Chapter 4
Global Models, Disciplinary and Local Patterns in Academic Recruitment Processes

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4.1 Introduction

Academic recruitment processes are a key dimension of academic labour markets. Not only they organise academic influxes – specifying the scientific and human composition of the academic workforce – they also testify of the configuration at play in each higher education sector (configuration they contribute to shape), and of the embedding of academic labour market in the general economy of the country.

Based on more than 500 interviews carried out in eight European countries and contextualised through national contexts' analysis, this chapter explores and analyses academic recruitment processes as a structuring dimension of both academic careers and organisations. Embedded in career structures, higher education institutions' organisation, and disciplinary identities, recruitment processes can be described as two-sided. On the one hand, a formal framework features the scientific qualifications required for each status, as well as the steps through which an application can be made, at the level of the institution and/or at national level. On the other hand, local practices are often specific, influenced by the disciplinary academic community, the available different types of resources and the position of the faculty in the national and international market, as well as the attractiveness of the private sector. In sum, the organisation of academic recruitment is to be understood with regard to the role of public authorities, of higher education

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institutions, of disciplinary settings as well as of individual strategies in a broader labour market context. They are also characterised by economic relations between employees and employers. As a consequence, the higher education system can be analysed as a market (Crane 1970; Musselin 2001, 2005; Caplow and McGee 2001).

The design of the research distinguishes two sectors of the higher education systems: the university and the non-university sector. The degree of variety of recruitment processes of senior and junior academics is examined according to global trends, to national differences, to institutional settings and to disciplinary characteristics. Recruitment in academic markets has already been largely characterized (see for instance Musselin 2005). Drawing upon this portrayal, the interplay of variables affecting recruitment in a cross-national perspective is analysed.

How are recruitment processes formally organized and how are they implemented? Which actor configurations are they intertwined with? To which extent do they vary according to national settings, institutional types and disciplines? And, finally, which constraints and opportunities are available to individual academics in order to cope with recruitment processes? Particularly, the interaction of diverse models (disciplinary, institutional, national, global) is observed in order to understand how distinctive logics coexist, generating similar and different practices.

Issues have emerged in the interviews, revealing existing tensions at different levels. Eastern European countries display a break between the socialist period and the subsequent democratization. These countries encounter major financial problems reverberating in practices of recruiting and promoting academic staff. Another significant tension arises between national and international dimensions, whereby practices based locally are being, at least partially, replaced by globalized models of academic career. A shift from a chair model to a department organization (Neave and Rhoades 1987) is perceptible in recruitment practices. This has emerged clearly, although to different extents, in almost all countries observed. Internal or local careers are under strain, international staff brings new ways of understanding and practicing the academic work, while mobility becomes, almost everywhere, in academics' discourses, an important dimension of academic careers.

The reorganization of academic careers is visible through the multiple waves of reforms that have changed the regulatory frameworks (Croatia, Austria, Poland, Romania, Switzerland). Competition can be found at all stages of the academic path, not only for professorial positions but also for lecturers, researchers and postdoctoral fellows, even for doctoral students (Austria, Switzerland, Germany). The introduction, in parallel, of tenure track positions for assistant professors, with diverse intensity and scope, has put pressure on academic positions after the doctorate. Thus, postdoctoral positions are increasingly part of academic careers trajectories and more and more difficult to achieve (Finland, Austria, Germany), while international mobility is (also) often perceived as the only choice not to drop out from university. If a doctorate is not ensuring anymore an academic career, it is becoming a compulsory degree also in the non-university sector.

In order to analyse these issues, the chapter is structured as follows: in the second section recruitment is characterized through its formal frame, by a presentation of

how positions are opened and funded and by the specific procedures. Then an analysis according to the status (senior, junior) in university sector and non-university sector is presented. This will take into consideration the distinctive characteristics of the various disciplines as well as the informal dimensions of recruitment. The third part relates to academics as individuals and investigates their constraints and opportunities in the different contexts of recruitment. The final section highlights the implications of the observed convergence dynamics.

4.2 Characterizing Recruitment in Academic Markets

Academic recruitment processes express both the national and disciplinary settings of academic careers and the social and power relationships at play in scientific and academic fields (Bourdieu 1976, 1984), or, to put it differently, higher education configurations.

As a specific dimension of the academic market, whose dynamics reflect the interactions among the actors involved, recruitment is a process through which the need for an academic position is expressed and constructed. Two main procedures can follow: a call can be structured and made public, or recruitment can be made "on direct call", whereby only one person is contacted, and the opening of a position is not made public or is only formally advertised. Subsequently, selection takes place, and, finally, negotiations between the institution and the candidate are conducted in order to conclude a contract (Musselin 2005).

4.2.1 The Formal Frame

Formal rules for appointment represent the tip of the iceberg. Still, they are embedded in authority relationships that can involve academic bodies, e.g. rectorate and board, and/or the state. Thus, all recruitment steps entail specific actors: academics, university management and public authorities. Academics can be observed from two different angles: as recipients of such processes, that is as professionals being hired, and as decision-makers at several stages of the hiring process. University management appears to be increasingly gaining power in personnel policies and is here taken into account as follows: rector and members of rectorate, that is vice rectors, but also, for instance, the gender delegate. Finally, the state is considered contextually: a number of recent reforms have delegated many functions to higher education institutions, however, legal frameworks still constrain much leeway, e.g. in terms of salary levels.

4.2.1.1 Changes in Legal Frameworks, in Selection Criteria, Work Activities and Career Steps Length

Legal frameworks rule a large interplay of dimensions that constrain academic recruitment: from the structure of doctoral studies, to the maximal length of temporary positions, to formal criteria to hire professors, they cover the spectrum of academic careers depending on the country and the degree of (de-)centralization, and the subsequent higher education institutions' autonomy.

In recent years, legal frameworks have changed in a number of countries (Austria, Romania, Poland, Croatia, Switzerland), weakening the public servant status. For example, in Austria, the University Act of 2002 modifies the academic status of the newcomers in the profession from civil servants to private employees (Friedrich 2013, p. 65).

Changes in legal frameworks are usually associated with alterations in the temporality and the career steps, but the pace of change has also accelerated and academics have to cope with varying requirements, so that uncertainty emerges as to the possibility to plan one's own career.

At a European level, the Bologna process has led to the restructuring of doctoral studies, as illustrated by the example of Croatia, where there used to be a postgraduate master degree for 4 years and then a doctoral stage. Now one starts immediately in a doctoral school and has a maximum of 4 years to finish his/her thesis. Enrolment in such a school is compulsory to do a doctorate. Grade average is important for potential PhD candidates as well as their integration in the department: being known by professors as undergraduate students is definitely an advantage. However, criteria for advancement change constantly, in particular criteria to become assistant professor.

