istruzione, dell'Università e della Ricerca.

Costa, G. (2001). La gestione delle risorse umane nell'università dell'autonomia. In M. Strassoldo (Ed.), *L'azienda università* (pp. 161–185). Torino: ISEDI.

Doeringer, P., & Piore, M. (1971). *Internal labour market and manpower analysis*. Lexington: Lexington Health Book.

Giglioli, P. P. (1979). *Baroni e burocrati. Il ceto accademico italiano*. Bologna: Il Mulino.

ISTAT (National Institute of Statistics). (1997). *Statistiche dell'istruzione universitaria. Anno Accademico 1995–1996*. Roma: ISTAT.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.

Rostan, M., & Vaira, M. (2011). Faltering effects of market driven reform. In P. Teixeira & D. Dill (Eds.), *Public vices and private virtues? Assessing the effects of marketization in higher education* (pp. 327–343). Rotterdam: Sense Publishers.

Vaira, M. (2008). L'organizzazione universitaria alla prova della riforma. In R. Moscati, & M. Vaira (Eds.), *L'università di fronte al cambiamento. Realizzazioni, problemi, prospettive*. Bologna: Il Mulino.

Vaira, M. (2014). The permanent liminality. Transition and liminal change in the Italian university. A theoretical framework and early evidences. In J. Branković, M. P. Klemenčič, P. Lažetić, & P. Zgaga (Eds.), *Global challenges, local responses in higher education* (pp. 191–208). Rotterdam: Sense Publisher.

Weber, M. [1922] (1968). *Economy and society* (G. Roth, & K. Wittich, Ed.). Berkeley: University of California Press.

Chapter 9
The Societal Embeddedness of Academic Markets: From Sex to Gender in the Swiss Context

Gaële Goastellec and Fabienne Crettaz von Roten

The last 10 years have been characterised by significant changes in the Swiss academic market. The system is becoming more international, the chair model is giving way to a department-based model, and attempts are being made to integrate historically segmented sub-markets into a single national market. These transformations have been substantial.

In this context, although the percentage of women has increased at all levels of the higher education system (they represent more than 50 % of high-school graduates and university entrants), women remain largely under-represented in the academic profession, and a comparison of the positions that men and women occupy shows evidence of both horizontal and vertical segregation. Indeed, a leaky pipeline characterises academic careers: the higher the status in the academic hierarchy, the less women there are, to such a degree that they represent only 17 % of the professoriate (OFS 2011). What do these inequalities tell us about the Swiss academic market, and, more generally, of the interplay between the different dimensions underlying the market changes?

This work draws on several quantitative research studies looking at academic careers (Goastellec et al. 2006, 2007, 2010, 2013) and the relationship between science and society (Crettaz Von Roten 2011a). Framed in a societal perspective, this

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chapter identifies sex differences and the discrete barriers to gender equality. More broadly, the gender issue (i.e. questions regarding the socially constructed nature of gender) provides a starting point for analysing change in the Swiss academic market and giving a broader perspective on transformations and barriers in academic markets in general.

In this perspective, we differentiate between sex and gender as categories of analysis: 'sex' is used to describe differences between the way men and women are represented in the academic career. 'Gender', reflects the social construction of such differences, turning differences into inequalities: gender is considered here to be the product of 'Social forces (that) either have a causal role in bringing gendered individuals into existence or (to some substantial sense) shape the way we are qua women and men. And the mechanism of construction is social learning.' (Mikkola 2011). More widely, we adopt the position of Mikkola (2011) that 'Feminine and masculine gender-norms, however, are problematic in that gendered behaviour conveniently fits with and reinforces women's subordination so that women are socialised into subordinate social roles'. As a result, although we do not consider gender a unitary notion, we assume that collectively Swiss academic women are more alike than different and thus constitute a relatively homogeneous group. By focusing on the career of academic women, we thus attempt to characterise the embeddedness of the academic market in society, as 'institutions anchored in wider political arrangements and cultural systems of meaning' (Hamilton 1994).

To achieve these goals, the first part of the chapter draws on quantitative analyses to describe sex differences in academic careers. The second part discusses these sex differences by revealing gender barriers at societal, systemic, organisational and individual levels. Finally, the concluding part builds on the 'sex to gender' issue allowing a broader reflection on the societal embeddedness of academic markets and its potential implications.

9.1 Sex Differences in Academic Careers

Sex differences in academic careers can be analysed from different angles. To start with, we look at the actual composition of the academic profession, drawing on statistics from the OFS (Federal Statistical Office) and the results of the EuroAC research project.[1] This can be complemented by looking at the historical evolution

[1] The EuroAC research study entitled 'The Academic Profession in Europe: Responses to Societal Change' took place between 2008 and 2011 in 10 European countries, employing a common survey to characterise the academic profession. The Swiss study was conducted in February and March 2010, using an online questionnaire based on that used in the CAP ('Changing Academic Profession') project, with minor alterations to reflect the Swiss context. All Swiss universities and applied sciences universities (including teacher training universities) were asked to participate in the project, with the questionnaire being distributed to approximately 18 000 academics. A total of 1471 complete questionnaires were returned, along with 2206 incomplete questionnaires. After a detailed check of the completed questionnaires, 1424 were considered usable for further analysis.

of this series, and also by analysing the success of national instruments designed to develop academic careers, including a target for improving the representation of women in academia. The study of these instruments, implemented by the Swiss National Science Foundation, is particularly revealing as they represent an excellence criteria (for obtaining funding granted by external assessors), and, increasingly, an unavoidable step in academic careers.

9.1.1 Different Instruments

Independent of the type of data analysed, women always appear under-represented in the Swiss academe. The higher the academic position, the fewer women there are: starting from 50 % of the student body, women represent 40 % of doctoral holders and 16 % of the professoriate (OFS 2009).

The same applies to the percentage of women with Swiss National Science Foundation (SNSF) fellowships. In recent decades, the SNSF has developed funding instruments for researchers, ranging from grants for doctoral students to support for professorships. A large number of tools have been created, designed to support the different stages of an academic career (from assistant to professor) and the multiple activities of faculty members (teaching and research), while also taking account of the specific nature of different disciplines and institutions and the gender inequality issue. Six main categories of individual funding have been implemented by the SNSF. The Marie Heim-Vögtlin programme (MHV) provides specific support for women whose career path has been slowed down or interrupted due to family constraints. The five other programmes specifically address each stage of an academic career. For researchers starting out, the ProDoc programme funds doctoral students, while a Fellowship prospective researcher award provides funding for the last stage of the doctoral studies or for a first post-doctoral research position. A Fellowship for advanced researcher award finances a second post-doctoral research abroad, while an Ambizione grant then allows academics to return to Switzerland for 1–3 years of research in a HEI other than the institution awarding the doctoral degree. Lastly, the funding for Fellow Professors provides 4–6 years of funding with an autonomous research team to develop original research in a Swiss Higher Education Institution.

Comparing the representation of women in the different fellowships also shows that the more advanced the career fellowship, the less women there are: they represent 45 % of the doctoral candidates, one third of the prospective fellows, one fourth of the post-doctoral fellows and 30 % of the advanced fellows (Table 9.1).

From a historical perspective, the representation of women has improved: as a proportion of SNSF fellows,[2] women increased from 26 % in 1996–2000 to 37 % in

[2] SNSF Prospective researcher fellowships are aimed at supporting researchers at the beginning of their career through a research stay abroad. This programme is targeted at doctoral candidates nearing completion (6–24 months stay) and postdoctoral researchers (12–36 months stay abroad). Fellowships are attributed through SNSF commissions based in each higher education institution.

Table 9.1 The proportion of women among SNSF fellows (in %)

		Women % 2003–2007
Fellows		36.2
	Juniors	36.9
	Doctoral candidates	47.7
	Post-doc	29.6
	Advanced	34.8
	SNSF	33.9
	Biology and Medicine foundation	40.5
Unsuccessful candidates		40.0
	Juniors	46.0
	Doctoral candidates	50.0
	Post-doc	44.3
	Advanced	33.8
	SNSF	38.7
	Biology and Medicine foundation	14.3
Total		37.0

Source: Goastellec et al. (2010)

2003–2007 (Goastellec et al. 2010). Similarly, they represented 23 % of the SNSF fellow professors in 1999–2000, and 31 % in 2004–2005 (Goastellec et al. 2007). Nevertheless, the proportion of women is higher among the unsuccessful SNSF fellow candidates than the successful ones (40 % versus 36.2 %). Furthermore, this pattern is repeated for the less prestigious fellowships; unsuccessful candidates always have a higher percentage of women compared to successful candidates. One could thus hypothesise that women have to face academic handicaps right from the beginning of their career, decreasing the probability of a first-level fellowship, and subsequently leading them to perform self-censorship.

9.1.2 The Disciplinary Bias

The situation of women in the academic labour market differs largely depending on the disciplinary fields. As revealed by the OFS (2011), the leaky pipeline in human and social sciences, medicine and pharmacy means that women start to become underrepresented between the time of their doctoral studies and reaching a professorship. However, in Law this process starts sooner, between the master's and the

Advanced researcher fellowships also imply a stay abroad (12–36 months) but the candidate must hold a doctorate, have at least a one year of post-doctoral activity, and present a project designed to 'deepen their knowledge' and improve their 'scientific profile'. In this case, fellowships are attributed at the SNSF level.

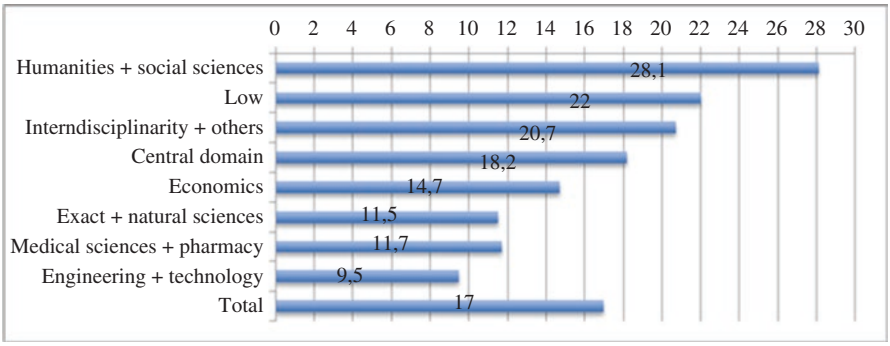

Fig. 9.1 Share of women (%) in the professorial body of universities with breakdown by field of study (2010) (Source: Conférence des Universités Suisses, Federal Statistical Office (OFS 2010, p. 51))

doctorate. The situation is starker in exact and natural sciences, economics and technical sciences, where there are always more men than women.

As a result, the proportion of women with a position in the professoriate is highest in human and social sciences (28.1 %), followed by law (22 %), economic sciences (14.7 %), medicine and pharmacy (11.7 %), exact and natural sciences (11.5 %) and technical sciences (9.5 %) (Fig. 9.1).

When analysing the proportion of women by discipline in the different instruments promoting academic careers, women are better represented in social and human sciences than the 'hard' sciences (Table 9.2).

What inference can be drawn from the gender dimension of the disciplines?

The research of Thomas (1990) on 'Gender and subject in higher education' showed that 'ideas about subjects, and ideas about gender, are, to a large extent, mutually reinforcing' (p. 172). Students in hard sciences (in this study we take hard sciences to mean physics and physical sciences) tend to perceive their field as 'objective' and 'value-free', and tend to establish a hierarchy of academic disciplines: 'The "harder", the more "certain", and the more "useful" a discipline' then the more important it was' (p. 172). Meanwhile, students in the so-called 'soft sciences' – here illustrated by disciplines of English and communications – define their fields as 'uncertain and subjective' (p. 173). As for the choice of subject study and further career, the author made the point that it was 'framed by questions of conformity and rebellion' (p. 176). Men studying physics conformed to the image of the 'successful physicist', while women in the same field were engaged in 'an act of non-conformity' and 'encouraged by single-sex schools or scientist parents'. However, 'the certainty of physics, so important to men, inspires less confidence in women because it depends on a negation of femininity, of those qualities which are socially acceptable but not intellectually acceptable' (p. 177). The conflict appears between being a 'good physicist' and an 'ordinary women'. As a result, the societal definition of the different disciplines, the type of qualities they are subjectively associated with, the type of professions they lead to, and the different social expectations towards men and women, lead to a subjective hierarchy of disciplines that

Table 9.2 The success rates for women, by type of fellowship and scientific field

	Number of requests			Number of grants			Success rate		
	Total	Women	Men	Total	Women	Men	Total (%)	Women (%)	Men (%)
Assistant professors	197	54	143	51	15	36	26	28	25
Human and social sciences	70	30	40	17	8	9	24	27	23
Maths, natural sciences and engineering	78	13	65	19	3	16	24	23	25
Biology and medicine	49	11	38	15	4	11	31	36	29
Ambizione	89	40	49	37	12	25	42	30	51
Human and social sciences	18	9	9	11	3	8	61	33	89
Maths, natural sciences and engineering	30	12	18	16	5	11	53	42	61
Biology and medicine	41	19	22	10	4	6	24	21	27
ProDoc	106	17	89	71	14	57	67	82	64
Human and social sciences	61	11	50	38	8	30	62	73	60
Maths, natural sciences and engineering	29	1	28	20	1	19	69	100	68
Biology and medicine	16	5	11	13	5	8	81	100	73
Fellowship (advanced)	148	53	95	94	26	68	64	49	72
Human and social sciences	57	32	25	33	13	20	58	41	80
Maths, natural sciences and engineering	14	4	10	10	2	8	71	50	80
Biology and medicine	77	17	60	51	11	40	66	65	67
Fellowship (early)	542	200	342	430	160	270	79	80	79
Human and social sciences	222	102	120	181	86	95	82	84	79
Maths, natural sciences and engineering	136	24	112	110	20	90	81	83	80
Biology and medicine	184	74	110	139	54	85	76	73	77
Total (without MHV)	1082	364	718	683	227	456	63	62	64

Source: OFS (2011). *Femmes et hommes dans les hautes écoles suisses. Indicateurs sur les différences entre les sexes*. Neuchâtel: OFS

comes with a subjective hierarchy of genders. Thus, the more gendered a society is, with highly differentiated roles between men and women, the stronger the hierarchy of disciplines and their gendered characteristic.

In the same vein, Barbara Crossouard (2011) studied the viva voce (the oral examination of doctoral studies in the UK), looking at the ways the jury addressed different academic subjects depending on the sex of the candidate, and identifying the underlying 'affective economies'. Crossouard's work indeed finds that the doctoral viva process 'involves the reproduction of gendered hierarchies', suggesting that even when women do access non-traditional disciplines, they are still subject to substantive stereotypes.

9.1.3 The Swiss Academic Market in International Comparison

By comparison with the European average, women represent 39 % of doctoral holders in Switzerland and 45 % in the EU27 (See figures 2009, p.49). Only seven countries have a lower percentage (the Netherlands, Norway, Belgium, Czech Republic, Greece, Japan and Malta). Women account for 27 % of researchers in Switzerland and 30 % in the EU27 – only six countries have a lower share of women researchers (Malta, Austria, Denmark, Luxemburg, the Netherlands and Japan) (*ibid*., p. 28). The same picture is visible in higher education governance. Only 13 % of institutions in Switzerland have a woman at the helm, compared to 32 % in Norway or 27 % in Sweden (*ibid*., p. 97). Additionally, women make up only 19 % of committee members, compared to 49 % in Sweden and 45 % in Norway (*ibid*., p. 99).