> [My] mentor warned [me, that I] should keep track of advancement conditions for they change as constantly as state laws do. (HR45_AC/junior/male)

Beside changes specific to doctoral studies, the Croatian case illustrates the trend towards a shortening of the temporary positions in a career: temporary contracts are more and more limited in length. The same happens in Switzerland depending on the universities and the disciplines due to local frameworks: universities' governing bodies – i.e. rectorates and boards for management, senates and faculty councils for academics – tend to define increasingly the organisation of assistants' working time (for example, 40 % or 50 % for the doctoral work, the rest for teaching-related activities or professor's research assistance), the length of a doctorate (5–6 years as a maximum in some faculties) as well as the salary of research funded PhDs. The same applies to the fixed-term PhD holders positions.

In Austria, with the introduction of the University Law in 2002, a paradigm change has taken place and made it increasingly difficult to obtain permanent positions.

> You can have a six-year contract but afterwards you will have to leave the university. (AT12_MAN/senior/male)

This is in fact the so-called "chain contract regulation", which doesn't allow continuous fixed-term employment contracts for more than 6/8 years (AT19_MAN/senior/male). Although these contracts do not fall into the category of "tenure track" positions, they adopt the same rule: after a specific probation period, the person is either in or out of the academic career. The same rule can be found in Germany, where one cannot work temporarily for a university (in the public service) more than 12 years and, because there are not sufficient permanent positions, people have to leave university definitively (D4_ACA/junior/female, D50_ACA/junior/female).

These examples illustrate an international trend toward the formalisation of the different stages of an academic career. Intertwined with this process, evaluation procedures of the candidates are increasingly formalized. This process is reinforced by national science foundations, which have become significant actors in the academic market. Not only they fund more and more academics and research activities, they also develop formal criteria for scientific evaluations affecting universities' own processes. Furthermore, national foundations provide scholarships and grants that allow universities to overcome contingent or structural financial problems (Poland, Switzerland, Germany and Finland) and, at the same time, they influence the redefinition of the careers organisation.

The trend towards a shortening of temporary positions has ambivalent consequences: first, it potentially reduces the length of uncertainty, by offering juniors the possibility to apply for a tenured position at an earlier stage than previously. Second, it tends to support a formalisation of scientific evaluation criteria and to ask for standardized scientific guarantees others than those coming from the local space: local careers become less of a norm, while a "detour abroad" develops as a way to testify of scientific legitimacy.

4.2.1.2 Degrees and Career Steps

This common trend towards a redefinition and a formalisation of career steps is accompanied, on one side, by an increased importance given to the doctorate, on the other side, for the countries with the *Habilitation*, by a progressive decrease of the latter's weight.

The meaning of the doctorate is changing: it is becoming compulsory in every country and constitutes *de facto* the entry point to an academic career, even in the non-university sector. However having a PhD is a necessary but not sufficient condition for an academic career. The number of granted doctorates has grown in the countries observed, while the available academic positions – from postdoctoral fellowships to professorships – have not increased accordingly.

The *Habilitation*, required for access to professorship positions in countries of German tradition, is less and less required, not only in natural sciences, where in many cases it has not been mandatory for a while, but also in Humanities and Social and Behavioural sciences. In some Swiss and German universities a double career path is observable: the traditional one with doctorate, *Habilitation* and

professorship and the new one with doctorate, assistant/junior professorship and full professorship. These new career paths are supported by national science foundations through the development of specific fellowships: "*Junior Professuren*" in Germany, "*Professeurs Boursiers*" in Switzerland, which somehow affect the traditional chair structure (Kaulisch and Böhmer 2010; Goastellec et al. 2007). However, there are some exceptions to these trends: in Poland the *Habilitation* is still compulsory by law in order to be granted a professorship. Furthermore, informal practices reveal that in German speaking countries the *Habilitation* continues to be a relevant title to legitimate one's academic career. Thus, even without the *Habilitation's* work, publishing a book – which is indeed the product of a *Habilitation* – is considered compulsory to get a position of associate or full professor. The scientific characteristics of the *Habilitation* (i.e. writing a book) are thus translated into a scientific requirement detached from certification. The social transactions behind the use or the demise of degrees such as the *Habilitation* in the career structure reflect disciplinary as well as generational issues, and, more widely, an understanding of what science and scientific practices are about.

In Finland the career steps are called a "four – stage model": assistant (doctoral student), researcher (possibly postdoc by means of external funding, working abroad or funded by the national academy), lecturer, and professor. With respect to universities of applied sciences, a double path is observable: as a teacher, from senior to principal lecturer (for this position a PhD is needed), then the highest title is head of educational matters. Otherwise a career can be based on research. The term "horizontal expertise" is used by a respondent to describe the different types of expertise one can acquire both in teaching and research, without a formalized (vertical) climbing up in the academic hierarchy (FI27_ACA/senior/male). A career in administrative positions (e.g. head of training division) is also possible and seems to represent the highest achievement in terms of non-academic internal career.

In Germany, the position of student assistant is described as a good entry point for the academic career, therefore this can start already during the master program. Then one becomes PhD student (assistant), a postdoc either in the same university or abroad, then assistant professor, associate professor and full professor. The *Habilitation* is not compulsory anymore but it can be still required (for instance in educational sciences D41_ACA/junior/female). A respondent academic reported that he could substitute the *Habilitation* title by practical experience and scientific publications (D48_ACA/senior/male). However, the classical model with doctorate, *Habilitation* and professorship persists, even though there is a perception of a change with the introduction of assistant professorships. While in universities of applied sciences industry experience is important and relevant in order to get professorial positions, the doctorate is indicated as a compulsory title to make a career in such institutions.

In Austria a career starts with a position as doctoral student ("predoc") and a part-time contract, then research collaborator and assistant, as well as postdoc with a full time contract, followed by professorship (assistant, contract, associate, full professorship). In the non-university sector career trajectories go from junior to senior researcher with project leadership, senior researcher responsible for research

areas and strategic development and, finally, to department leadership. In some cases a lapse of time is defined to conclude one's own studies: 4 years for the doctorate, 6 years for the *Habilitation*. A doctorate within 4 years would allow for a position as tenure-track assistant professor. However, these positions are rare. In all other cases, one gets a "rotating position", which comprises maximum 4 years plus 4 years (AT11_HEP/female). Only then, by competitive call, one can obtain a permanent position either as senior scientist/lecturer or as full professor. According to our interviews, there is no clear career path outside the tenure track which allows for a fixed-term assistant professorship, then a tenured associate professorship and, in the end, a full professorship. Yet, this progression is still sporadic due to cost reasons. Hence, for instance, external lecturers find themselves in a vacuum, for they depend on their teaching contract to work in the university but they are not able to build a concrete path of advancement, as they do not have enough time for research activities.

In Irish universities of applied sciences, after the position of senior lecturer, the only possible promotion is becoming head of department, head of school, head of faculty, assistant registrar, and registrar. These positions are administrative and provide increasing managerial responsibilities (IE59_ACA/junior/female). The doctorate is becoming more and more important and many lecturers work to get this title in order to offer a more academic profile.

Poland presents one of the clearer career paths: research assistant, assistant professor, associate professor, full professor. This advancement is regulated by law and is framed by getting the necessary degrees in due time.

In Romania an academic career starts with a position of tutor (however this position will be abandoned soon), then of assistant, lecturer, assistant professor, associate professor, professor. Doctorate adviser is an additional title that is granted to full professors and allows them to supervise doctoral theses. According to some respondents, it is the legislation that establishes criteria to measure career progress (RO4_AC/senior/male, RO22_AC/junior/male).

In Switzerland an academic career can start by becoming student assistant, then assistant (which covers both PhD students and postdocs); the title of assistant professor depends on the higher education institution and on the discipline. In parallel or afterwards one can be associate professor and then full professor.

Finally, diversity between and sometimes within countries remains important when it comes to the polymorph structure of academic careers. The career steps, which entail also the different entry points for building an academic career, are more or less similar in the first stages: becoming a PhD student and working as a teaching, research and/or administrative assistant. After the doctorate, opportunities bifurcate into two main paths: first, as already mentioned, in countries of German tradition, work as assistant continues in order to complete the *Habilitation*, to become a *Privatdozent* and wait for a professorial position. Second, a series of postdoc positions follows, mainly in a different university and/or abroad and the passage to a professorial position is not clearly defined, as it can happen after a couple of years or several more. In this case, a position of tenured track assistant

professor can exist as an in between. In all, both paths have the same effect: they provide the institution with a "screening period" allowing the evaluation of the academic *in situ* before hiring him or her definitively.

Countries also differ regarding the degree of co-existence of research-only positions and teaching and research ones. A general trend seems to be characterised by the development of research-only positions at the level of doctoral studies as well as of post-doctoral studies. This phenomenon may be interpreted as a consequence of an increased number of PhD students but it also illustrates the development of external academic labour markets where internal markets used to be the rule. The development of these research positions in the early stages of a career is connected to the internationalisation of the academic careers.

The analysis of the eight countries underlines the complexity of careers organisation, as career paths are manifold, so that an academic may have different alternatives (internal vs. external career, postdoctoral positions vs. tenure track) which can be or not be permeable, implying path dependency in choice or opportunity.

Beside the classical structural diversity of academic careers, in the end, three main nexuses appear to be structuring academic career path: the possibility or the constraint for internal or external career; the research and teaching activities distribution among faculties, and the academic – administrative potential articulations (see Table 4.1. hereafter).

4.2.2 Hiring and Funding: Two Sides of the Same Coin

Investigating the funding of academic positions grasps the interplay between institutional and third party funding as well as the research-teaching work division.

While professors are generally recruited permanently on institutional funding, PhD students and members of the non-professorial academic staff are increasingly hired on non-permanent contracts based on third party funding. On the one hand, temporary positions are often developed to meet teaching needs: in Austria and Germany, teaching – whether or not based on third party funding – is more and more devolved to the lower levels, accordingly professional requirements and salaries for lecturers are decreasing. On the other hand, in other countries, like Switzerland, an increasing number of PhD students and assistants do exclusively research on the basis of third party funding – and in some cases administrative tasks. Both models coexist, to different extent, in our various countries.

As some interviews schematically depict:

> There are new patterns of career, whereby people do only research for a long time, then come to teaching and do not have enough experience. The double career teacher/researcher doesn't exist anymore and it is not any more important in order to do an academic career. (CH25_ACA/senior/female)
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> . . . [young scientists] are not connected to the chair, because this generation of new scientists' doesn't teach and then possibly becomes an assistant professor, without knowing responsibilities of the chair. (D2_ACA/junior/female)

Table 4.1 Career paths in eight countries

Switzerland		Finland		Germany		Austria		Ireland		Poland	Romania	Croatia
University	Non university	University	Non university	University	Non university	University	Non university	University	Non university	University sector only	University sector only	University sector only
Student assistant	Student assistant			Student assistant								
Assistant, PhD student	Assistants (new category emerging)	Assistant	Lecturer/ researcher	Assistant	Assistant (doctoral student)	Predoc	Doctoral student		Assistant lecturer	Research assistant	Tutor (to disappear)	Junior researcher/ Assistant
Assistant/MA postdoc abroad/ PrivatDozent	(Industry experience)	Researcher		Postdoc (abroad)	(Industry experience)	Research collaborator (*wissenschaftlicher Mitarbeiter* – 4 years)	Junior researcher	Lecturer			Assistant	Higher assistant
Maître d'Enseignement et de Recherche	Lecturer/ researcher		Senior lecturer/ Senior researcher			Assistant (6 years)		Senior lecturer	Career grade lecturer			
Assistant professor		Lecturer	Principal lecturer	Assistant professor	Professor	Contract Professor (*Vertragsprofessor* 7 years)	Senior researcher		Senior lecturer	Assistant professor	Assistant professor/ lecturer	Assistant professor
Associate Professor						Assistant professor (tenure track)		Associate professor		Associate Professor	Associate Professor	
Ordinary professor	Professor or management position	Professor	Head of training division	Professor	Management position	Professor	Department leader	Professor	Management position	Professor	Full professor	Full professor

This table identify, for each country, the different types of academic status existing in the university sector and in the non-university sector, going from the first type of available position to the highest status existing. This allows to compare the complexity of the academic careers depending on the national and sectorial contexts as well as to identify potential structural homology lying beside status named differently

In Finland, Poland, Germany and Switzerland there has been an increase in externally funded scholarships, so that postdocs have the opportunity to finance their own position through a grant by the national science foundation. This is not without consequences: in Finland the increase in the numbers of PhD students is linked to the development of externally funded positions. According to a junior female academic, getting external funds is a long process and besides these cannot always cover the whole duration of studies (FI15_ACA/junior/female). This puts doctoral students as well as their supervisors under pressure. Even worse is the situation of postdoc positions, which are structurally problematic: because there is little funding, they are frequently part-time. However, tenure track assistant professor positions have been introduced to consolidate careers (FI20_MAN/senior/male).