The EuroAC results[3] show that women represent 17 % of university senior academics.[4] This is the lowest share amongst the 12 European countries studied (the average is 26 %, and the maximum is found in Poland, with 38 %). University juniors have a higher percentage of women (40 %), but this is still below the average (46 %), and far from the maximum found in Ireland at 58 % (Goastellec and Pekari 2013).

Women are far better represented in the humanities and social sciences (52 %, equal to the average for EuroAC countries) than in life sciences and medicine (43 %, versus 46 % for the European average), business and law (35 %, versus 40 %) or physics and engineering (20 %, versus 26 %).

Among senior academics, the proportion of women working full time[5] in Switzerland is not considerably different to the proportion of men (92 % of the men

[3] The study included 12 countries: Austria, Switzerland, Ireland, the Netherlands, Poland, Germany, Finland, Italy, Norway, Portugal, the UK, and Croatia.

[4] To enable comparisons, analysis of the EuroAC survey data differentiated between senior academics (professors and other permanently employed academic staff) from junior academics (lower status and non-permanent staff).

[5] The EuroAC research only took into account academics working at least 50 % of a full-time load.

work full time compared to 86 % of the women – a difference of 6 %). However, this difference is more emphatic among junior academics (24 %). Here again, these differences between the sexes are above the European average (a 4 % difference for senior academics and a 12 % difference for junior academics). Furthermore, other things being equal, the probability of working full-time is negatively correlated with having children at home (this is true for Switzerland as well as Austria and Germany) (Goastellec and Pekari 2013).

The same trend is visible when looking at access to permanent employment: Switzerland is amongst those countries where women are less likely to be permanently employed. The gap between the sexes reaches 12 % for university senior academics and 9 % for university junior academics. Those who are married are also less likely to be permanently employed in Switzerland (Goastellec and Pekari 2013), testifying to the tension women face in managing both professional and family life. Role models in Swiss society follow a general trend of gender differentiation, with women being part of a subsystem bearing responsibility for childcare. As a result, the assimilation model dominates in the academic world: to become successful, women imitate men and adopt their characteristics.

9.1.4 Distribution Between Teaching and Research

The teaching-research nexus illustrates the assimilation model. Interestingly, Swiss senior academic women that responded to the EuroAC survey were more likely than men to say that their interest lies primarily in research (33 % versus 23 %). Still, senior academic women estimate they spend an average of 19 h a week on teaching related activities, where men spend 15 h. However, this does not seem to impinge on time spent on research related activities, with women and men estimating that they respectively dedicate an average of 19 h and 17 h a week to such activities (Goastellec and Pekari 2013). Men, in contrast, are more likely to occupy roles in institutional governance.

Swiss senior academic women are more often involved in scientific committees (87 %) than their European counterparts (the EuroAC average is 57 % of women). This can probably be linked to the strong internationalisation of the Swiss academic market, but it may also reflect their limited numbers among Swiss academics.

Academics were also questioned as to their perception of the influence they have on academic policies at the department level within their institution. Everything else being equal (controlling for status, type of institution, discipline, age and part-time work), women perceive themselves as having less influence than men do. This raises the question of whether this is a consequence of the broader societal context of gender inequalities.

In comparison with other countries, Switzerland has some of the highest differences between the sexes in academic careers, leading to gender inequalities for the representation of women and differences in professional practices. Still, when comparing countries such as Switzerland (where the gender gap is the most notable

amongst those accessing the most prestigious positions) with countries where the academic labour market is more open to women, the latter appear more gendered in terms of work related activities. Consequently, the EuroAC results rank Switzerland as one of the most unequal countries in terms of access to the professoriate, but amongst the least gendered when it comes to the work related activities of the professoriate. This does not mean that the Swiss academic world is not gendered: women appear to be disadvantaged from the beginning of the academic career through part-time positions, and having to work harder than men do to justify their worth in the academic community. One thus has to distinguish between the non-gendered behaviour of the Swiss professoriate, illustrating the assimilation model at play, and the gendered organisation of the academic career, echoing a strongly gendered organisation of the society.

9.2 From Sex Differences to Gender Equality Resistance

Sex differences in the academic world are better understood in the light of societal resistance to gender equality. Switzerland represents a society where the differentiation of gender roles remains strong, and where gaining equality of rights between men and women has been a long-running process.

9.2.1 The Product of History: Gender and Society

Several dimensions reflect the slow process through which women have obtained status in the public sphere.

Until 1953, Swiss women would lose their nationality when they married a foreigner (Wanner 1998). They are the last in Europe to have obtained the right to vote following a referendum among male voters (1971), while a majority of 70 % rejected a first attempt in 1959. Ludi (2005, p. 53) provides an accurate picture:

> […] opponents of women's vote understood the separation of male and female spheres at once as the triumph of civilisation and the realisation of a naturally given order, women's suffrage, in turn, as a "denaturation" of femininity. They regarded political exclusion of women as intrinsic to Switzerland's national identity, its presumed exceptionality among all other nations, of which they derived a feeling of superiority. Citizenship […] fashioned Switzerland's gender regime beyond its explicit political implications. It drew the line between public and private, between male and female in a particular way, finding its reification through legislation, the welfare state and the organisation of the labour market.

This understanding of the Swiss societal model has not disappeared with women's formal access to the political sphere. The gender role separation remains visible.

For example, the federal office for gender equality was instituted in 1976, but it was not until 1981 that an initiative put the principle of equal rights for both men

and women on the agenda (the right to equal salary was introduced into the Constitution in 1999). Moreover, it is only in 1984 that a woman obtained a position as a Federal Councillor.[6] In the same vein, while the principle of maternity insurance has been part of the Federal Constitution since 1945, it was only in 2004 that the Swiss population agreed to implement a right to paid leave for working mothers during the 14 weeks following childbirth. This partly explains why the fertility rate, varying between 1.42 in 2005 and 1.54 in 2010 (OFS 2011), is amongst the lowest in Europe. Additionally, foreign women (foreigners represent 22 % of the Swiss resident population, (OFS 2009)) have a higher birth rate than their Swiss counterparts, suggesting not only structural resistance but also subjective resistance linked to the early socialisation of Swiss women.

Indeed, conciliating work and family life remains difficult in Switzerland. For example, statistics reveal that when the first child is born (typically when the mother is around age 30), a large part of women reduce their working hours and another large part temporarily stop working to concentrate on the family (OFS 2008). More broadly, while a large share (72 %) of Swiss women work (compared with 65 % in New Zealand and 61 % in Portugal – OECD 2004), the opposite is true when it comes to full-time equivalent work (respectively 51 %, 52 % and 57 %). Additionally, Swiss women tend to remain in part-time positions throughout their working life – in other countries women are more likely return to full time positions once the children have grown up (OECD 2004).

This situation is partly reinforced by the lack of collective structures for children. This creates an extra difficulty, compounding the problems of conciliating family and professional life, and may reflect an implicit belief by some in Swiss society that women have to choose between a professional career and a family. This forced choice may result from the historical gender division between the public and private sphere (Ludi 2005) that also led to the federal policy 'not to intervene at all with respect to families with young children, as decisions in this area are considered by a large part of the population to be of private matter' (OECD 2004, p.16). Children start school when they reach between 4 and 6 years old (depending on the Canton) and very little early childhood care structures exist. Accordingly, a UNICEF study of early childhood care structures and education ranked Switzerland amongst the lowest quartile of all OECD countries (UNICEF 2008).

This tension is visible in the profiles of the fellows applying for a SNSF fellowship: while women are on average slightly older than men are when applying (which could imply a higher probability of women having children), men who apply for a mobility fellowship are twice as likely to have children as women are. More widely, this strong devolution of male and female roles between the private and public sphere is concomitant with the invisibility of women in the media, and thus the lack of women as role models for young girls considering an academic career (Durrer

[6] The Swiss government is comprised of 7 federal councillors that make up the Federal Council. Each federal councillor is responsible for one department of the federal administration, and the president of the confederation – considered a Primus Inter Pares – is elected annually from among group of councillors.

et al. 2009; for the role models, Steinke 1997 and 2005). Differences in wages (around 20 %) –which put women at a disadvantage– probably also negatively weigh on the reproduction of the societal organisation.

During the last 10 years, there have been several initiatives to fight gender inequalities in academic careers. One approach used specific tools, creating a Federal Office for Equity between men and women (1988), progressively introducing an equity office in each university (from the 1990s until the 2000s), and institutionalising gender studies. A second approach used generic tools, (federal programmes for gender equality with mentoring, system incentives, etc.) with policies taking account of the gender dimension in the programmes supporting academic careers (set targets for female representation) such as the 'academic body renewal', 'SNSF fellows professors' and 'SNSF junior fellows' programmes. However, these initiatives faced discrete resistance to gender equality.

9.2.2 Resistance at a Structural Level

When analysing women's trajectories in Swiss academia, it appears clear that right from the beginning of the career they are always disadvantaged by their professional status: at the time of a SNSF candidacy they are more often declared to be 'students' or 'other status' than men, while men were more often 'assistants' or 'scientific collaborators'. This illustrates the fact that, during the transition from the doctoral studies to post-doc, women are less professionally integrated into the academic workplace than men are.

The same type of differences appear at the level of the Swiss academic labour market: amongst university junior academics, women are much more often employed part time than men are (42 % of women academics are employed full time versus 66 % of men[7]). However, when candidates apply to an academic position, the research expectations do not account for this type of potentially prejudicial difference in working conditions: women are expected to publish as much as men do, even if they are hired on smaller, part-time contracts.

Higher education institutions probably play an important role in the creating those inequalities. When we analyse the institutional implementation of national programmes supporting academic careers, it appears that when universities are responsible for the implementation of a programme, they tend to reproduce the gender gap, in particular by employing women more often in part time positions and in teaching oriented positions (Felli et al. 2006). At the institutional level, studies have shown how nominating committees tend to focus on masculine criteria of scientific excellence and judge men and women differently on the basis of the same criteria, therefore reproducing the gender gap (Bureau de l'égalité 2007) and how the introduction of new roles tends to reproduce gender inequality (Bureau de l'égalité 2011).

[7] Data from the EuroAC research study, 2010.

Women who obtain a fellowship in order to improve their research record (before applying for an academic position) find that while conditions are similar for both men and women, there are visible inequalities in the benefits. The programmes supporting academic careers do not have the same impact for both genders: after their participation in the 'academic body renewal' programme, men were 2.6 times more likely than women to obtain a secured professorship position (Felli et al. 2006). The 'SNSF fellows professors' programme led to a similar, although less flagrant, result (Goastellec et al. 2007), while participants in the 'SNSF fellows' programme also found that more men were likely to obtain a full-time, secured position than women (Goastellec et al. 2010).

Moreover, when comparing the unsuccessful candidates for the SNSF fellows programmes, men appear to have better professional outcomes than women do. This trend is similar to that observed by Danell and Hjerm (2012) in the Swedish case, where 'women without a postdoctoral fellowship have a lower chance of becoming professors compared to men who have not held a postdoctoral fellowship position.' (p. 232). Thus, although fellowships have a greater impact on a man's career, obtaining a fellowship appears to be more important in defining the career path of women.

Two hypotheses stem from this:

First, we can reiterate Danell and Hjerm when they state that 'as long as competition over resources and positions is transparent, competitive women fare as well as men, but when men and women are allowed to compete over resources and networks in a more informal way, women are clearly worse off than men'. (2012, p. 232). Finally, this underlines the decisive impact of having formalised interventions and processes organising academic careers. The heart of the issue lies in the mix of formal and informal processes. A mix of social mechanisms exists that reinforces privileges and mechanisms that help compensate the disadvantaged, while formalised interventions have a more balanced mix of privileges, meritocracy and compensation policies than informal systems do. The Swiss academic sphere, characterised by a broad variety of different status levels and career paths, depending on both the institutions and the disciplines, has long been characterised by the low level of process formalisation. The SNSF incentives, illustrated by the introduction of various fellowships, are designed to push institutions to increase the formalisation and transparency of the processes. From a historical perspective, it seems that gender equality has been pushed by the Confederation onto the institutions' agenda. In the Swiss context, formalisation and reinforcement of the national actor appears to go hand in hand.

Second, the hypothesis can be made that women have to provide more proof of their legitimacy than men do to remain in the academic field: is this systemic resistance or personal choice? Probably this is a combination of both factors, as the following dimensions can testify.

9.2.3 *Invisible Inequalities: Between Systemic and Individual Resistance*

– A higher education academic system resisting equality?

The system's resistance to gender equality is not easy to grasp: of course, no formal rule limits women's access to a successful academic career. However, different research results help to reveal some of the invisible resistance.

As an example, women who did not obtain a SNSF fellowship represent 41 % of the non-fellows employed abroad, 30 % of the fellows employed in their alma mater, and 17 % of the fellows employed in other higher education institutions. Do women have to leave to succeed? Of the women that did not obtain a SNSF fellowship, 41 % went on to find a position abroad compared with 39 % of men, while 35 % of both women and men who obtained a fellowship later found a position abroad (Goastellec et al. 2010, Table 52). Additionally, from those that took part in the 'academic body renewal' programme, women represented a higher percentage of the group of fellows that found a position abroad (41 %) compared to women as a percentage of those finding national or local positions (Felli et al. 2007).

Discrete processes representing the reproduction of inequalities are probably at play. For example, we know that organised recruitment reduces the probability of women being hired. In particular, recruitment differences are known to depend on the number of women on the committee (Van den Brink et al. 2006). Activities are differently assessed for men and women: for example, the assessment of the scientific dossier is full of male stereotypes (Bureau de l'égalité 2007). Here, the small number of women in the Swiss academic labour market means that it is unlikely that women are well represented on recruitment commissions. Furthermore, differences in recruitment also depend on the different assessment regimes used (Musselin 2003): women are less disadvantaged by recruitment processes that use standardised evaluation criteria in comparison with more subjective criteria linked to personality. Here again, the issue of formalisation appears central. Moreover, a recruitment process that explicitly characterises the expected scientific profile, instead of making an open call through a large competition, favours less gender bias. Lastly, women always suffer less from inequalities in internal markets in comparison with external markets, but in this case, their career is less successful than those in the external market.

Besides the link between recruitment principles and gender inequalities, these elements inform us that the principles limiting the reproduction of inequalities vary depending on the higher education segment: the market for the scientific elites is most gender neutral with respect to excellence. In the national marketplace, specifying the scientific profile along with the expected activities is less gender discriminating than a totally open recruitment. Finally, internal markets are more favourable than external ones because they put the knowledge one has of future colleagues above the scientific profile.

The structural temporality of careers also appears detrimental: the Swiss academic market is characterised by a historical chair system, with the ordinary professor being at the top of an academic 'alimentary chain' composed of multiple successive status levels that are mainly short term and often part time. The articulation of a precarious position makes it difficult to conciliate the reality of the biological clock and the ideal temporality of an academic career (Fox 1995). An early tenure favours more equality (Musselin 2003) because it does not pit professional and private interests against each other. When comparing various academic labour markets in the EuroAC study, we have shown that the fewer full time positions there are in an academic labour market, the more men tend to occupy them (Goastellec and Pekari 2013).

9.2.3.1 Introducing New Tasks with a Discriminating Filter?

The third mission attributed to researchers (engaging with society) generates different mechanisms which create cumulative advantages for men. One advantage relates to status (a variation on the Matthew effect) while another relates to gender (a variation on the Matilda effect). A study at the University of Lausanne found that the media are less likely to contact people with lower academic status and women: a gender difference exists in the level of engagement with society even after the effects of status, age, and faculty are removed (Crettaz von Roten 2011b). Finally, nomination committees for men value activities related to the third mission, while the same committees consider such activities to undermine scientific quality for women (Bureau de l'égalité 2007).

9.2.3.2 Societal Resistance

The Science and Technology Eurobarometers have introduced items related to social roles. Results on such delicate questions need to be treated with caution since they can be influenced by social desirability. The 2005 Eurobarometer has shown that four out of five Swiss disagree when asked if a university education is more important for a boy than for a girl. The same proportion consider that if jobs are scarce, women have as much right to a job as men, and two out of three Swiss disagree that men make better political leaders than women. We could consider that Swiss society shows no gender resistance, but, by comparison the Nordic countries (Denmark, Sweden, Finland), the Netherlands and France all support more gender equality. Principles of gender equality are most widely upheld by Swiss women and Swiss people with a university education.

In 2010, seven out of ten Swiss agreed that women are underrepresented in top positions in research institutions and that government should support specific measures to improve women's representation. Unsurprisingly, women agree with this statement more than men (79 % versus 69 %). In addition, more educated people are more likely to support this statement. By level of education, only those who stayed

in full-time education until age 20 or over showed significantly different opinions between the sexes, with women agreeing more. Finally, the desire for specific measures to improve women's representation is dependent on the age group. Some 79 % of those aged between 15–24 and 76 % of those aged 55 or older were in favour of such measures, implying that people midway through their professional career, and thus directly confronted with marketplace issues, are less open to professional gender equality.

Specific measures may respond to different objectives, including an improvement in the way research is conducted. Two out of three Swiss think that it is true that if women were better represented, research would improve. Unsurprisingly, women agree more than men (69 % against 62 %). By level of education, there is a significant difference only for people who stayed in full-time education until age 20 or over (at this level, women agree significantly more). Comparatively, Swiss agree less than people from Cyprus and Greece (90 % and 79 %) and from Nordic countries (Sweden 76 %, Ireland 73 % and Denmark 70 %).

To sum up, Swiss society tends to show more resistance to gender equality than some European societies and to show heterogeneity within the society.

9.2.3.3 Individual Filters Resisting Equality?

Systemic resistance goes hand in hand with individual resistance that expresses the internalisation of social norms. When we study how women behave in application processes, for example, it appears that women are more likely to contact the secretary of the commission than men are (36 % versus 28 %), but men more often contact the president of the commission than women do (24 % versus 18 %). Additionally, we have previously seen that women that did not obtain a fellowship were less likely than men to remain in the university sector (57 % versus 68 %), which can also be interpreted as a choice influenced by the internalisation of social roles.

We have also previously seen that women applying for SNSF fellowships are more often single and without children than men. Amongst the junior fellows, 54 % of the women and 47 % of the men are single. Amongst advanced fellows, 31 % of men and 25 % of women have children. This could indicate the internalisation of women, taking on the necessary choice between a career and a family. Simultaneously, when questioned on the role played by their partner in their candidacy, 40 % of women saw it as important or very important, compared with only 17 % of men. The same trend can be observed regarding the role attributed to family (15 % versus 8 %). As a result, a candidacy for a SNSF fellowship appears more often than not to be subordinated to the partner's support or to the fact that a woman is single. This seems to illustrate a role conflict and public/private life tension.

Last, when it comes to their self-perception (as evaluated in the EuroAC research – Goastellec and Pekari 2013), everything else being equal, academic women are less likely than men to perceive themselves as influential in defining their departmental policies.

Individual resistance thus appears as intertwined with organisational, structural and societal resistance. In 2010, during a workshop organised for female doctoral students in a Swiss university as part of a mentoring programme for women, a doctoral student addressed the issue of the under-representation of women in the academic world. The student opined that "some professor positions should be adapted to women's needs", i.e. part-time work to make academic life compatible with family life… Her demand raised no response from her peers.

9.3 Conclusion: Changing the Sex of Universities, a Complex Operation?

What does this analysis of the Swiss academic market through the gender prism tells us about the interplay of dimensions hanging over change? Far from the image of the ivory tower, higher education labour markets are societally constructed.

At the sex level, academic markets are told to be democratising: women must increasingly be represented in academia. However, although research has shown for some decades now a clear historical trend with women improving their access to academic positions, barriers to equality are still at play. Yet, the academic market is the object of a gendered division of labour. This occurs in an objectified state, with gendered academic activities and status, and in an incorporated state, within the perception academics have of their work, of the academic labour market and the possible actions they have on it (Bourdieu 1998). However, this is also a representation of the social world: a likely conservative social conception of the necessary differentiation of roles.

How can we explain these inequalities and what do they tell us about the academic market's embeddedness? Gender resistance can be found at systemic, organizational and societal levels. As Thomas (1990) emphasised, 'Higher education does not actively discriminate against women; rather, through an acceptance of particular values and beliefs, it makes it difficult for women to succeed […]. Caught in between wanting to have highly valued social qualities and conforming to acceptable social behaviour, women in higher education are engaged in a process of negotiation and manipulation; their choices are, perhaps, based upon a more complex, awareness of reality than those of men's' (p. 179).

At the system level, for example, there seems to be a correlation between the proportion of women in a higher education system and their representation in the various disciplinary fields: the higher the share of women at the system level, the more equal their representation in the various disciplinary fields, including the historically most masculine ones. As well, the more common full-time employment is, the less inequalities structure gender relations. Still, increasing women's access to academic positions as a whole is a necessary requirement but not a sufficient condition to guarantee gender equality in accessing the most secure positions.

At an organizational level, recruitment processes are under scrutiny. As research has shown, the probability of a woman being recruited increases if there are women in the recruitment committee (see for example Van den Brink et al. 2006), and when recruitment criteria are standardized rather than being subjectively designed (Musselin 2003). The organization also plays with career timing: the later tenure is granted, the more women are disadvantaged. Precocious permanent employment favours equality because it does not oppose professional and family life. In the same vein, recruiting with tenure track instead of offering a straight full professorship also favours the representation of women. In fact, the barriers that exist have different configurations depending on the particular segment of the academic market: the gender mechanisms that hinder equality of access to top academic positions are not necessarily the same as those in less prestigious sectors, or in local markets.

At both systemic and organizational levels, the decisive dimension for equality seems to lie in the formalization of the academic recruitment processes, career stages and structures, etc. Formalized processes and policies have a more balanced mix of privileges, meritocracy and compensation policies. In the Swiss academic case, the current push towards formalization has largely been driven by the National Science Foundation, alongside an attempt to integrate a historically very diverse academic market.

This intervention by a national body in a system that has long been structured around cantonal power can be perceived as a necessary measure to overcome societal resistances in the area of gender inequality. Indeed, societal explanations appear important: a comparison of gender inequalities in European higher education systems shows that the largest inequalities occur in societies that have remained strongly gendered – the division of social roles (and rights) seem to work against equality. ‘There is a relationship between higher education and society, and society’s different elements; families, industries, schools. This relation is not a straightforward one, because society itself is not straightforward: its organization is riddled with contradictions and anomalies.’ (Thomas 1990, p. 180)

Finally, resistance to gender equality in the transformation of the academic market provides evidence of a strong societal embeddedness of academic markets. This may be a facet of the overall organization of the higher education system – with the career structures reflecting an elitist and reproductive view of the society – that illustrates the strong resistance of the chair-system organization, in the organization of processes such as recruitment. Or, this may reflect the self-perception men and women have of the necessarily gendered organization of society, where the academic market is the product of a specific civilization, and attempts to reform it come with strong internal, objective and subjective resistance. The understanding of transformation in academic labour markets thus calls for a historical and societal approach, in order to grasp these resistances and the broader requirements for overcoming them.

References

Bourdieu, P. (1998). *La domination masculine*. Paris: Seuil.

Bureau de l'égalité. (2007). *Sept ans, l'âge de raison? Expériences et réflexions autour du suivi des procédures de nomination*. Lausanne: Université de Lausanne.

Bureau de l'égalité. (2011). *La situation professionnelle des femmes et des hommes du personnel administratif et technique à l'Université de Lausanne*. Lausanne: Université de Lausanne.

Crettaz von Roten, F. (2011a). Sciences en société: Le regard des Suisses en 2010. *Les Cahiers de l'Observatoire, 21*, 1–49.

Crettaz von Roten, F. (2011b). Gender differences in scientists' public outreach and engagement activities. *Science Communication, 33*(1), 52–75.

Crossouard, B. (2011). The doctoral viva voce as a cultural practice: The gendered production of academic subjects. *Gender and Education, 23*(3), 313–329.

Danell, R., & Hjerm, M. (2012). Career prospects for female university researchers: Event history analysis of career trajectories at Swedish Universities. *Scientometrics*, 228–235. Published online http://link.springer.com/article/10.1007/s11192-012-0840-4?no-access=true

Durrer, S., Jufer, N., & Pahud, S. (2009). *La place des femmes et des hommes dans la presse écrite généraliste de Suisse romande des années 80 à nos jours* [The place of women and men in the general press in western Switzerland 80s to today, col- lection "Gender"]. Zürich: Seismo.

Felli R., Goastellec G., Baschung L., & Leresche J-P. (2006). « Politique fédérale d'encouragement de la recherche académique et stratégies institutionnelles des universités. Evaluation du programme « relève » de la confédération (2000–2004), *Cahiers de l'Observatoire*, N°15, 83p.

Felli R., Goastellec G., & Leresche J-P. (2007). « Les marchés du travail académique en France et en Suisse: des imbrications différenciées » *Formation Emploi*, n°100, 49–64.

Frank Fox, M. (1995). Women and scientific careers. In S. Jasanoff, G. E. Markle, J. C. Petersen, & T. Pinch (Eds.), *Handbook of science and technology studies* (pp. 205–223). Thousand Oaks: Sage.

Goastellec, G. et Pekari, N. (2013). Gender in the academia between differences and inequalities, findings in Europe. In U. Teichler et E. A. Höhle (Eds.), The work situation of the academic profession in Europe: Findings of a survey in twelve european countries (p. 55–78). Dordrecht: Springer.

Goastellec G., Leresche J-P, Moeschler O., & Nicolay A. (2007). Les transformations du marché académique suisse. Evaluation du programme professeurs boursiers. FNRS,168p.

Goastellec, G., Leresche, J.-P., Ramuz, R., Pekari, N., & Adangnikou, N. (2010). *Evaluation du programme des bourses du Fonds National Suisse (FNS)*. Rapport, Berne: FNS.

Hamilton, G. (1994). Civilizations and the organization of economies. In N. J. Smelser & R. Swedberg (Eds.), *The handbook of economic sociology* (pp. 183–205). Princeton: Princeton University Press.

Ludi, R. (2005). Gendering citizenship and the state in Switzerland after 1945. In V. Tolz & S. Booth (Eds.), *Nation and gender in contemporary Europe*. Manchester: Manchester University Press.

Mikkola, M. (2011, Winter). Feminist perspectives on sex and gender. In E. N. Zalta (Ed.), *The stanford encyclopedia of philosophy.* URL= http://plato.stanford.edu/archives/win2011/entries/feminism-gender/

Musselin, C. (2003). Academic markets. How they work. Conference paper. *Women in European universities, training and research network*. Available on-line: http://csn.uni-muenster.de/women-eu/

OECD. (2004). *Babies and bosses, reconciling work and family life. New Zealand, Portugal and Switzerland* (Vol. 3). Paris: OECD.

OFS. (2008). *Egalité entre femmes et hommes: La suisse en comparaison internationale. Un choix d'indicateurs d'égalité dans les domaines de la formation, du travail et de la politique*. Neuchâtel: OFS.

OFS. (2009). *Femmes et hommes dans le système de Bologne. Indicateurs reflétant les différences entre les sexes dans les hautes écoles universitaires* (p. 44). Neuchâtel: Office fédéral de la statistique.

OFS. (2010). Femmes et Hommes dans les hautes écoles suisses. Indicateurs sur les différences entre les sexes. Neuchâtel. Office Fédéral de la Statistique.

OFS. (2011). *Femmes et hommes dans les hautes écoles suisses. Indicateurs sur les différences entre les sexes*. Neuchâtel: OFS.

Steinke, J. (1997). A portrait of a woman as a scientist: Breaking down barriers created by gender-role stereotypes. *Public Understanding of Science, 6*, 409–421.

Steinke, J. (2005). Cultural representations of gender and science: Portrayals of female scientists and engineers in popular films. *Science Communication, 27*, 27–63.

Thomas, K. (1990). *Gender and subject in higher education*. Bristol: Taylor and Francis Publishers.

UNICEF. (2008). *The child care transition. A league table of early childhood education and care in economically advanced countries. Innocenti Report Card 8*. Florence: UNICEF Innocenti research center.

Van den Brink, M., Brouns, M., & Waslander, S. (2006). Does excellence have a gender? A national research stud on recruitment and selection procedures for professorial appointments in The Netherlands. *Employee Relations, 28*(6), 523–539.

Wanner, P. (1998). Les changements de nationalité des étrangers en Suisse. *Revue Européenne des Migrations Internationales, 14*(3), 185–201.

Chapter 10
From Academic Profession to Higher Education Workforce: Academic Careers in the UK

John Brennan, Rajani Naidoo, and Monica Franco

10.1 Introduction

The phrase 'higher education workforce' is taken from the title of a recent publication from the Higher Education Funding Council for England (HEFCE 2010). The report considers such topics as shortages of certain specialists (professors of physics and boiler maintenance engineers are both mentioned), training needs and career trajectories of staff working in universities. It does not make the conventional distinction between 'academics' and 'others' usually made in discussions about staff working in higher education, thus removing the sense of the professional distinctions between different groups of university 'workers'.

The use of the higher education workforce terminology could be regarded as yet another example of the changing times which see universities being converted into 'businesses' like any other, subject to the overriding forces of markets and economic pressures and drawing on the managerial techniques of the business world to respond to these pressures (Bok 2003; Brown 2011; Slaughter and Rhoades 2004). Such vocabulary contrasts rather starkly with terms such as 'academic freedom',

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'institutional autonomy', 'independence' and 'critical creativity'. These terms appear in some of the mainstream higher education literature of the last century (e.g. Clarke 1983; Becher and Kogan 1992), reflecting the claims made by such authors (and many others) for the 'exceptionalism' of universities as social institutions and their immunity to the organisational (market or bureaucratic) pressures of businesses (private and public) of all kinds.