In Austria, too, positions can be funded externally or by the university. The first appear as more vulnerable, for they usually focus only on research and have time limits according to the project and not according to the necessities of the assistant, e.g. publishing, finishing his or her thesis. Hence, those who are funded externally would like to change to a post funded by the university. But the context is not necessarily favourable: the board/ministry imposes 40 % permanent positions and 60 % fluctuating positions in a university, while not respecting this rule implies a cut in funds (AT19_ACA/senior/male). As a result, the number of externally funded PhD has increased. Those are hired on shorter terms than the traditional doctoral assistants, and have to articulate their PhD within the constraints of a collective research project.

In Croatia and in Romania there are currently serious financial problems, due to the recent economic crisis: a Romanian senior academic reports on the government having barred advancement to higher academic positions (RO27_ACA/senior/male). In the same vein, in the Croatian case, the opening of new job positions has been restricted: very few positions for junior staff have been created, while a large number of new PhD is produced.

The general trend towards the development of third party funding positions, essentially for PhD students and post-doc, is intertwined with the development of research activities. More widely, one could argue that the first period of higher education massification has led to the recruitment of a large number of academics, mostly on permanent positions, to face teaching needs. In a less dynamic economic context and with changes in the governance of higher education, the last decades have seen the development of non-permanent positions: mainly based on internal funding for teaching positions, on third party funding for research ones. This diversification blurs the traditional professional boundaries and the division of labour within the profession.

4.2.3 Recruitment Procedures

Procedures of candidate selection reveal who contributes to decision-making and by which prerogatives, that is from the selection of files to the last rank where one candidate is proposed.

Determinants of actors' involvement in recruitment depend on the status of the opened position and on the funding source. The higher the status of the person recruited, the more formalised the process by the higher education institution's governing body, be it faculty, rectorate or university board. Depending on whether the position is permanent or not, the degree of formalisation differs. Thus, recruitment implying an important and long-lasting financial investment (e.g. full professors) tend to be governed at university and faculty level through increasingly formalised processes, while short-term recruitment based on third party funding (e.g. for PhD students and scientific collaborators) are more prone to individual academic appreciation. Accordingly they are also less formal in their implementation.

However, a trend towards recruitment processes to come closer to those implemented for the professoriate is observed for the other stages of the academic career. Promotions, too, are increasingly concerned with the formalisation of the procedure and criteria, particularly when assistant professors are granted a tenured position. *De facto*, the procedures are the same as in recruitment.

4.2.3.1 Recruitment of Professors

Professorship is mostly granted permanently from associate to full professors (with the exception of Finland and Austria, where not all professors have permanent positions), while assistant professors may be with or without tenure track (in the last case, assistant professors are usually hired for 6 years).

In Switzerland most respondents describe standardized procedures: opening of an official and public call; establishment of a recruitment commission comprising dean, internal and external professors, a delegate of the intermediary body, a representative of the rectorate, and the delegate of the equality office (the latter without voting right); selection of the best candidates; organisation of interviews; possibly a trial lecture; production of a ranking – usually a short list of three names – by the commission; validation by the faculty council; validation by the rectorate or the board. Lastly, while before the status of full professor was often perceived as the retribution of a long career, a trend towards an early recruitment of strongly internationalised academics with sound research records is now observed in some disciplines. In some fields, hiring of professors is standardized in its formal selection process, evaluation and required criteria depending on the national higher education system or on regional, institutional or disciplinary arrangements. In Switzerland, professors have historically decided and influenced this process, but major differences among institutional types emerge: while in universities job

descriptions and positions are decided by the concerned faculty with its dean, in federal institutes of technology and universities of applied sciences president and board control key phases of the process and decide on final candidates with a veto right.

In Poland some respondents called professorial recruitment a "*façade* exercise", where loose criteria, centrally defined by the state, are easily shortcut by senior professors within faculties (see Sect. 4.2.3.6). The Polish system has been criticized by many interviewees: allegedly it is based on inbreeding, often there is no open call and potential candidates are not aware of new available positions. It is centrally organized by the ministry or a special central committee for academic degrees and titles, setting formal requirements for each degree. Departments can set their own requirements, which are usually more demanding. However, the *Habilitation* as well as all the other promotions are said to be awarded in a "non-transparent way", to be "a fiction" (PL44_ACA/senior/female). Even open calls are called a *façade* (PL1_ACA/senior/male, PL4_ACA/junior/female, PL44_ACA/senior/female, PL48_ACA/junior/male) *a* legendary joke (PL54_ACA/junior/male) because of the opacity of the procedures. Professors offer positions to their assistants, selections are conducted in a way that everybody knows who will win. In any case, internal candidates seem to be favoured, for criteria are extremely specific in order to select a predefined applicant. Academic calls do not require interviews but only documents (PL23_ACA/junior/male), while the process is usually very lengthy (PL55_/ACA/junior/female).

Profiles of candidates also depend on the discipline. In this perspective, for instance, engineering and life sciences can favour industry experience. A German junior male academic relates that in the Natural Sciences and in Engineering, practical experience is well accepted and people can go back to university (and get a professorial title) after 3 years training (D55_ACA/junior/male). A German senior male academic reports how attractive life sciences are nowadays: in the last years, the domain has been expanding (D27_ACA/senior/male) and competition for attracting scientists has become fierce: in Germany universities contend themselves the best researchers. This has brought to a high turnover, contracts may be broken before they expire, as scientists migrate to other universities in order to profit from better facilities and laboratories.

In Croatia the National Science Council has established formal criteria for career advancement based on time frame and number of publications. Although advancement criteria vary depending on the disciplines, and papers are differently classified according to the type of journal they have been published in (international, national, with foreign reviewers or national ones, if the journal is indexed, in which databases, etc.), in average three papers in peer-reviewed journals are required to become assistant professor, then six such publications are needed for tenured professorship. According to Croatian junior female academic this constitutes a "minimum common denominator" for quality in recruitment (HR6_ACA/junior/female). Hence, even though also class work and international experience are taken into consideration, quantitative measurement of publications seems to be the

basis of progress in academic career, whenever an opening is at hand (HR16_ACA/junior/male).

In Austria procedures are equally perceived as non-transparent, while some interviewees consider that the rectorate has a corrective function in order for recruitment to be more uniform (AT01_ACA/junior/male). As in Switzerland, a member of the equality commission is active in recruitment processes (AT09_ACA/senior/female).