These are changing times for higher education and there are certainly many changes occurring with major implications for the people who earn a living working in universities and other higher education institutions. But it is perhaps best not to be too apocalyptic in considering these changes. While it is true that universities as institutions have been around for a very long time, this is not to say that they have not changed over time, that there are no differences between universities, either as individual institutions or as parts of different national systems and traditions. The same can be said of the roles of academic and other staff who work in them.

The next section of this paper will summarise some of the distinctive features of higher education institutions in the UK (while not ignoring the fact that there may also be some important differences between the constituent nations of the UK) and the roles of the different groups of academic staff within them. It will report on the growing differentiation of institutional types, functions and roles of staff members. It will report on the changing external relationships between universities and other social institutions, including changes to their funding sources and methods and to the expected 'deliverables' to the rest of society. It will then go on to consider the implications of these changes for the roles and careers of academic staff who work in universities. More specifically, this includes changes in identities and in power distribution, shifts from 'collegial' to 'competitive' relationships between staff, new roles and divisions of labour, greater 'boundary' crossing – between both institutions and academic subjects – with all of these changes accompanied by new 'insecurities'.

10.2 UK Higher Education and the People Who Work in It

In comparison at least with the situation in some other European higher education systems, UK universities have long been characterised by strong levels of autonomy from government and the mechanisms of the state. While funded substantially by the state, relationships were traditionally kept at arms' length with individual universities possessing substantial autonomy over their use of public funding, both in relation to the ways they organised themselves institutionally and to the outputs they delivered to the host society (Becher and Kogan 1992). However, the greater authority at the level of the institution was not just a function of lesser state interference; it was also a function of a lower level of autonomy for academic staff, in particular for university professors. The authority of the 'professor' within universities of the Humboldtian tradition (Anderson 2006) has never really been achieved by the professoriate within UK universities while there are many individual

exceptions, professors have generally been subject to the expectations and requirements of their institutions. UK academics are employed by their universities and not by the state. They work in faculties, schools and departments which themselves are generally subject to institutional frameworks and 'rules' which shape the working conditions of their staff (in some European countries, one still can hear faculties referred to as the higher education 'institutions', with more or less strong direct relationships to government departments and with the university itself taking only an apparently fairly minor role in the shaping of academic matters). Of course, the individual 'basic units', using Becher and Kogan's (1992) terminology, of academic departments and schools remain crucially important in determining the life of a higher education institution, but in the UK these units are probably more easily 'invaded' by institutional forces than they are elsewhere, even to the extent that organisational restructurings can remove them altogether. For these reasons, the arrival of a 'new managerialism' within higher education came sooner and more comprehensively within UK universities than it did within many other systems (Deem et al. 2007).

The traditions of institutional authority and autonomy relate to another feature of UK higher education: the considerable differentiation of its institutions. This is an area where generalisations are somewhat dangerous. Differentiation reflects above all history. This is the case with the continued use of a pre-1992 and post-1992 distinction in much debate about universities (reflecting the previous 'binary' division between universities and polytechnics in the preceding two decades). But in fact, history is usually the key factor in distinguishing universities more generally with groupings of Victorian 'civics', 1960s 'plateglass' to be identified (with others) alongside the medieval 'ancients'. These different groupings reflect both 'vertical' (i.e. reputational) differentiation and 'horizontal' (i.e. functional) differentiation using the terms employed by Clark (1983) or Teichler (2007) in their descriptions of different national higher education systems.

As in other systems, expansion has led to increased differentiation. In 1981, the Conservative Government announced major cuts to university funding. While the cuts were significant, they also undermined the equity principle by being highly selective, protecting those institutions perceived as 'the best'. The end of the binary distinction between universities and polytechnics in the early nineties was accompanied by greater vertical differentiation between university institutions. In turn, this differentiation was exacerbated by another of the main system developments over the last 10–15 years: the growing marketization of higher education (Bok 2003; Brown 2011; Slaughter and Rhoades 2004). Ideologically, the trend has moved away from forms of funding and regulation, which were based on the 'social compact' that evolved between higher education, the state and society over the last century. For example, the belief has been eroded that universities are required to be relatively independent from political and corporate influence to function optimally (in turn linked to the need for guaranteed state funding and professional autonomy). These developments, together with more general retractions in public policy away from frameworks based on Keynesian welfare state settlements, have resulted in the implementation of frameworks employing neo-liberal market mechanisms. Such

frameworks are based on the assumption that the contemporary higher education system has become too large and complex for the state to sustain its position as sole regulator and funder and that market competition within and between universities will create more efficient and effective institutions. As such, there has been a decline in state funding for research and teaching, the end of the 'block grant' and its replacement by competitive and earmarked funding arrangements – plus, especially for some institutions, a greater diversity of funding sources and declining reliance on the public purse. Quasi-market principles have introduced major changes to the organisation and control of academic work as indicated in our empirical data in subsequent sections.

However, it is important to note that the increase in quasi-market frameworks in the UK has not resulted in a reduction in state regulation. As Naidoo (2008) has indicated, higher education continued to be regulated by the state while simultaneously opening up to market forces. Furthermore, rather than pulling in different directions, increasing articulation between the two modes of co-ordination has occurred. State intervention has helped establish the conditions for the operation of a quasi-higher education market. More importantly, as Middleton (2000) has shown, the relationship has also worked both ways. Rather than the state merely creating the conditions for the market to function by reducing elements of state intervention or providing market information, market mechanisms have been applied to further the state's agenda for change. In other words, we find a situation where the state facilitates and manages the market at the same time as the state actively mobilises market mechanisms to attain political goals. In this sense, the British state (in relation to higher education governance) may also be thought of as exhibiting the characteristics of what Cerny (1997) has termed the 'competition' state. The competition state is described as one that defines its primary objective as fostering a competitive national economy. Policies are shaped to promote, control and maximise returns from market forces in international settings, while abandoning some of the core discourses and functions of the welfare state. The state is also described as steering complex systems from a distance by devolving decision making down to institutional sub-units while at the same time maintaining strong regulatory policy and financial management frameworks which restrict the range of choices available to the sub-units. At the same time, strong accountability mechanisms are implemented to supply feedback to the centre.

The inevitable growing state and public interest in institutions, costing ever more public money and engaging ever larger proportions of the population, has led to various forms of accountability mechanisms and performance measures. In response to the Secretary of State for education's call for an efficiency analysis of universities, the Jarratt Report in 1985 recommended the use of performance indicators to measure, assess and reward achievement (Townley 1993). As a result, resource allocation became even less linked to equity, a trend which had already begun with the 1981 funding cuts. More and different groups within society expect more and different things of universities. In particular, the need for processes of elite reproduction and legitimisation to be implemented within what is now a 'mass' system mean that elite segments need to be identified and justified within a larger mass system.

The first research selectivity exercise, later to become the research assessment exercise, was introduced in1986. This resulted in research funds being distributed to different departments according to the funding body's assessment of their level of achievement. This further reinforced the shift to selectivity, especially since the proportion of funding allocated to research by the research selectivity exercises increased dramatically from 15 % in 1986 to 100 % in 1992. The terms of the research assessment exercises (presently the research excellence framework) can be seen to be reinforcing the teaching-research divide both within and across universities.

There has also been growth in performance measures and institutional rankings which have been developed partly to inform prospective students and their parents in making their choices of university, but the rankings also ensure that 'top' students and graduates can be readily identified and converted into 'top' professionals and leaders of society. International rankings of research universities are increasingly impacting on higher education. They contribute to the creation of a hierarchical order in contemporary mass higher education and provide input for the construction of the national and global institutional field of 'world-class' universities (Wedlin 2011). These result in governments and universities developing strategic actions for improving the position of the country or the university in the various tables. As Marginson (2009) has illustrated, rankings lead to templates which align closely with the characteristics of elite research-intensive universities. The league tables give prominence to research as well as certain subjects. These templates are used to classify and judge very different types of institutions, leading to greater stratification of institutions and less encouragement and reward for diversity.

Of course, this is something that is not limited to the UK system; however, the strength of the institutional level of differentiation is worth noting (in contrast say to the more subject level of differentiation in the French system) (e.g. Bourdieu 1996). These mechanisms apply pressures which shape the nature and intensity of academic work and challenge traditional components of academic identities.

The above-mentioned changes link firmly with another major trend of recent times, the growth of greater 'managerialism' within institutions, coupled with new forms of control and surveillance from outside institutions. New Right thinking on the academic profession grew during the post-1979 Conservative Government's reign, and academics were portrayed as out of touch, anti-business inhabitants of ivory towers. A series of right-wing think tank publications argued that universities were a government sponsored cartel, that would benefit from opening up to the market (Griffith and Murray 1985) and that universities needed 'perestroika' from bureaucracy (Kedourie 1991). The opposition of public-sector workers to Neo-Conservative and New Right inspired reform contributed to the perception of the sector as a threat which had to be managed in the 'national interest' (Politt and Bouckaert 2004; Shattock 2010). By linking higher education reform to discourses which argued against expert, hierarchical control and for devolved and democratic governance at a local level, successive governments were protected from the accusation of infringing on academic freedom and institutional autonomy. In 1988, lifetime tenure was removed by legislation for new academics and appraisals and

performance related pay were introduced in 1988 and 1989 respectively as a condition of government funding. A particular outcome of this trend has been the introduction of New Public Management (NPM) practices (Clarke et al. 2000) into universities. This has resulted in a shift from more collegial and horizontal accountability to more vertical reporting through new layers of management and a greater focus on performance measurement (Ferlie et al. 2007). Measurement processes have been strengthened through the development of performance indicators and performance management systems, along with the growing activities of audit and regulatory bodies, such as the Higher Education Funding Councils and the Quality Assurance Agency (QAA) in the UK.

The QAA's approach to teaching, for example, has developed a code of practice consisting of detailed guides prescribing the micro-processes at all levels and all aspects of university education (QAA 2003). The code of practice has ten sections covering all levels from undergraduate to doctoral study and various dimensions of study including the admission of students, programme design, programme approval, monitoring and review, assessment, student complaints and students with disabilities. The QAA code of practice specifies the processes that institutions have to go through in all these dimensions. The adopted strategy chose to devolve the function of assessing and implementing academic quality to the individual institution. In essence, the function of the QAA is to check the implementation and monitoring of the established codes by the institutional quality structures and procedures. Institutional audits are carried out by the QAA itself. The monitoring structures and processes for quality assurance compliance are therefore pushed downward onto the university. In addition, the Higher Education Funding Council also publishes performance indicators, including throughput rates, staff-student ratios, widening participation, programme specifications, entry qualifications, completion rates, library facilities, student feedback and comparative tables of performance indicators. A National Student Survey provides the basis for league tables of student 'satisfaction', which receive considerable publicity and arouse considerable institutional angst.

If we take the regulation of teaching as an example, we see that the QAA requirements have resulted in significant organisational restructuring at the level of the university. There is an increase in the layers of bureaucratic procedures relating to teaching at all levels, designed to monitor the compliance of educational programmes with QAA codes of practice, the development of new organisational structures and the creation of new administrative and management positions. While quality assurance in teaching was historically minimal, now there are whole units dealing with quality assurance and enhancement in all the various dimensions of teaching and at all study levels. While curriculum development used to be largely the responsibility of individual academics, it now has to go through formal programme approval boards at Faculty and University level before being approved by Senate. There is also a whole machinery associated with preparing the institution for QAA audits, implementing QAA codes related to student admissions, student assessment, new programme specifications, evaluation and monitoring of courses and the development and implementation of equal opportunities policies, including

disability issues. The QAA is also concerned that institutions demonstrate that procedures are in place not merely for quality assurance but also for quality improvement or enhancement. This therefore involves more than just implementing policies and strategies to improve teaching across the institution but also demonstrating to the QAA that this has been done.

At the same time, the involvement of academic staff in administrative duties related to teaching has increased. For example, academics are required to write the programme aims and learning outcomes for the courses they teach in the form and language required by the QAA. They are involved in designing and carrying out a first stage analysis of student evaluations. They are involved in documenting and reflecting on a number of aspects of their professional practice. Many tasks are also shared. For example, the principles on which admission decisions are made are developed by academics but administrators carry out the procedures. The same is true of E-learning. The curriculum content is determined by academics, the technical details are the responsibility of the new professional administrators, but the e-learning pedagogical strategies are shared.

With the erosion of collegial governance and decision making, administrators have taken on key roles in supporting more institutional management practices (Conway 2000). In other words, they can be seen to be the conduits for transferring the external forces into the internal environment of the university. Professional managers now offer 'expert opinion' rather than advice on regulatory compliance (Whitchurch 2008). There is also a greater stress on data recording, on procedures and systems, and on the formal appraisal of academic work. This has meant that academics have had to develop ways of making their work open to scrutiny by administrators. This can be understood as a form of the 'visualisation of work' through which academic work becomes accessible to administrators who may evaluate academic efforts and act upon the information 'from a distance' without any specialist knowledge about it (Kogan and Hanney 2000). Administrators therefore increasingly assume high-profile technical and specialist roles which include monitoring and managing academic work. Thus while professional autonomy remains an important characteristic of the academic profession, it is nevertheless increasingly constrained by managerial frameworks (Deem et al. 2007).

A related trend is a growing emphasis on the 'users' and 'consumers' of higher education, coupled with a faith in the power of markets to ensure that their needs are met. The UK was the first country in Europe to adopt consumerist discourses. Government rationales for this shift were linked to market competition and tuition fees, the modernisation of the public sector agenda which was intended to break 'producer capture', and the need to maintain quality as higher education moved from an elite to a mass system. Recommendations such as differential student fees contained in the recent Browne Report, which arose out of a government commissioned enquiry into university funding and student finance, undoubtedly reinforce these consumerist trends (see Browne et al. 2010). Various consumerist levers to enhance student choice and control over the education process have been introduced. These include mechanisms for greater choice and flexibility, information on academic courses through performance indicators, league tables and student

satisfaction surveys, and the institutionalisation of complaints and redress mechanisms. The assumption behind such policies is that students will utilise such mechanisms to demand high-quality provision, as well as apply pressures on universities to make courses more relevant to the skills they require for the workplace. The related assumption is that consumerist forces will have a positive impact on the professional practices of academic staff. High quality will be rewarded and low quality penalised, and consumer choice will foster competition between universities to result in more responsive, inclusive, and better quality teaching.

Rather than merely stipulating new procedures to enhance the functioning of higher education, consumerism may thus be seen as a device to reform academic culture and pedagogic relationships to comply with market frameworks. It is therefore apparent that such policies are attempts to change, fundamentally, the terms on which education takes place in universities (Naidoo et al. 2011). Thus, in recent years, ever-growing amounts of information are being produced about the functioning of different higher education institutions, to inform consumer choice and achieve market efficiency. In particular, external evaluation systems have become increasingly about demonstrating 'differences' which could inform consumer choice, whereas previously they had been much more about ensuring common standards (and, in a sense, the denial of 'significant difference') (Brennan and Singh 2011).

These changes in the external environment for universities have inevitably brought with them implications for their internal management and organisation. Institutions have found it necessary to tell interesting and attractive 'stories' about themselves in order to attract funders and consumers. These factors have propelled universities to engage with forms of marketing practices that are more closely aligned to the corporate world. As the pressures for external visibility increase, universities become active in image, reputation and brand development and enhancement. In systems of mass higher education, branding in particular becomes increasingly important to differentiate from other institutions and to narrate a range of economic and social values. Branding attracts financial and administrative resources and introduces an outwardly focused process of conscious organisational projection, packaged and distributed according to external performance measures and market criteria. In other words, higher education institutions must now strive to embody the values and images required by the external world within the confines of corporate imagery and popular culture (Naidoo et al. 2014). It is highly likely that academics will be increasingly drawn into contributing to branding strategies. Experience with corporate branding shows that the brand is not simply developed by the Marketing Department for potential consumers, but it is also something that employees' engage with. University managers may well take this lesson on-board and enact the values and vision of the brand, representing a key element in differentiation strategies and thus providing competitive advantage for the company (Hatch and Schultz 2008).

Branding strategies may thus become one of a growing number of devices to steer the structure and organisation of work processes within universities (Naidoo et al. 2014). Hoggart (2001) described the rise of the Public Relations professionals in universities (and other organisations) in severe terms: 'These people deal in half-

truths at best, in lies more often.' (p. 106) And the needs of users and consumers of higher education's various 'products' have come to replace the 'freedoms' of academic staff over what they teach and what they research. For all but a few, academic life has switched largely to a responsive mode in recent years. Coupled with declining resources and greater competitiveness over who gets them, all of these changes have brought with them mounting managerial processes and controls within universities. These of themselves have inevitably consumed more resources and they have inevitably brought a new distribution of professional roles and relationships within universities, with implications for the working lives of all who work in them.

10.3 Identity Changes and Ambiguities in the Lives of UK Academics

In order to develop analytical purchase on the extent to which the factors above may impact on academic identities and practices, we draw on the 'organisational field' concept and in particular the work of Pierre Bourdieu. Bourdieu's (1977) work on higher education as a specific institutional site, particularly his concepts of 'field', 'capital' and 'habitus', makes an important contribution to understanding the dynamics of practice and how academics respond to change within higher education institutions. The organisational field concept has a lineage dating back to Durkheim and draws heavily on accounts of the social construction of reality (Berger and Luckmann 1966). It has received attention in management studies through the work of the new institutionalists who have developed the concept to depict a group of organisations within a common institutional framework held together by regulation, cognitive belief systems, and normative rules, and which compete for legitimacy and resources (Powell and DiMaggio 1991). However, while much of the new institutionalists' work leans towards isomorphism, Bourdieu's framework emphasises that the field is not a product of consensus but the dynamic product of a permanent conflict.

Although Bourdieu's work on higher education has been developed in the context of France, the application of his concepts to other national contexts indicates the significant contribution his work can make to the study of higher education in general (see, for example, Naidoo 2004; Tomusk 2000). According to Bourdieu, social formations are structured around a complex ensemble of social fields in which various forms of power circulate. The relative autonomy of fields varies from one period to another, from one field to another, and from one national tradition to another (Bourdieu 1988). The field of university education is conceptualised as a field with a high degree of autonomy in that it generates its own organisational culture consisting of values and behavioural imperatives that are relatively independent from forces emerging from the economic and political fields (see also Prichard and Wilmott (1995) for the conception of higher education as a restricted field of production).

The activities in the field revolve around the acquisition and development of different species of capital, which may be defined as particular resources that are invested with value (Bourdieu 1986). The types of 'capital' invested with value in the field of higher education are termed 'academic' and 'scientific capital', and consist in the first instance of intellectual or cultural (rather than economic) assets. Bourdieu differentiates between 'scientific capital', which is related to research renown and is the most powerful capital in the field; and 'academic capital', which is linked to managerial power over the instruments of reproduction of the university body. We would add that other forms of capital including economic capital have and will become increasingly powerful as higher education loses its relative autonomy and becomes more porous to external pressures.

Individuals and institutions are located in various positions of hierarchy depending on the type and amount of field-specific capital possessed. Bourdieu (1977) introduces the concept of habitus to indicate how social practice within fields is generated. He defines habitus as a system of lasting and transposable dispositions which, by integrating past experiences, functions at every moment as a matrix of perceptions, appreciations, and actions. This inclines actors to act and react in specific situations in a manner that is not always calculated and that is not a conscious adherence to rules. According to these definitions, the 'dispositions' represented by the habitus are not fixed and unchanging but 'strategy generating'.

In his major empirical studies on higher education, Bourdieu (1988, 1996) illustrates the operation of an academic habitus, which orientates practices that revolve around a belief in, and struggle for, the acquisition of scientific and academic capital internal to the field of higher education. These practices are based on a systematic suspension, or even inversion, of the fundamental principles of the economy and of politics. The operation of a general academic habitus operating across different national contexts has been confirmed by empirical studies in other national contexts and time periods (Henkel 2005; Naidoo 2000).

Taking the three concepts of field, capital, and habitus together, practice in the field of higher education is therefore shaped by an academic habitus, which engenders in individuals a 'disposition' below the level of consciousness to act or think in certain ways; and on the network of objective relations between positions that individuals or institutions occupy in the field. Individuals and institutions implement strategies in order to improve or defend their positions in the organisational field in a competition that has historically been relatively autonomous from economic forces but which nevertheless consists of deeply ingrained rules, values, and professional protocols. Organisational fields can thus be regarded as structured systems of social positions, which have an impact on how academics respond to the forces for change mentioned above.

Our hypothesis therefore would be that the grafting of market and corporate management practices derived from the commercial sector onto a sector with a deeply imbedded professional and public culture will not translate easily into the outcomes intended by managers. We would expect those of a generation that was heavily socialised into traditional academic cultures and with high scientific capital to be resistant to economic and managerial drivers. Those with low scientific capital

and newer generations of academics are likely to have different responses. In other words, those located in powerful positions in the field will be threatened by external forces for change and will seek to preserve the type of power that is effective in the field. Those located in dominated positions will attempt to draw on external forces for change to challenge the existing criteria and distribution of orthodox power effective in the field in order to improve their positions.

This analytical framework gives us a context in which to understand some of the results that follow a recent survey of academic staff in UK universities,[1] which was undertaken as part of an international study of changes in the academic profession.

10.4 A Closer Look at the Evidence

Studies of academics have long shown an overriding loyalty by academics to their subject/discipline, which has been the central element of both their self- and their public identities. This was something, which was generally stronger than any organisational loyalties they may have had to their institution or department. Working relationships were within subject/disciplinary groupings, as indeed were a high proportion of social and personal relationships. As the data in Table 10.1 indicate, academic loyalties remain highest to disciplinary affiliations, followed by departments or other basic units with institutions attracting the lowest support.

While subject loyalties continue to be strong among academics, in many institutions and departments they are increasingly balanced by other relationships and identities. For example, it appears that a majority of sociologists working in UK universities are not to be found in separate sociology departments but are working alongside academics from other fields in cross-disciplinary units such as business,

Table 10.1 Academic loyalty of UK academics

Please indicate the degree to which each of the following affiliations is important to you.	Very important	Important	Moderately important	Of little importance	Not al all important	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
My academic discipline/field	46.0	35.8	12.6	4.7	0.8	1123
My department (at this institution)	18.1	37.5	25.5	13.4	5.5	1123
My institution	9.4	29.0	35.7	20.4	5.5	1122

[1] The UK part of the international project on the 'Changing Academic Profession' (CAP) was carried out by researchers and associates at the Open University's Centre for Higher Education Research and Information with funding from the Higher Education Funding Council for England

Table 10.2 Research emphasis of UK academics

How would you characterise the emphasis of your primary research this (or the previous) academic year?	Very much % of cases	Much % of cases	Somewhat % of cases	Very little % of cases	Not at all % of cases	Number of responses
Basic/theoretical	24.3	31.9	25.9	13.4	4.5	957
Applied/practically-oriented	30.8	35.1	16.2	10.7	7.3	964
Commercially-oriented/ intended for technology transfer	5.5	10.7	15.4	20.7	47.6	913
Socially-oriented/intended for the betterment of society	19.2	26.7	22.6	15.8	15.8	945
Internationally in scope of orientation	35.2	30.0	15.9	9.5	9.5	958
Based in one discipline	11.0	29.0	28.8	14.7	16.4	971
Multi-/interdisciplinary	29.3	34.1	19.4	12.5	4.7	970

education or urban studies.[2] This pattern is also apparent in Table 10.2 where we can see that more than half of the academics surveyed are focused on multi/interdisciplinary research. One implication of this is that 'authority' over the direction and focus of academic work is increasingly led from outside the individual's original subject field. One's 'boss' is no longer necessarily 'one of us' with the shared assumptions and values, which come from the long disciplinary induction and socialisation into a professional identity defined in subject terms. This makes it inevitably easier for institutional or external values and objectives to drive the direction of professional activity. The fact that 66 % of UK academics regarded their primary research as 'applied/practically oriented' is an indication of the power of external drivers.

Another related area of change, but this time perhaps in the direction of reduced ambiguity, lies in the area of decision-making. At one time, much was left to the decision of the individual staff member, especially if they were reasonably well established or senior. In some contexts, decisions were collective and 'collegial'. Collegiality was reflected in a blurring of academic and management roles with many individuals combining aspects of both with the balance between them changing at different career stages but with no one aspect dominating. But increasingly, many academics find it difficult to combine professional academic roles and identities with institutional management roles. This reflects a shift away from 'elected fixed-term' filling of management roles to 'appointed permanent' roles, which are effectively full-time leaving only minimal space for continued academic endeavours. A consequence of this is that many mid-career academics are faced with choices as to whether to continue down an academic 'professional' track or to shift into a more managerial track and identity or even to consider jobs outside of higher education.

[2] Personal communication from a member of the Higher Education Academy's subject centre for sociology.

In Table 10.3, it is interesting to note that compared to academics from most other countries UK academics are more likely to have been considering career moves into management positions (26 %), another academic job (53 %), an academic job abroad (35 %), or even outside higher education (38 %) (though only 24 % had actually done anything about it, (see Table 10.4)).

The above preferences may be explained by the data contained in Tables 10.5, 10.6, and 10.7 where the views of UK academics about their profession, job satisfaction and working conditions are summarised.

While satisfaction levels remain quite high (Table 10.6), work conditions are regarded as having deteriorated by the vast majority of academics who took part in the survey (Table 10.7). More than half of them felt that their jobs were a source of considerable strain (Table 10.5). Table 10.8 also shows how academics seem to have quite negative views about many features of their institutions, which may be influencing their decisions on whether to stay in academia. They believe that their institutions are characterised by rather poor communications, top down management styles, cumbersome administration, low levels of collegiality and a very strong performance orientation. In other words, the managerial developments over the past decades may be linked to a growing dissonance between more traditional academic values and practices inscribed in the academic habitus and new techniques of control and changing hierarchical relations between academics and administrators.

The challenges and ambiguities of academic roles are particularly strong for new generations of academics. These also concern the balance between research and teaching. Today it is both more difficult and potentially takes more time to reach a permanent academic position combining both teaching and research functions. Research positions are still generally awarded for a fixed term in the early stages of an academic career, but the length of this career stage is increasing and, for some, may never be followed by the permanent 'tenured' academic position. At the same time, as increasing emphasis is placed on the research function – being the prime measure of achievement and reputation within academe – the balance between teaching and research activity among tenured academics differs between individuals and it is institutionally 'managed' to take account of differences in quality and productivity. In some institutions, there has also been an increase in teaching-only academic positions, as this is a way of releasing more time for the research 'stars' to further enhance both individual and institutional reputations.

10.5 A Changing Distribution of Power

The increasing differentiation of academic roles brings with it changes in the distribution of power in higher education. Traditionally, a hierarchy largely defined in terms of age and experience within disciplinary-focused basic units has provided the primary source of authority and decision-making. For a brief period during the 1960s and 1970s, there was a shift to greater democratisation reflecting '1968' and the radicalised student movements of those times. Committees and consensus

Table 10.3 Academics' views about changing their jobs (UK and 18 other countries)

Countries	To a management position in your higher education/research institution (% Yes)	To an academic position in another higher education/research institute within the country (%Yes)	To an academic position in another country (%Yes)	To work outside higher education/research institutes (%Yes)	Not applicable, I have not considered making any major changes in the job (%Yes)	Number of responses
Argentina	6 %T>15 %	6 %	23 %	63 %	807	
Australia	20 %	45 %	33 %	45 %	26 %	1181
Brazil	24 %	33 %	15 %	25 %	43 %	1126
Canada	20 %	33 %	21 %	21 %	45 %	1111
China	11 %	13 %	4 %	7 %	72 %	3458
Finland	11 %	22 %	20 %	42 %	39 %	1368
Germany	21 %	33 %	23 %	27 %	41 %	1247
Hong Kong	7 %	28 %	26 %	16 %	49 %	704
Italy	8 %	16 %	25 %	19 %	57 %	1670
Japan	2 %	50 %	18 %	22 %	41 %	1358
Korea, Republic of	4 %	29 %	17 %	47 %	35 %	506
Malaysia	29 %	44 %	25 %	27 %	33 %	1152
Mexico	22 %	15 %	8 %	13 %	11 %	1930
Netherlands	12 %	26 %	18 %	21 %	52 %	1093
Norway	16 %	29 %	20 %	34 %	41 %	971
Portugal	10 %	22 %	19 %	22 %	56 %	1122
South Africa	23 %	33 %	21 %	33 %	37 %	654
United Kingdom	26 %	53 %	35 %	40 %	23 %	1188
United States	24 %	47 %	18 %	27 %	42 %	1051
					Full sample	23697

Table 10.4 UK academics considering and taking action to change their jobs

Within the lase five years, have you considered a major change in your job? And did you take concrete actions to make such a change? [If yes, check all that apply in both columns. If any of the actions don't apply, leave them blank]	Considered % of cases		Concrete action % of cases	
	Yes	No	Yes	No
To a management position in your higher education/research institution	25.5	74.5	12.0	88.0
To an academic position in another higher education/ research institute within the country	53.0	47.0	27.9	72.1
To an academic position in another country	34.8	65.2	11.4	88.6
To work outside higher education/research institutes	40.2	59.8	7.2	92.8
No, I have not considered making any major changes in the job	23.5	76.5		
Number of responds = 1188				

Table 10.5 UK academics' views about their profession

Please indicate your views on the following…	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
This is a poor time for any young person to begin an academic career in my field	22.5	28.2	19.8	23.2	6.3	1124
If I had it to do over again, I would not become an academic	9.3	13.2	20.4	35.3	21.8	1125
My job is a source of considerable personal strain	23.9	34.5	19.5	17.6	4.5	1122

Table 10.6 UK academics' job satisfaction

How would you rate your overall satisfaction with your current job?	Very high	High	Somewhat	Low	Very low	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
	10.2	**37.3**	**35.5**	**10.5**	**6.5**	**1132**

Table 10.7 UK academics' changing working conditions

Since you started your career, have the overall working conditions in higher education improved or deteriorated?	Very much improved				Very much deteriorated	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
	0.7	**14.4**	**17.4**	**46.1**	**21.5**	**1118**

Table 10.8 UK academics' views of their institutions

At my institution there is…	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Number of responses
lership	% of cases	% of cases	% of cases	% of cases	% of cases	
A strong emphasis on the institution's mission	15.8	46.1	28.4	7.3	2.4	1026
Good communication between management and academics	2.5	20.4	28.4	27.2	21.5	1030
A top-down management style	34.3	37.4	19.9	7.1	1.3	1025
Collegiality in decision-making processes	0.8	19.8	31.5	29.3	18.6	1020
A strong performance orientation	16.3	51.8	23.0	7.0	1.9	1024
A cumbersome administrative process	40.4	36.1	17.6	5.6	0.3	1022
A supportive attitude of administrative staff towards teaching activities	5.4	38.2	29.0	17.1	10.3	1006
A supportive attitude of administrative staff towards research activities	3.9	29.8	35.9	18.9	11.5	992
Professional development for administrative/management duties for faculty	5.1	36.5	40.1	11.8	6.5	1002

became more important in reaching decisions. But both the hierarchical and the democratic forms of academic authority could provide quite strong barriers to changes initiated from outside the basic unit. From the 1980s onwards, and reflecting the Thatcherite 'revolution' in public life, power began to shift from the academic collectives to assigned management role holders. Initially, such role holders were mainly recruited (or elected) to reflect local academic values but increasingly more generic and institutionally-defined values (and job descriptions) came to predominate. And this reflected a shift in power from the academic basic unit level 'up' the institution where institutional-level objectives (and 'missions') were being

defined and 'set' both for the academic units and the staff who worked in them. Over the years, a considerable apparatus of objectives and target setting, 'surveillance' and assessment of professional activities, and evaluation of their results and outcomes grew up in most UK universities. New administrative support posts were created to assist in the data management and process supervision, which such arrangements required.