In Switzerland, as well as in other countries to different extents, a certain convergence of criteria concerning full professors can be observed, like for instance negotiating the number of assistants per professor and the teaching hours. The formalisation of the evaluation processes to access tenure seems to be negotiated between faculty and university. Other instruments are salaries, working conditions such as offices, number of assistants, research budget, sabbaticals, teaching hours. With respect to academic status and tenure track, the university defines the range of possibilities while faculties and departments decide how to use them.

4.2.3.2 Assistant Professorship and Tenure Track

In Germany, tenure track has been introduced as a way of providing a foreseeable career path with predefined procedures and to counteract the fact that an assistant used to work for a professor for up to 10 years. It is advertised by an official act, but then processes are allegedly not transparent, texts are tailored to certain candidates.

In Switzerland, from assistant to full professors recruitment procedures are standardized and follow the same rationale: international competition, research-based reputation (publications are required and reviewed by a scientific committee). These procedures have been introduced quite recently and have been imposed by the rectorate (e.g. at History) or agreed within the faculty (Business Administration and Chemistry), thus reflecting different disciplinary identities on the one hand, different positioning in the academic market on the other hand. Planning of professorial positions has been formally introduced, however, only at the faculty of Business Administration this seems to be implemented thoroughly: in Chemistry full professor titles are still favoured, in History assistant professors are usually recruited without tenure track, they are funded by the national science foundation or by private foundations. In the first case there is little involvement from the faculty and from the department, as it is the individual getting the scholarship from the national foundation that decides in which university she or he wants to work.

> I don't know of any expectation of my university. I am free to do as I like it. I am a researcher [an assistant professor funded by the national science foundation] and I don't feel like I am connected to this institution. (CH21_ACA/senior/female)

In the second case, the inclusion of a representative of the private foundation changes the actors' configuration: the rectorate manages the relationship with the foundation and intervenes significantly in case of conflict between the foundation

and the faculty, for instance on the selection of a candidate (CH24_AC/senior/male).

Tenure track exists only in the university sector, but disciplinary differences in its use according to discipline can be detected. According to a German junior male academic, in Economics, the minimum age to get a tenure track assistant professorship has been lowered to 27 years (D21_ACA/junior/male). Careers go faster in Life Sciences, while in the Humanities, scientific maturity is advocated at a later age, what can also be analysed as a rationalisation for preserving the chair-based organisation.

> Especially in jobs in the Humanities educational field, where personal maturity is very important, I do not want to imagine a 30-year old professor teaching 20-year old students. (D33_ACA/senior/male)

The tenure track instrument allows the hiring of younger academics for professorship positions, however, its concrete use appears to depend upon disciplinary fields, e.g. economics seem to comply more thoroughly.

4.2.3.3 Intermediate Body Recruitment

With the exception of Ireland, Romania and Switzerland (in the case of *Maîtres d'Enseignement et de Recherche*), where lecturers and researchers may be granted permanent contracts, lecturers, researchers, assistants and scientific collaborators are characterized by fixed-term employments. Periods may be decided by the duration of research projects or the need for educational activities, by the timeframe provided institutionally in order to carry out a doctorate (from 5 to 6 years) or a *Habilitation* (from 3 to 10 years). In the case of senior assistants, limited time is accorded as a rule (e.g. in Switzerland 6 years). After the *Habilitation*, *Privatdozenten* have to wait until they are granted a professorship in Germany, Switzerland and Poland. Nevertheless this position should not be overestimated, as it funds only minor educational duties (and not research) providing little financial support.

Standardization of recruitment procedures can be found in most universities, where rectorates try to impose transparency and competition also at the lower levels. In this perspective, the introduction of doctoral schools is functional to the formalization of PhD student hiring. In general, however, professors remain in charge of selecting academic staff in a flexible way, in order to respond to contingent needs of research, teaching and students' supervision. Spontaneous applications for a doctorate continue to be made by prospective students and, as many respondents all over the countries observed, previous acquaintance with professors, in spite of open calls and numbers of competitors, represents the greatest advantage for recruitment (see Sect. 4.2.3.6). In sum the intermediate corps is somehow oppositional to the professoriate, in that particularly in the chair model, it holds a very different status, accordingly gets very different type of contracts and exercises diverse professional functions.

In Germany the recruitment process has not changed a lot

Now there is more expert advice but there has always been international cooperation. (D31_MAN/senior/male)

Overall performance is taken into consideration. (D49_ACA/junior/female)

In Ireland appointments have become more professional: criteria are precise and relate to teaching, research, contribution to the institution and to the community. Internal and external committees review applications and panel interviews are conducted. According to a senior male academic one needs a minimum of 3 years in a position to be promoted (IE45_ACA/senior/male). A trend is visible in the hiring of young staff who are offered part-time contracts and who are very active in research. This creates a gap with the existing academic personnel and pushes the latter to build more scientific profiles, for instance by doing a doctorate. A senior male academic details how promotions are evaluated: from career lecturer to senior lecturer 40 % research, 30 % teaching, 30 % contribute onto the institution and the community, i.e. community service. From senior lecturer to assistant professor 60 % research (peer reviewed articles, book chapters, conferences), 20 % teaching, 20 % contribution (IE7_ACA/senior/male). According to another senior male academic also involvement in administrative tasks is considered (IE55_ACA/senior/male).

In Austria the role of professors in hiring assistants (predoc, postdocs towards the *Habilitation*) is underscored: a female junior academic testifies that those who are mentored get a predoc position (AT30_ACA/junior/female). In other words, assistants depend on professors for changing their position and moving upwards in the hierarchy. Nevertheless, formal procedures are in place for the recruitment of predoc: a letter of application is required and 1-h interview is carried out. One has to show experience in research projects, the appropriate age, and publications. An Austrian female junior academic feels enormous pressure to comply with certain expectations (AT37_ACA/junior/female), another complains about writing research proposals, while the professor agrees to take on the formal leadership (AT38_ACA/junior/male). In case of (already) funded research projects, recruitment is more informal, without application and the candidate is approached directly by the professor.