These changes, which consequently led to a shift in power relationships, are commonly referred to as a move from 'bottom-up' to 'top-down' decision-making'. The 'interests' of individual academics and their departments were no longer paramount. Both needed to find ways of 'surviving' in new environments. Many basic units disappeared or at least were renamed. (During the 1980s, many sociology departments were rechristened 'applied social studies' departments, for example). Decisions reflected an increasingly competitive external environment and the strategies developed by institutional leaders in response to that environment. Much was necessarily resource-led, reflecting new funding arrangements and quality assurance regimes, which aimed to steer higher education institutions in publicly desirable directions.

The most recent development of these changes in power relations has been the growth in consumerism – first this was reflected in the language and rhetoric of policy makers, but subsequently in the introduction of student fees and in the compilation of student satisfaction measures and increasing government interest in the social impact of higher education activities. Looking at the recent survey on the academic profession, the data indicate a mix of 'top-down managerialism', 'cumbersome administration', and 'strong performance orientation' as the defining features of today's universities and colleges in the UK, and this is largely irrespective of the type of institution (see Tables 10.9, 10.10, and 10.11).

We can thus summarise the shifts in the balance of power within UK higher education institutions. First, a shift occurred away from individual academic authority to more collective forms. Second, managerial authority gained importance, initially at the basic unit level and then at the institutional level. And third, a consumerist authority took hold, where the satisfaction of external 'customers' for services supplied by higher education became the prime factor shaping behaviour and reward for academics working in higher education.

10.6 Shifts from 'Collegial' to 'Competitive' Relationships Between UK Academics

One must be wary of implying some sort of lost 'golden age' within UK academic life, where everything was shared within friendly and mutually supportive relationships. Rivalries and competition have always been part of academic life, particularly in pursuit of academic reputation within one's area of specialism. But competition has broadened to include a wider range of incentives and rewards within academic

Table 10.9 Who decides what in British higher education

At your institution, which actor has the primary influence on each of the following decisions? (Please check only one column on each decision)	Government or external stakeholders	Institutional managers	Academic unit managers	Faculty committees/ boards	Individual faculty	Students	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
Selecting key administrators	2.7	59.4	12.7	18.9	6.0	0.2	961.0
Choosing new faculty	0.5	16.7	30.3	33.0	19.1	0.4	996.0
Making faculty promotion and tenure decisions	0.2	31.8	14.7	46.6	6.5	0.2	982.0
Determining budget priorities	3.2	57.0	14.4	18.8	6.4	0.1	966.0
Determining the overall teaching load of faculty	1.1	23.0	39.6	18.5	17.2	0.5	961.0
Setting admission standards for undergraduate students	4.0	29.4	21.4	30.5	14.3	0.3	942.0
Approving new academic programs	3.6	26.1	9.8	55.5	5.1		950.0
Evaluating teaching	5.1	13.8	19.9	26.2	20.6	14.5	948.0
Setting internal research priorities	1.5	24.8	21.8	20.8	31.0		934.0
Evaluating research	18.4	18.5	20.4	24.8	17.7	0.1	906.0
Establishing international linkages	0.3	26.7	15.7	9.9	47.0	0.3	909.0

Table 10.10 Views on academic freedom (per type of institution)

Please indicate your views on… the administration supports academic freedom	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Numbei of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
Russell Group	9.4	39.7	32.1	12.0	6.8	234
Other pre-1992	6.0	36.5	36.0	14.9	6.5	397
Post-1992	2.0	26.1	28.1	25.5	18.3	153
Post-2004	4.2	33.3	29.2	25.0	8.3	24
HE College	–	23.4	42.2	21.9	12.5	64
Total	5.7	34.5	33.8	16.7	9.2	872

Table 10.11 Views on academic freedom (according to different academic roles)

Please indicate your views on… the administration supports academic freedom	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Number of responses
	% of cases	**% of cases**	**% of cases**	**% of cases**	**% of cases**	
Professor	10.1	39.9	32.0	9.6	8.4	178
Senior lecturer/ Researcher	6.2	32.2	33.1	17.9	10.6	357
Lecturer	4.6	32.0	37.0	17.6	8.8	284
Researcher	3.2	21.0	41.9	22.6	11.3	62
Other	–	43.5	28.3	15.2	13.0	46
Total	5.9	33.4	34.4	16.4	9.8	927

life, including the acquisition of that initial permanent academic position. And the terms of the competition have increasingly come to be defined outside of the subject-based units and cultures. The ‘rules of the game’ are set at levels beyond the discipline and, as we have already noted, many academics are today based in organisational units, which are not defined in terms of their original disciplines.

In this competitive world, an individual academic’s biggest rivals may be sitting in the office next door. The need to get a good ‘deal’ from one’s institution in respect of such things as research time allowances, teaching timetables, funding for conference attendance, as well as promotion and any financial rewards on offer, can often result in quiet local distrust and rivalry which may actually be lessened with distance, both institutional and national. In particular, recognition for achievements is less likely to have to be shared if the ‘collective’, which produced them, inhabits different locations of institutional and national power and reward. From this per-

spective, collaboration becomes a 'safer' strategy when it is with colleagues in a different institution in a different country rather than with a colleague in the room next door.

A related phenomenon is the growing tendency for academics to inhabit multiple 'worlds', some marked by relationships of collaboration and others marked by relationships of competition. Some of these worlds may be located within the individual's academic discipline, others in interdisciplinary fields; some will be located within the individual's own university whereas others will be located within external networks, both nationally and internationally; and some will be located entirely within the academic community whereas others will spill over into other professional, business or policy worlds.

While to some extent academics have always belonged to networks which cut across institutional and national boundaries, today it is arguably the international networks which provide individual academics with the greater freedoms. In Table 10.9 we can note that establishing international linkages was the only area where a high proportion of UK academics felt that they had real authority. Ball has recently applied social network analysis to both policy and practice in education at all levels (Ball 2012). And he describes how this leads to a redistribution of authority across traditional organisational and geographical boundaries.

10.7 Conclusion: Changing Roles and Changing Boundaries

Many academics working in UK universities today will not be working in departments or schools defined by their original academic disciplines. Many will not have permanent contracts with their employing university. Many will be under severe pressure to produce quality research outputs, while others will have little expected of them in this respect coupled with hardly any time allowance for research and scholarly activity. Many will have administrative and managerial responsibilities within their institutions. Many will be very widely networked, across and beyond their disciplines. And many will be considering a job move beyond their current institution, and possibly beyond higher education altogether.

These conditions of the 'workforce' can be understood in relation to the changes that have been occurring in the management and organisation of higher education institutions. These changes reflect both new demands and conditions from the wider society which in turn reflect a greater centrality of higher education within expanding knowledge economies. From some perspectives, higher education has become too important to be left mainly in the hands of academics.

'Being an academic' can mean quite a variety of things in today's university world in the UK. Academics face choices, of direction and professional identity. While interest-led work continues to have considerable importance for perhaps a majority, the need to be aware of the various professional 'games' that must be played and the rules, which apply to each of them is an increasingly necessary requirement for a successful academic career. And the 'rules' of the game are

increasingly externally set. These changes represent a shift from autonomy to responsiveness as the defining contexts for academic work in UK universities. Many academics strive to achieve a balance between the two and, hopefully, many succeed. Because, if the balance is lost, then the shift from 'university' to 'business' will be complete and the long-held claims for the university's distinctiveness and exceptionalism will no longer be valid.

References

Anderson, R. (2006). *British universities past and present*. London: Hambleton Continuum.

Ball, S. (2012). *Global education Inc*. London: Routledge.

Becher, T., & Kogan, M. (1992). *Process and structure in higher education* (2nd ed.). Abingdon: Routledge.

Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City: Anchor Books.

Bok, D. (2003). *Universities in the Marketplace: The commercialisation of higher education*. Princeton: Princeton University Press.

Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.

Bourdieu, P. (1986). The forms of capital. In G. R. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.

Bourdieu, P. (1988). *Homo academicus*. Cambridge: Polity Press.

Bourdieu, P. (1996). *The state nobility*. Cambridge: Polity Press.

Brennan, J., & Singh, M. (2011). Playing the quality game: Whose game and whose higher education. In D. Rhoten & C. Calhoun (Eds.), *Knowledge matters: The public mission of the research university*. New York: Columbia University Press.

Brown, R. (2011). The march of the market. In M. Molesworth, R. Scullion, & E. Nixon (Eds.), *The marketisation of higher education and the student as consumer*. Abingdon: Routledge.

Browne, J., Barber, M., Coyle, D., Eastwood, D., King, J., Nayak, R., & Sands, P. (2010). *Securing a sustainable future for higher education: An independent review of higher education funding and student finance*. Retrieved from: http://webarchive.nationalarchives.gov.uk/+/hereview.independent.gov.uk/hereview/report

Cerny, P. G. (1997). Paradoxes of the competition state: The dynamics of political globalization. *Government and Opposition, 32*, 251–274.

Clarke, J., Gerwitz, S., & McLauchline, E. (Eds.). (2000). *New managerialism, new welfare*. London: Open University/Sage.

Conway, M. (2000). Defining administrators and new professionals. *Perspectives, Policy and Practice in Higher Education, 4*(1), 14–15.

Deem, R., Hillyard, S., & Reed, M. (2007). *Higher education and the new managerialism: The changing management of UK universities*. Oxford: University of Oxford Press.

Ferlie, E., Musselin, C., & Andresani, G. (2007). The steering of higher education: A public management perspective. *European Science Foundation*, 59–74.

Griffiths, B., & Murray, H. (1985). *Whose business?* London: Institute of Economic Affairs.

Hatch, M. J., & Schultz, M. (2008). *Taking brand initiative: How companies can align strategy, culture, and identity through corporate branding*. San Francisco: Wiley.

HEFCE. (2010). *The higher education workforce framework: Main report*. Bristol: Higher Education Funding Council for England.

Henkel, M. (2005). Academic identity and autonomy in a changing policy environment. *Higher Education, 49*, 155–179.

Kedourie, E. (1991). *Perestroika in the universities*. London: Institute of Economic Affairs.

Kogan, M., & Hanney, S. (2000). *Reforming higher education*. London: Jessica Kingsley Publishers.

Marginson, S. (2009). University rankings and the knowledge economy. In M. Peters, S. Marginson, & P. Murphy (Eds.), *Creativity and the global knowledge economy* (pp. 185–216). New York: Peter Lang.

Middleton, C. (2000). Models of state and market in the modernisation of higher education. *British Journal of Sociology of Education, 21*(4), 537–554.

Naidoo, R. (2000). *Admission policies and the politics of access*. Unpublished PhD thesis. Cambridge: University of Cambridge.

Naidoo, R. (2004). Fields and institutional strategy: Bourdieu on the relationship between higher education, inequality and society. *British Journal of Sociology of Education, 25*(4), 457–471.

Naidoo, R. (2008). The competitive state and the mobilised market: Higher education policy reform in the United Kingdom (1980–2007). *Critique Internationale, 39*, 47–65.

Naidoo, R., Shankar, A., & Veer, E. (2011). The consumerist turn in higher education: policy aspirations and outcomes. *Journal of Marketing Management, 27*(11–12), 1142–1162.

Naidoo, R., Gosling, J., Bolden, R., O'Brien, A., & Hawkins, B. (2014). The branding of business schools: A bourdieusian analysis of leadership and change in UK higher education. *Higher Education Research and Development, 33*(1), 126–138. Special Issue on Leadership.

Politt, C., & Bouckaert, G. (2004). *Public management reform: A comparative analysis*. Oxford: Oxford University Press.

Powell, W. W., & DiMaggio, P. G. (1991). *The new institutionalism in organisational analysis*. Princeton: Princeton University Press.

Pritchard, C., & Willmott, H. (1995). Just how managed is the McUniversity? *Organization Studies, 18*(2), 287–316.

Shattock, M. (2010). *Managing successful universities*. Maidenhead: Society for Research into Higher Education/Open University Press.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state and higher education*. Baltimore: John Hopkins University Press.

Teichler, U. (2007). *Higher education systems: Conceptual frameworks, comparative perspectives, empirical findings*. Rotterdam: Sense Publishers.

Tomusk, V. (2000). Reproduction of the 'State Nobility' in Eastern Europe: Past patterns and new practices. *British Journal of Sociology of Education, 21*(2), 269–282.

Townley, B. (1993). Performance appraisal and the emergence of management. *Journal of Management Studies, 30*(2), 221–238.

Wedlin, L. (2011). Going global: Rankings as rhetorical devices to construct an international field of management education. *Management Learning, 42*(2), 199–218.

Whitchurch, C. (2008). Shifting identities and blurring boundaries: The emergence of third space professionals in UK higher education. *Higher Education Quarterly, 62*(4), 377–396.

ERRATUM

Challenges and Options: The Academic Profession in Europe

Maria de Lourdes Machado-Taylor, Virgílio Meira Soares, and Ulrich Teichler

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The order is: Ulrich Teichler, Maria de Lourdes Machado-Taylor, and Virgílio Meira Soares

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What Is the New Academic Profession?

Ulrich Teichler, Maria de Lourdes Machado-Taylor, and Virgílio Meira Soares

The State of Discourse

In many countries around the world, the university professor was traditionally viewed as a quite respectable species: exceptionally wise, highly devoted to professional work, and trustworthy in the professors' claim that 'academic freedom' and an overall low degree of regulation in the organisational setting are essential for creative work in academia. A *credo* was widespread, according to which a close link between teaching and research is valuable for the quality of work and performance in both areas of activities. All of this tended to be accompanied by a high regard for scientific disciplines as a major base of the professors' identity, a strong emphasis on collegiality among professors and the belief that a high degree of institutional 'autonomy' would be desirable.

The traditional image, though, was not unassailable. For example, the question was often asked whether the cult of the academically free professor in a relatively

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autonomous institutional framework would reinforce a mentality of the absent-minded professor, and the 'ivory tower', and a neglect of possible services to society. Also, the long and selective path to become a professor, filled with learning and productive academic work, was often characterised as carrying an unnecessary burden of exceptionally rough employment conditions and suffering unfavourable treatment from the well-established professors. Moreover, the traditional system underscored so strongly the potentials and rights of the individual scholars that this led to endemic weaknesses whenever coordination and cooperation was at stake, e.g. research in teams, coordination of curricula, interdisciplinarity, or quality assurance. These ambivalent questions aside, most of the recent accounts of the academic profession imply that once upon a time there had existed a relatively golden age for the professoriate.

All recent attempts to characterise the university professor or the academic profession have come to the conclusion that enormous changes have taken place in recent decades. These changes are highly visible in the current situation of the academic profession, reflecting the fact that the changes that the academic profession has undergone have been enormous. The views vary somewhat regarding the major factors, the major changes in the situation, the most salient changes in the characteristics of this profession and the impact of these changes on the actual results and consequences of academic work, but it seems to be a commonly held notion that the extent of overall change is enormous.

The lists of major factors affecting the situation of the academic profession vary, but consistently the quantitative expansion of the system of systematic knowledge in modern society is named as key factor in this framework. This growth can be described most easily by the increase in the number of students: enrolment figures grew more than ten times all over the world within about five decades.

The quantitative growth tends to be explained as linked to a second factor, i.e. the growing relevance of systematic knowledge for technological innovation, economic growth, societal well-being and cultural enhancement. This linkage means, on the one hand, that the quantitative growth would not have happened if it had not such benefits. But, on the other hand, it means that mechanisms aimed at ensuring that higher education and the academic professors become more relevant might gain importance in the process of quantitative growth.

There is less of a consensus as regards the weight of other factors affecting the academic professions, but some of them might be named here, because they are often referred to:

- Changes to the regulatory systems in society which also affect higher education, research and the situation of scholars, even though this sector continues to be somewhat different from the mainstream of social organisation; in the domain of higher education, changing powers, regulations, incentives and sanctions, etc. seem to have led to stronger pressures upon academics to act and perform according to certain expectations which are not necessarily in conformity with their own academic self-understanding;
- changing notions of a good or desirable society, which for example might affect the daily life in academia in terms of a growing professional role of women, calls for 'work-life' balance, etc.;

- the pervasive influence of new information and communication technologies in all life spheres;
- a trend towards spatial widening, often termed – with different undercurrents – as 'internationalisation' or 'globalisation'.

One tends to assume that a profession might gain in status and work conditions, if its core functions are expanding and become more important in society. Thus, expansion of systematic knowledge in society and growth of the system of higher education and research, combined with growing relevance for society, might have led to increased respect in society, improved employment conditions and a work environment more conducive to high quality and relevant work by scholars. But observers agree that the growth and growing relevance of systematic knowledge has turned out to be a 'mixed blessing' for the academic profession. And a glance at other sectors of society suggests similar developments: the increasing appreciation of health has not necessarily raised the status and work setting of medical doctors; similarly, a higher appreciation of leisure and the trend toward an ageing population has not enhanced the situation of core occupations in those sectors.

In trying to explain the ambivalent questions of growth and increasing relevance of the academic profession, we tend to point to different dynamics. The expansion of higher education undermined more or less automatically the social exclusiveness of the professoriate. Also, the role of systematic knowledge has increased within other occupations, visible for example by the fact that the majority of doctoral degree holders nowadays spend most of their professional career outside the academic and research system, thus having challenged the knowledge oligopoly of the professoriate. Growth of sectors in society – this holds true for higher education and research as well as other sectors such as health care – is accompanied by conflicts, asking whether funding of the respective sector can increase in tune with the quantitative growth and other presumed needs of funding. Growth and higher relevance triggers concerns as to whether the growth is needed, the relevance is assured and the quality is appropriate. There might be one issue specific to the academic profession – a profession traditionally characterised by an extremely high degree of freedom in deciding the substance and procedures of the work and an extremely low degree of organisational regulations. As the profession's functions and the relevance of these functions evolved, obviously the trust afforded them by society faded, lacking belief that the academic profession could cope with the challenges of growth and growing relevance if the conditions of freedom and autonomy remained unchanged. As a consequence, a multitude of mechanisms emerged or where strengthened, were aimed at exerting pressures or safeguarding that the academic profession does in fact respond to the changing conditions.

Irrespective of whether the changes in the situation of the academic profession are viewed widely in the light of expansion and social relevance of systematic knowledge or whether a multitude of other factors are taken into consideration, the academic profession tends to be predominantly characterised as having lost something of its traditional charm in recent decades. The various trend assessments might be grouped into three types of narratives:

- The 'deteriorating academic profession' narrative, according to which a loss of status and favourable employment conditions, a loss of freedom as far as academic work is concerned and a loss of power with regard to the regulation of academic life, are the most salient changes. This narrative might be presented with apocalyptic undertones or with the view that the loss of privileged niches of the past is a normal state of affairs when systematic knowledge expands and becomes more open;
- The 'academic profession under pressure' narrative, according to which the academics are exposed to some conditions and pressures which challenge the traditional charm, but the academics themselves cope with that in a mixed way: partly yielding unhappily, partly resisting successfully and partly undermining the external pressures, partly adapting and partly making use of new opportunities. This narrative might reflect admiration for the capability of the academic profession to uphold independence and critical thinking amidst unfavourable press or the expectation that old-fashioned attitudes are likely to fade away over time;
- The 'transforming academic profession' narrative, according to which academics integrate the changing conditions and expectations into their prevailing views and actions. Accordingly, the new academic might be described either – often with a negative undertone – as a typical *homo oeconomicus* and status seeker, being enormously responsive to the dominant pressures, expectations and incentives or – often described with a positive undertone – as a responsible and proactive professional contributor to the emerging knowledge society.

Efforts to assess the overall changes in the academic profession do not necessarily have to adopt the traditional notion of the university professoriate and its more favourable elements as the archimedical point of analysis. Rather, in some instances, a critique of the past is the starting point of analysis:

- whether the traditional status gap between junior staff and professors and the widespread dependency of junior academics on the benevolent professor is counteracted;
- whether inequities according to socio-economic origins, notably according to gender, are reduced or even offset;
- whether conditions are created that favour a higher efficiency of academic work, such as the reduction of cumbersome bureaucracy, smooth management instead of baroque decision-making patterns, growth of support for academic work through an increase in the number of higher education professionals, increased research funding, innovations in the equipment needed for teaching and research, etc.;
- whether academic work gains in quality as a consequence of increasing evaluation activities and incentive mechanisms;
- whether academics strive more strongly for the societal relevance of teaching, learning and research and whether they take over more direct service functions for society.

Finally, there are various questions often raised about the factors influencing the situation of academics and about their actual situation which are neither clearly linked to the notion of the traditional charm of the academic profession nor to the critique of the past of the academic profession and to potentially beneficial innovations. Notably, three themes are often addressed:

- How diverse is higher education, what changes do we note with respect to diversity and what does this mean for the character of the academic profession? This certainly raises the question as to whether it makes sense to assume the existence of a single profession.
- How varied or similar are factors possibly affecting the situation of the academic profession and to what extent do they actually affect the academic profession across European countries? Most of the public discourse talks about conditions and trends in a way which suggests almost universal trends and challenges, and we note manifold activities of coordination and cooperation in Europe aimed at similar moves towards a 'European Higher Education Area' and a 'European Research Area'; in contrast, however, many observers point to an enormous persistence of elements specific to the national level.
- How do the trends of internationalisation and globalisation affect the academic profession? How is this mirrored in the life and work of academics, for example with respect to migration and mobility, collaboration, language use and in the substance of teaching and research?

The Background and the Thrust of this Book

A few decades ago, research on higher education was either a very small field in some European countries or did not exist at all in other European countries. Both the rapid expansion and the widespread student protests in the 1960s contributed to the awareness that one cannot consider higher education as an area in society which self-regulates itself smoothly, but that analysis of emerging problems and systematic efforts for improvement are necessary. As a consequence, higher education research emerged and grew in some European countries in the 1970s. In recent decades, views spread that systematic evaluation is essential for the quality of higher education and that policy decisions are more promising if they are evidence-based.

As a consequence, research on higher education has expanded in some European countries since the 1990s and in others since the first decade of the twenty-first century. It might be justified to estimate that between 1000 and 2000 scholars in Europe have chosen higher education as the prime area of their research. As they are spread across various disciplines, are embedded in varied institutional settings and vary in their prime identities and academic networks, a more precise estimate is not possible. But there are certainly between 10,000 and 20,000 or even more experts who produce in one way or another more or less systematic knowledge on higher education: external consultants, collectors of statistical information, quality and

career officers within institutions of higher education or umbrella organisations, policy and planning specialists, etc. As a result, we can identify thousands of published reports, unpublished accounts, information-based policy statements, etc., produced annually on the state of higher education. It is not easy to get a comprehensive overview, and it is even more difficult to draw a borderline between sketchy accounts, policy-based fabrication of evidence, individual opinions and views on the one hand and sound systematic analyses on the other hand.

For a long time, the academic profession was not among the prime thematic areas of higher education research. A multitude of studies and publications addressed teaching and learning as well as the situation of students. More recently, issues of governance and management became a sizeable area. But clearly, higher education research paid increasing attention over the years to the academic profession. Some decades ago, the social historian Harold Perkin coined the term 'key profession' to point out that the ways of thinking and the issues addressed by academics in the various disciplines eventually shape the substance of work in the related professions. In this volume, academics are repeatedly called the 'sculptors' of the quality in higher education. Terms like this underscore the idea that efforts to change the conditions, the operations in higher education and the impact of higher education, have to pay attention to the central role that academics play as the core profession in higher education.

In the meantime, activities which involve taking stock and systematising the state of knowledge on the academic professions can draw from a wealth of sources. They can take into consideration many interesting concepts and syntheses of experience. When scholars of the Centre for Research in Higher Education Policies (Portugal) invited scholars from various European countries to reflect on selected issues of the academic profession, they could draw from a wealth of prior accounts, from the in-depth knowledge of the invited experts on higher education in various European countries as well as from the results of recent surveys of the academic profession. Partly through the design of the initial concept and the invitation policy, and partly influenced by the options of the presenters and the dynamics of the international conference, four cross-cutting themes emerged which are addressed in several presentations in this book:

- Academic careers and the situation of junior academics,
- Job satisfaction of academics,
- Diversity in higher education systems and its implications for the academic profession, and
- Variety or similarity across Europe of the academic profession.

The subsequent discussion following these four themes aims to take stock of the major lines of thought visible in the chapters of this book and to point out their contribution to an enhanced understanding of the academic profession. It should be added that this volume also analyses some additional themes. In particular, we look at the situation of the academic profession as part of the framework of changing features of governance and management, as well as the relationships between teaching and research from the viewpoints and the activities of the academic professions.

As these additional themes are the prime focus of particular chapters, the major findings and conclusions are not discussed in this concluding chapter, the reader might consult the respective individual chapters.

Academic Careers and the Situation of Junior Academics

In discussing the situation of the academic profession in Europe, we tend to focus on the professoriate, or more precisely on the first rank and possibly also a second rank of core professionals in higher education. The work situation of these professionals is characterised by a high degree of independence and responsibility in their teaching, research and potentially other duties. This reflects the fact that proper employment and proper definitions of tasks were for a long time confined only to mature scholars in most European countries. In contrast, the formative years of scholars tended to be poorly defined and socially risky in most European countries. These formative years were viewed to be a mix of competence enhancement and possibly productive academic activities which followed the completion of a university degree (considered to be the typical entry level to other professions) and came before the appointment to an independent professor position. And most of the professional titles employed for this period (e.g. researchers, lecturers, auxiliary academic staff, etc.) did not explicitly define them as being at a junior career stage of the professoriate, but rather as taking over some possibly poorly defined current tasks, but certainly clearly different from those of the professors. Coupled with this, reports on the professional situation of junior academics some decades ago suggest that the general career was described to such a poor degree that junior academics were very much at the mercy of senior academics. The professions' rules focused on defining the entry qualifications to the professoriate and the appointment mechanism to the position of professor.

The situation academics faced with the expansion of higher education, growing expectations of relevance and increasing managerial power has often been summarised, as pointed out above, as their being exposed to an increasing trend of deterioration. In some European countries it might have been an appropriate depiction of the state of the university professoriate, but did certainly not apply to the academic profession as a whole. Rather, we noted substantial efforts in many European countries – in some countries since the 1970s – to ameliorate the situation of junior academics in higher education.

Protagonists of such measures have often claimed that academia was in danger of losing talent and thus was ultimately risking a loss of quality in the professoriate – that is, unless the employment and work conditions as well as the career prospects of junior academics were not substantially enhanced. This, however, never reached a minimum of consensus in higher education reforms in the various European countries – not surprisingly, though, because many talented young persons remained highly motivated, even under conditions which made it difficult to be active in academia and to move *per aspera ad astra*. Also, one did not observe in the

various European countries a consistent and regular trend in this domain. But some steps towards structuring career paths and towards amelioration of the employment and work situation of temporarily employed junior academics became a regular reform thrust in many European countries.

In the detailed accounts of the developments in Austria, Italy and Portugal, together with some other countries additionally addressed in this volume, we note

- the sorting of junior employment and work according to clear stages and phases of temporary employment,
- the improvement in the employment and work conditions of junior academics in various respects,
- in some instances possibilities were created to transfer to long-term or permanent employment without progression to the professoriate, and
- the introduction of titles which signal a milestone towards a 'real' professorship, such as assistant professor, auxiliary professor, junior professor or even associate professor.

In the countries discussed here in detail, however, these reforms stopped short of establishing a career promotion scheme from junior to senior positions in academia. Appointment to the position of full professor (and in some countries also to second-ranking professorial positions) continued to be decided by open competition among those potentially qualified; such positions continue not to be filled through what often is called 'tenure-track' modalities with reference to widespread practices in the U.S., where an individual person at a lower level might be promoted on the basis of individual assessment.

Over the years, we note in many countries a rise of the typical entry qualifications. In German-speaking countries and regions a doctorate was not sufficient, with the 'Habilitation' (somewhat of an advanced-level doctorate) already serving as the entry qualification for appointment to a position of professor for a long time. In contrast, most professors in Italy and Portugal, for example, had not been holders of the doctorate. In the wake of structuring the junior academic employment and work, some countries introduced clearly distinct positions separating those who had not yet completed the doctorate from doctoral degree holders. And in so doing, at least the doctorate became an obligatory element of the academic career. Surveys undertaken between 2007 and 2010 of twelve European countries across the CAP framework and EUROAC studies showed that of the people in full or associate professor positions, more than nine tenths were doctoral degree holders in six countries, three quarters or more in four further countries, with Ireland reporting a somewhat lower proportion (64 %) and only Italy showing a substantially lower proportion (32 %). Of junior academics regularly employed at least half-time at universities, on average 58 % were doctoral degree holders over the twelve countries. For individual countries, this level depends largely on dominant practices of early recruitment and funding modes of doctoral candidates, but this high average proportion of more than half is the result of a spread of the doctoral degree as the entry requirement even to large sectors of junior academic positions in higher education.