Assistants are recruited through a quite formal process in Switzerland: publication of the position on the Internet, selection of the applications. This said, informal discussions between the professors hiring their doctoral students – whom often had already met at Master level – and postdocs, bringing the candidate to be hired, are frequent. Depending on the departments (thus, it is the level of the disciplines that is concerned), the procedure differs: in some a PhD commission decides on candidates, while in others, students are hired by single professors. In both contexts, spontaneous applications may be taken into consideration. Although assistant recruitment takes place through a call, these positions can be obtained also by replacing someone else (maternity leave, sabbatical or scholarship abroad as in the case of a History department). Given the importance of being assistant to a full professor and the requirement for the *Habilitation* after the doctorate in the German speaking part of Switzerland, these positions are often occupied by postdocs, who

thus hamper many PhD students from climbing the hierarchy. The latter are often recruited on research projects, i.e. on more precarious positions without teaching activity. In this case recruitment is related more to the professor's choice and his/her necessity. According to a Swiss senior male manager (CH19_MAN/senior/male), university management wants to introduce transparency and competition of recruitment processes also at lower level and discusses nowadays the possibility to select the best master students. This is somehow already implemented at a History department, which can select PhD students for its doctoral school, while young graduates are invited to work for a limited period of time in order to get their PhD research funded. Although this is reported as a positive novelty and an opportunity to enter the academic career (CH24_ACA/senior/male), it should be noticed that these students are recruited with a lower salary than assistants, their contract is limited to 1 year, after which they may be selected out if they do not receive funds for their PhD proposal.

The hiring of the intermediary body suggest that the chair-based organisation, characterised by the power of full professors on hiring assistants and defining their tasks, resists the implementation of a more departmental based one. The latter is implemented formally, but informally professors maintain their structuring power.

4.2.3.4 The Non-university Sector

In the non-university sector a professorship is granted through different procedures and processes. Professors are appointed after some years of activities in teaching and research. It is an internal procedure disconnected from disciplines, as the title of professor is not related to a chair, it is not even mandatory in order to be institute director and research leader. In Switzerland, the committee (professors, representative of the council, externals) as well is unrelated to the specific disciplines: the candidate is proposed by his department head, then the school board decides.

> Professors: everybody applies spontaneously, this title is unrelated to disciplines. (. . .) The commission for evaluating professorships is made of traditional university professors. How can they really assess? I have never applied to become a professor because I don't want to be assessed in this way. (CH8_ACA/senior/male)

The evaluation procedure relates to studies (doctorate is favoured), applied research with regional scope and competitive projects, quality and number of scientific publications, quality of education, institutional activities, possibly activities and acknowledgements in other universities, "exceptional performance" in arts. This can be explained by the universities of applied sciences' history as educational institutions, with former professors and teachers constituting still an important part of the staff. Moreover, teaching activities can be extremely intensive (e.g. in Switzerland up to 22 hour a week), under these conditions, it is not surprising that part of the staff is mainly involved in teaching and cannot take up significant research tasks.

At universities of applied sciences career paths and recruitment at non professorial level appear to be distinct from those of traditional universities. Career stages

are more differentiated, first because they are organized separately according to teaching and research. Even though in order to become professors both activities are required and only the so-called teachers/researchers have access to these positions (Switzerland). In fact, procedures to hire teachers/researchers are more formalized than for the other levels and include various steps (public call, evaluation committee, interviews) similar to the professorial position in universities.

Hence, entry at universities of applied sciences depends more on research activities and experience in industry than on teaching, which is seen as a task that can be taken up successively, once someone has demonstrated to be proficient in managing research projects and acquiring external funds. Positions of researcher and senior researcher are mainly granted at the level of the department (i.e. faculty), while the relevant professor or institute director is in charge of the whole process.

Even if universities of applied sciences may grant permanent positions to their staff, researchers, lecturers and assistants are increasingly hired on a temporary basis and paid through external research funds. This means also that a candidate may have to get his research funded before getting a contract. The same is true for PhD students, who are affiliated to a university, as universities of applied sciences usually do not grant doctorates. Assistants are usually selected by professors among the best students at bachelor and master level and fulfil coordination tasks within research projects.

Finally, a distinctive characteristic of academic careers is the rise of the research manager profile, who has to be skilled both in management (strategy, funding, staff) and administration (accounting, controlling). This has been indicated often as a mandatory competence for career advancement, for instance in order to manage research projects, teams and budgets as well as for coordinating educational programs.

Industry-related working experience is necessary as well. To make a career in universities of applied sciences one has to assume responsibilities and show command in management skills, commitment to the institution, pedagogical expertise. Cooperation with stakeholders, foreign languages, project management, teamwork and student supervision are also mentioned by respondents.

In three countries (Germany, Ireland and Switzerland) elements of academic drift are observed. In Germany and Switzerland more research and publication outputs are required, as well as international networking and, accordingly, the use of foreign languages.

> Careers are becoming academic: degree, PhD and postdoc, young people are doing academic careers, there are now professorial councils, they are getting important but they do not manage anything. (CH10_ACA/senior/male)

A German senior male academic confirms that the PhD has become an important requirement (in Engineering, D57_ACA/senior/male). In Ireland, increasingly the doctorate figures as a necessary requirement to advance, together with research activities and outputs, and acquisition of research funding. However, an Irish junior female academic states that promotions are still ruled by in-house politics, seniority

instead of meritocracy (IE37_ACA/junior/female). Finally, in Finland, and Austria, indications of academic drift couldn't be detected from the interviews.

4.2.3.5 Some Disciplinary Features

Criteria for advancement are not identical in all disciplines. In the Natural Sciences research is central and depends upon facilities, groups and science dynamics. Accordingly, progress in the academic hierarchy is affected by some boundary conditions: first, publishing is harder and slower, because work in the laboratory requires time and patience (HR17_ACA/Physical Sciences, Mathematics, Computer Sciences). However, a Romanian academic in Mathematics also argued that empirical sciences are more favoured than theoretical sciences, for the latter it is more difficult to publish, given the requirements of most scientific journals. Secondly, being part of a team is the only way to achieve performance in research, then to publish. Thirdly, in Physics, a researcher must be ready to switch to different groups (thus change research topics) in order to remain in academia. He or she therefore has to be flexible and not too much specialised. In general, doctoral students in these disciplinary fields are primarily active in research. Even if PhD students are funded through the institutional budget, they rarely teach in courses (although they often coordinate exercises in laboratories).

In Medicine there is a strong division between clinical work and basic research. This structures four different types of careers: to become a clinical doctor, to get a professorship and do basic research, to be active in industry research, and, finally, to do research in fields belonging to the natural sciences (e.g. life sciences). Moreover, for an academic path, international experience in the US has been mentioned by several respondents as a significant advantage.

In the Humanities, being attached to a chair is still considered important in order to get a higher position. In History the assistant position is deemed important for career prospects, for both postdocs and PhD students. Being an assistant means being connected to a full professor, or to a chair, and be able to do teaching, research and administrative tasks related to student support. However, in Switzerland, this position is limited to 50 % part-time, hence some interviewees (maybe already in their 40s) have found complementary professional activities outside the university.