Moves towards clearer structures of employment and work certainly have not only ameliorated the current employment and work situation of junior academics, but seem to have contributed to a stronger meritocratic logic for academic careers. While the article in this book addressing existing gender disparities in Switzerland also refers to other European countries, it comes to the conclusion that opportunities for women to progress in academic careers are enhanced if informal practices of assessment, supervision, promotion, etc. are substituted by more general and more transparent modes.

Job Satisfaction in Academia

In examining effects of higher education reforms, various dimensions of the criteria are taken into consideration. On the one hand, some studies address inputs and processes in higher education, such as practices of governance, management, evaluation, etc., and focus just on these inputs and processes, thereby considering the implementation of what is viewed to be good practice as an indication of success. They just trust their own belief that good rules and processes produce good results. This might be true in many instances, but in other instances, it might become evident that good practices on the part of the regulatory and supervision system are not as powerful or even elicit unintended side-effects. On the other hand, some studies really aim to measure the output and outcome of the higher education system, for example in terms of the careers of graduates or the scholars' publications. These measures might look quite convincing, but they might have limitations as well. For example, a growth of the publication in reviewed international journals might not indicate a growth in 'academic productivity', but rather an increase in scholars' compliance with managerial expectations of being visible there, where indicators of success are employed.

Surveys of the academic profession measure success somewhere in the middle ground between these extremes. For example, the three major comparative analyses undertaken hitherto – all referred to in some of the articles of this book – asked academics to describe and assess their employment and work conditions, to characterise their views on academic matters and their contexts, to describe their professional activities and eventually state their overall job satisfaction. This holds true for the 'Carnegie Study' undertaken in the early 1990s in more than a dozen countries, the 'Changing Academic Profession (CAP)' study undertaken from 2007 onwards in almost 20 countries, and the 'Academic Profession in Europe (EUROAC)' study which took over the CAP data from some European countries and undertook similar surveys in some other European countries in 2010, thus being able to compare altogether 12 European countries. Comparing these studies shows that most university professors surveyed in recent years are overall satisfied with their current job. In 2007 (or the respective subsequent year) these proportions ranged from 49 % in the

United Kingdom to 83 % in Switzerland (among others, the level was 67 % in Portugal and 71 % in Germany). Measured on a scale from 1 = very high to 5 = very low, the mean satisfaction ranged from 2.6 in the United Kingdom to 1.9 in Switzerland (2.3 in Portugal and 2.2 in Germany). The respective rates and values were less positive on the part of junior academic staff at universities. For this group of staff, satisfaction ranged from 43 %/2.8 in the United Kingdom to 76 %/2.1 in Croatia (54 %/2.6 in Portugal and 55 %/2.5 in Germany). A comparison with the situation of the early 1990s is only possible for Germany and the United Kingdom. While both ratings in the UK deteriorated slightly over time (by 0.1 points), those of university professors in Germany became slightly more positive (by 0.2 points), and the ratings for junior staff in Germany improved from the lowest score in the early 1990s (i.e. 3.1) by 0.6 to a more or less average score (i.e. 2.5).

Altogether, an analysis linking the assessment of various features of employment and work conditions shows that the overall satisfaction as measured in these surveys was more strongly influenced by dimensions of work (e.g. interesting work, independent work, etc.) than by dimensions of employment (salary, duration of contract, etc.). Moreover, the difference in the ratings between university professors and junior staff is primarily due to the fact that – as one might expect – junior staff were less satisfied with the employment situation.

This book also comprises an account of a survey undertaken in 2009 on the satisfaction of academics in Portugal. In contrast to the previous studies, the academics in Portugal were asked in this framework about their degree of satisfaction with various individual features in various areas: teaching climate, institutional management, academic colleagues, non-academic staff, physical work environment, employment conditions, personnel and professional development, institutional culture and values, institutional prestige, and research climate. Altogether, the authors come to the conclusion that slightly positive ratings outnumbered slightly negative ratings, whereby satisfaction turned out to be more positive regarding ‘intrinsic’ dimensions and less positive regarding ‘extrinsic’ dimensions, i.e. a similar distinction to that made between ‘work’ dimensions and ‘employment’ dimensions in the analyses of the above named surveys. Most positive ratings which are reported in the satisfaction survey in Portugal relate to academic freedom, competences of academics and cooperation between academics, while most negative ratings are reported regarding equipment and other conditions for research. Thereby academics at public universities in Portugal rated conditions for research and job security less highly than those at other public institutions of higher education, while academics of the latter tended to be more highly satisfied with the institutions’ management and administration.

Altogether the authors of the Portuguese study point out that job satisfaction cannot be viewed just as a subjective feeling, but rather as the key basis of motivation which in the free and highly intrinsically motivated academic profession is a key potential of actual academic work. Thus, it can be viewed as the essential trigger of successful teaching and research in academia.

The Implications of the Diversity in Higher Education Systems for the Academic Profession

When higher education rapidly expanded and seemed to become more socially relevant, the conviction spread that higher education was bound to diversify. For one thing this followed from the basic conviction of system theory, according to which expanding systems are likely to diversify. However, a diversification of higher education was also widely believed to be desirable to serve the growing diversity of talents, motives and job prospects for rising student numbers, to help survive the increasing costs of higher education and to contribute to high quality research, which was not as much in need of expansion as student enrolment.

The most popular description of higher education diversity actually turned out to be the distinction between 'elite', 'mass' and 'universal' higher education put forward by Martin Trow. He described diversification in functional terms rather than in institutional terms; he was convinced that 'mass higher education' and 'universal higher education' would not only serve new demands, but help to protect the place of 'elite higher education' alongside those new and wider demands.

In Europe, four of the six countries addressed in this book have opted for formal diversification according to institutional type, whereby other institutions of higher education (called *Fachhochschulen*, polytechnics, etc.) were established alongside universities. Two countries opted for other solutions: A distinction between universities and polytechnics existed in the UK for a while, but was discontinued by upgrading most polytechnics to universities in 1992; Italy kept a 'unitary' system with almost all higher education institutions called universities and being entitled to grant doctoral degrees. In European countries which established a binary or multi-type institutional pattern, the distinction between universities and other institutions of higher education was not uniform; in all four respective countries addressed in this book, however:

- the right to award doctoral degrees is reserved for universities,
- other institutions of higher education have only a limited role in research,
- study programmes and research at other institutions of higher education are expected to have a more applied or vocational thrust, and
- teaching loads tend to be higher at other institutions of higher education,
- the remuneration of professors is higher at universities, and
- other institutions of higher education have fewer junior staff positions.

Over time, efforts have been made on the part of the non-university sector of higher education to move somewhat closer to universities – a phenomenon often called 'academic drift'. Some experts, however, have pointed out that efforts on the part of universities to become more instrumentally useful for society, in reverse, could be called 'vocational drift' or 'application drift'.

The differences and similarities between the views and activities of the academics from the two institutional types are analysed in this book in the chapter on Germany as well as the differences and similarities regarding satisfaction in the

respective chapter on Portugal. In Germany, university professors seem to be more highly devoted to their profession than professors at other institutions: the weekly hours reported by the former exceed the typical workload of employees much more than those by the latter. The proportion of time devoted to research is quite different, and this is reinforced by the fact that the teaching load for the latter remained more than twice as high as those of the former. There is no definitive answer to the question of whether universities have a distinct academic profession compared to other institutions of higher education, or indeed whether common elements would prevail in comparison to other professions. There is one element, though, where the distinction is not as clear as conventional wisdom might suggest: the majority of university professors are convinced that they are at the forefront of theory and high academic quality, along with a relevant and at least indirectly useful repository of knowledge.

Over the years, the discourse on the character and the extent of diversity of higher education has diverted its attention away from the formal features of higher education systems; instead, nowadays it increasingly addresses informal features, notably 'vertical' differences – as often described in 'rankings' of universities – according to 'quality' and 'reputation'. Most analytical studies agree in their conclusion that the increase of managerial power and the targeted accumulation of incentive and market mechanisms in higher education have increased the focus of attention by academia and the public on vertical differences of that kind. Therefore, it has remained an open question whether vertical differences have really increased substantially or whether small vertical differences are considered to be more important than in the past. And most critical analyses of this increasing public and academic preoccupation with informal vertical distinctions between universities come to the conclusion that the growing emphasis placed on vertical distinctions reinforces adaptive behaviour in the lower-ranking institutions thereby discouraging horizontal diversity. This supports the suspicion that trends of diversification in higher education are not so much pushed by the aggregate of societal demands but rather by the vertical ideology within academia and parts of the public, according to which there is one truth, one Nobel prize and ideally a common view of 'the' quality. Accordingly, the vertical ideology is not predominantly a reflection of the societal demands, but rather seems to disregard the multitude of societal expectations.

In the analyses presented in this book, data on the differences between the conditions of academic work according to informal vertical diversity were only presented occasionally. In the United Kingdom, for example, the academics in more highly prestigious universities are more strongly convinced than those at other institutions that traditional academic values are upheld in their institution. For example, 49 % of academics at the most prestigious universities stated that the university administration supports academic freedom. This view was expressed as well by 42 % of the professors at other 'old' universities (universities that existed before 1992), but by less than 30 % of the professors at newer universities and other institutions of higher education.

One has to add that diversity in higher education is also the result of the variety of options taken by the individual academics. Taking again the example of the

United Kingdom, 24 % of the academics characterised their research as primarily theoretical and basic, while 4 % saw their work as not at all basic and theoretical. A strong applied and practical orientation was reported by 31 %, while 7 % stated the opposite. The respective figures for socially oriented research were 19 % versus 16 % or, for a multi-disciplinary or interdisciplinary emphasis, 29 % versus 5 %. It remains a task for future research to examine what the actual diversity of the views and activities of individual scholars in higher education means for the students, for research and for the direct services of academia for society.

Variety or Convergence Across Europe Regarding the Academic Profession

Many accounts of the changing conditions in academia and society, of the changing situation of academics and of the changing impact of academic values and activities on the knowledge system and the contribution of higher education to society, tend to focus on an 'ideal type' or 'modal type' across countries. Already the initial depiction in this article of the traditional image of a professor implied that this image was replicated across Europe. Any more in-depth analysis, however, is likely to show that there have been traditional differences between European countries. For example, the analysis of the academic profession in the United Kingdom suggests that British universities historically had stronger autonomy from government, but, in turn, individual academics at British universities had less autonomy from their – relatively powerful – individual universities.

Most analyses of the recent history of the academic profession name forces that seemed to be typical all over the world in economically advanced countries, or at least in the majority of European countries: the growing role of systematic knowledge, growth of student enrolment, increasing social relevance of higher education in general, expansion of research, the growing role of research for innovation, increasing power of university management, stronger pressures on academics to be socially relevant and to be visibly productive, etc. And it is widely assumed that the academics' views and activities in the various countries are influenced by these conditions. The belief that there are increasing similarities across countries in the situation of academics, their views and activities has been fuelled in the first decade of the twenty-first century by policies in Europe in favour of growing convergence. This is notably the case with respect to some features of higher education and science described as the 'Bologna Process' and 'Lisbon Process' or with moves towards a 'European Higher Education Area' and a 'European Re-search Area'.

Such policies in favour of convergence certainly have some visible impacts, for example in the spread of a bachelor-master structure of study programmes across countries. But even in areas closely linked to these policies, differences persist. Neither the substantial differences across European countries in the proportions of international mobility among all students nor the percentages of GDP spent on

research seemed to have diminished in the first decade of the twenty-first century. With respect to the academic profession, the surveys undertaken in twelve European countries indicate a substantial variety across countries. For example, university professors in Switzerland seem to spend about 1.8 times as much time on research and related activities as they spend on teaching and related activities, but their colleagues in Poland, Portugal and the United Kingdom spend only 1.1 times as much. The resources available for academic work are rated on average as positive by 69 % of the professors in Switzerland in contrast to 38 % of their colleagues in the United Kingdom. The proportions of university professors stating that they are influential in shaping key academic policies ranged from 26 % in Germany to 4 % in Ireland at the university level and from 63 % in Germany to 11 % in Ireland at the faculty/school level. The overall satisfaction of university professors was positive for 83 % of academics in Switzerland, 80 % in Croatia and 76 % in the Netherlands, while the United Kingdom only managed 49 %.

Obviously, academia across Europe is perceived as facing similar challenges, and everywhere it seems that steps are being taken moving in the same direction. But the specifics of the policies and their related effects might vary dramatically. For example, it seems to be a wide-spread notion that the employment conditions for senior academics and junior academics should not differ too wildly, but in some countries, the opportunities for junior academics to reach long-term or permanent employment on non-professorial positions are extensive while in other countries job security of professors is limited.

Thus looking at the conditions and actual situation of the academic profession across European countries suggests that such conditions apply in all countries and that the *Zeitgeist* is not confined by national borders. But similar 'demands' and 'pressures' are obviously given the same degree of urgency across countries as the protagonists of such 'demands' and 'pressures' advocate.

Concluding Observations

Higher education is often depicted as undergoing dramatic changes in its tasks and functions and as a result of it being pushed and steered to respond to the changing needs of the 'knowledge society', the 'global society', the 'mass education society' or however we like to characterise the directions of change. Such scenarios suggest that the situation of the academic profession is changing enormously and we may certainly assume that academics' views and activities will undergo profound changes as well.

A look at the situation of the academic profession, at their employment and work setting, their values and activities as well as the visible impact of their work, provide evidence of the changes that are taking place. However, the situation is less dramatic and has less of a tone of urgency than the protagonists of such scenarios of dramatic change suggest or expect. Of course, some protagonists of dramatic change scenarios might come to the conclusion that the academic profession is sufficiently

'old-fashioned' or 'wise' as it is pushed and expected to change. But the enormous variety of different expectations, national policies and institutional strategies suggest as well that any scenario about 'necessary' and 'urgent' changes is characterised by exaggeration.

One might argue that the picture of less consistent and coordinated change in the academic profession is a matter of procedure amidst the lack of agreement characterising the situation and the tasks and functions of the academic profession: The academic profession seems to need both pressures and incentives as well as academic freedom, the readiness to serve societal expectations and to pursue knowledge for its own sake, to accept national policies and institutional strategies as well as scepticism and willingness to undermine, to serve technology, economy, society and culture as it is and to uphold a critical function in every respect, to have some common thrusts in the whole academic profession and to opt for completely individual paths and solutions. What looks like moderate change of the academic profession in general, could be a balanced response to the diversity of conditions.

However, new ways of analysing the academic profession might be necessary: less emphasis on averages and aggregates and a more appropriate analysis of the variety of views and activities among academics as well as the causes and consequences of this variety.