Disciplines constitute still an important space of constraints and opportunities. In engineering, if one is specialised in a specific topic, he/she risks not to have an opening for a professorial position (FI3_ACA/Engineering, Manufacturing and Construction, Architecture). Moreover, disciplines affect differently academic career paths (RO10_ACA/Physical sciences, Mathematics, Computer Sciences) and modify them constantly, through their own evolution (RO29_ACA/Business Administration and Economics).

Poland has been described as a system heavily based on disciplines, where professors are able to rule almost without control. According to a manager in Business, Administration and Economics, this has been criticized and characterized as one of the reasons why the Polish system is rather immobile and difficult to

reform (PL49_MAN/Business Administration, Economics). It doesn't come as a surprise that interdisciplinarity is considered an advantage by some (FI9_ACA/Medical Sciences and Health Care). On the one hand it is considered a way of doing research that is becoming more and more relevant, in this respect academics have to adapt themselves. On the other hand it is perceived as a way to overcome disciplinary silos defended by senior professors.

4.2.3.6 Recruitment: Balancing University Missions, Social Competences and Personal Attributes

In Croatia, recruitment and advancement are enhanced if one works for the benefit of his or her own institution (e.g. attracting funds, working in committees), is active in relation with curriculum activities and is able to manage websites. Networking includes personal acquaintances, which can make a person advance in spite of not fulfilling formal criteria or in addition to them (HR60_ACA/senior/female).

In Finland, beside publications, career is said by the interviewees to be based on scientific autonomy after the doctorate, passion for research, success in getting research funds, building international networks, ambition and persistence as well as "insecurity tolerance", adaptability, profiting from a good supervision. Internationalization in early career is also underscored together with cherishing the informal social side of a career, or, as a Finnish respondent puts it: "to be part of the in-crowd" (FI65_ACA/senior/female).

In Austria our respondents mentioned establishing international contacts early on, gaining insight into the research field, enjoying mentoring through senior professors. Moreover, project acquisition and leadership, proposal writing, risk taking, internal and external networks, own project ideas are mentioned. From a more personal perspective, a junior academic should have a partner with a fixed income in the first 3 years as a postdoctoral fellow, be ready to compromises, be accepted by students and contribute to their professional future, obstinacy. A significant change is claimed:

> Before one had not to fall out of the favour of your professor, now [there are] measurable scientific qualifications and international experience. (AT33_ACA/senior/male)

Working independently in one's own research area and acquiring a broad knowledge of the field while specializing on a certain area is also seen as an obligation in early career. Postdocs have to publish but also develop their own ideas. Dealing with norms, competition, academic habitus and hierarchies "without taking it personally" (AT15_ACA/junior/female) is fundamental in order to be academically successful.

In Germany, career advancement is also based on the ability to raise external funds, expertise in committee work, fruitful link between research and teaching, networking internationally and with "relevant" professors. Subsequently perseverance, discipline, strong personal interest, language skills, teaching quality are also considered important characteristics. Advanced education to get management skills has become more and more a requirement for career advancement. Even though

formal applications are the rule at all levels, many interviewees recognize that acquaintance with professors and with the university structures is important.

Requirements for career in Poland, besides getting the relevant academic degrees on time, are the following: having the right ("known and likeable") mentor, be successful in research and accordingly publishing more and more, be known and agreeable by senior academics, being aware of the informal hierarchy. Social networks within one's own discipline and department are relevant in order to be awarded degrees by associations of peers and to be introduced to key people. From a personal point of view, an academic should be ready to abandon large parts of his/her social and family life and to develop some "egotism and assertive attitudes".

In Romania requirements for academic career are: receiving a formal recommendation upon graduation based on good academic results, being able to exploit the various institutional and financial opportunities, carrying out research intensively, possessing good communication, psychological and pedagogical skills. International experience in research projects and in conferences, in professional associations, participation in scientific events and being a reviewer in international journals are also considered very important responsibilities for one's own and students' development. Furthermore Romanian interviewees also indicate teaching and third mission as relevant dimensions of involvement.

> Teaching talent as a passion to convey to the younger generation the desire and instruments to investigate the new (RO51_ACA/senior/male).

This is followed by interest for students, cooperation with all parts of the national educational system, contribution to community affairs life, being interested in society dynamics.

In conclusion, three categories of characteristics appear as being differently articulated in recruitment: those related to university work – research (mainly), teaching and third mission – those featuring the social competences needed to cope with academia – often related to an international dimension – and, finally, the personal attributes – passion, tenacity, risk-taking – necessary to be competitive enough to remain and progress in the academic career.

4.3 Applicants' Constraints and Opportunities: Some Insights

Recruitment is often looked at from the institutional side. But what about the applicants? This section attempts to link recruitment characteristics to individual leeway in balancing advantages and disadvantages in order to be hired. In doing so, it illustrates how individuals deal with recruitment processes: how they select the positions to which they apply and how they try to comply with existing conditions and requisites.

Models of external versus internal academic careers entail different strategies for advancement. Moreover, affiliation to specific disciplines – more or less dynamic

and "fashionable" – as well as requirements of degrees – such as doctorate and *Habilitation* – may modify individual positioning in the academic job market, influencing one's opportunities to apply for the most favoured opening.

Besides fitting the structural requisites for the academic position, job seekers actively position themselves within their national, disciplinary and institutional community. This is relevant in order to understand the dynamic relationships between the different layers of the academic profession. It is important to observe how (potential) candidates connect to their colleagues in order to position themselves appropriately and how they carry out such networking.

Relating to the uncertainty and precariousness characterizing the first stages of the academic career, two trends are detected: on one side, fragmentation and conformity of junior academics and assistant professors, who try to comply with the requirements of "research excellence". In the department model junior academics and assistant professors express their feeling to be more on their own in organizing their career paths. This means that they do not have (anymore) a senior professor advising and guiding them. In fact their acquired autonomy makes them more loosely coupled in relation to the institutional setting. On the other side, in the chair model, persisting for instance in Poland, compliance with perceived powerful professors is very strong. However conformity is also a pattern among junior professors in the department model: they do not want to take a risk by profiling themselves in research too much, particularly in the beginning. Accordingly, it can be argued that pressures for conformity vis-à-vis senior professors persist in both models, while requirements for research excellence are usually defined by the number of publications in international journals.

> Today young academics have to publish and do public relations to become visible. (. . .) one has to create bubbles by highlighting achievements and developing a broad portfolio. This leads to a fragmentation for the individual and the university. Also, profiling takes place through the successful acquisition of external funds, thus a "Me Inc." is founded. (AT25_ACA/senior/male)
>
> Now junior professors are autonomous in their career, no support from senior professors, no structure anymore. (D26_MAN/senior/male)

Yet, as we have seen, professors continue to be important for many junior researchers' careers. Strategic positioning and networking with perceived "powerful" professors are instrumental to obtaining support along the different career stages.

> [Old professors] preserve the feudal system and openly block careers of many young academics just because they are too young and too independent and too critical. Many professors are scared of their younger colleagues who speak foreign languages, are more internationally recognized and research active. They use their institutional power to postpone their development. (PL40_ACA/junior/male)

In other cases, a Croatian senior male academic argues, professors choose their junior researchers and educate them in order to prepare them for an assistant professor position (HR11_ACA/senior/male). Mentors have become very important to guide doctoral students, who often find themselves out of institutional affairs and thus need to be oriented.

> Mentors help to gain access to the academic system, professors pave the way to good publications. (AT51_ACA/junior/female)

These two trends are visible across all countries, institutional types and disciplines, at different intensity according to the adherence to standards of research excellence and talent promotion and to the traditional chair model, where patronising relationships continue to be in place. According to the discourse of our interviewees, it is possible to contend that these two opposing conditions – junior autonomy in research and junior dependence on senior professors, produce the same outcome, that is decreasing the variety of scientific (and human) profiles.

> Since academic career is nowadays unstable people change careers and broaden their expertise, which is good but confusing and decreases effectiveness. (FI4_ACA/senior/male)
>
> A broader positioning is required: languages, interdisciplinary orientation, external funding. (D28_HEP/senior/female)
>
> No administrative tasks anymore, but focus on scientific performance. Involvement with the organization and cooperation in teams are not conducive to advancing one's curriculum vitae. (AT41_ACA/junior/male)

Internationalization in its dimensions of research, publications, and fellowships push academics to position themselves increasingly outside their institution (Austria, Germany, Switzerland). In Eastern European countries, international experience is valued but long term mobility is not required, however academics have to participate in international conferences, projects and as reviewers for international journals. At the same time, in many cases, remaining in the targeted institution seems to be the best solution (if available) to finally apply for the desired position.

> People stay more in Finland after their PhD, because people have noticed that working abroad is not necessary in progressing in academic career and they keep active their contacts in Finland and are ready to apply for posts when they become available. (FI7_ACA/junior/male)
>
> Going abroad can mean not to return any more because of the closed nature of certain disciplines (e.g. Humanities). (AT41_ACA/junior/male)

As many respondents observed, mobility can be a temporary solution to unemployment on the one hand, it is also expected from young researchers on the other hand. Postdocs are becoming more and more international, there is pressure for mobility coming both from competitive dynamics and from the impossibility to find positions in the home country. The other side of the coin with respect to this mobility trend can be observed in traditionally nationally oriented countries: in Poland researchers go abroad and acquire "Western standards", which they bring back, building up

> A new generation of senior academics who are more internationally oriented and less feudal. (PL13_ACA/junior/female)

Precariousness and uncertainty can influence personal decisions, in terms of family planning for instance, and professional decisions, e.g. in relation with mobility. On the one hand, academics underline that fixed term contracts (typically each one up to 2-year duration) entail a tension between the working framework

and timing of publications, which usually take longer. On the other hand, the *Habilitation* appears not to be a secure path anymore and under such conditions it becomes difficult to plan a career. The compression of the duration of studies is visible also in medicine, where traineeship used to be originally 10 years and has now been decreased to 5 years (D16_ACA/senior/female). Along the same line, increasing requirements of internationalization – in form of fellowships, research projects, publications – may influence individual trajectories and preferences with regard to the different positions offered.

Conclusion: Convergence and Divergence Through Standardization Pressures and Local Practices

The interviews reflect the reshuffling of the academic profession from an academic system based on a chair organisation and implicit knowledge towards an organisation based on a network organized around an open market and the competition processes that come along. These models and the type of careers they bear in embryo can coexist not only within one higher education system, but also within a single institution, or, even, sometimes, within a faculty.

In the framework of the Bologna Process, doctoral studies tend to become harmonised both regarding their length (average duration) and their content (through the implementation of doctoral schools), although these trends have to be considered as a general movement occurring unevenly depending on the type of institution and on the discipline. We thus discern a diversification process, from the once unique classical model of doctoral student characterised by the status of teaching assistant and belonging to a professorial chair, to its coexistence with a doctoral student working in a collective research project. In the first model, PhD candidates and supervisors select themselves mutually on the basis of individual interactions. The supervision and the integration into the broader community of researchers are highly variable and the time devoted to the PhD is usually long. In the second model, the PhD candidate is more often hired on the basis of a national or international competition, often centred on criteria such as "early talent". In this model, the candidate is allegedly more integrated to the scientific community through a shared supervision by a group of professors (Enders 2005). This new model, favoured by the Bologna process and the implementation of doctoral schools, tends to increase the workload of PhD candidates during the first years of the doctorate and to accelerate the building up of the PhD project. The thesis thus becomes an exercise in order to get an entry ticket into the academic career. Though, these changes also come with a progressive formalisation of the rights and duties of the doctoral students: the funding limitation reduces the thesis time but is accompanied by a more precise

(continued)

definition of the work to be dedicated to the doctorate (40–50 %), which is a protection for the PhD student.

The same can be observed regarding senior researchers, lecturers and professors: as of the first group, senior researchers and lecturers working on a non-permanent basis, their contracts have often been reduced to a specific number of years, after which a professorial position (or another permanent position) has to be achieved.

Two general comments can be made. First, although recruitment procedures tend to converge at professorial level through standardization, they can be loosely coupled with practices, while at lower levels, though some standardization is detectable, professors continue to maintain their control on who is hired and for what activities. Indeed, behind the on-going standardisation, different informal practices can be detected depending on the discipline and its degree of internationalisation (Fumasoli 2014).

Second, individual strategies in the aggregate display a trend towards decreasing diversity among young scientists, on one side induced to conform to standardized research evaluation and, on the other side, encouraged to reproduce senior professors (research) activity orientation. However this trend is mitigated by the increasing influence of national foundations: these fund postdoc and junior professorship positions, allowing young academics to develop their own – more or less original – research agenda.

Finally, the analysis of the interviews shows that a European trend can be spotted: regulated internal academic markets have emerged, whereby career progression increasingly follows explicit rules and incentive mechanisms (Musselin 2005), while external markets have developed, since national and international performance is progressively required.

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