The Graduate System in Transition

External Ph.D. Researchers in a Managerial Context?

CHRISTINE TEELKEN, KEES BOERSMA AND PETER GROENEWEGEN

Introduction

The Ph.D. is the last step in the academic training of researchers, future lecturers, entrepreneurs and the intellectual elite. In an era in which knowledge and knowledge workers are increasingly important, the effectiveness and quality of this type of education is crucial (Pearson, Evans and Macauley, 2004; Barnacle, 2004). Understanding of the current functioning and future operation of this system and how it is interrelated with societal developments can guide government policy and university strategy. This is of particular urgency because in the near future the Ph.D. system will be redesigned as a last step of university reform laid down in the Bologna Declaration.

In the Bologna Declaration the (European) aim is stated that an increase in the number of higher educated citizens is necessary to be competitive. A compatible system (on the level of Bachelor's, Master's and Ph.D. degrees, also called the first, second and third tier) has been adopted in order to improve the quality of national and European-wide study programs (Kettunen and Kantola, 2006; Kehm and Teichler, 2006; Keeling, 2006). This means that the current restructuring of the Ph.D. system is part of the Europe-wide policy for educational innovation. Since September 2003 (ministerial conference in Berlin), the third tier has been brought on to the agenda. Two years later the Bergen communiqué put the need for a structured doctorate program on the policy agenda. A common European framework, clearly defined in guidelines, codes and regulations at the highest institutional level, which provides detailed rules on recruitment, supervision, exams, evaluation and defense of the thesis, is considered highly beneficial and innovative by the European University Association (EUA, 2005), as it frames further national and institutional restructuring of the doctorate system.

Theoretically speaking, these trends will likely lead to an integration and unification of Ph.D. systems in Europe. However, it has been argued that this system still has many faces due to internal diversity of higher education institutes and external variety with regards to national economies and higher education systems (Enders, 2004; see also EUA, 2007). In addition: "an agenda is not yet a concrete policy, let alone real change" (Bartelse and Huisman, 2008: 103). The actual impact of the Bologna Process on doctoral education (e.g. on the relation between education and research) and the rapidity of change are still limited (Bartelse and Huisman, 2005). This contrasts with the rather swift pace of the implementation

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of the Bachelor's/Master's structure in the Netherlands (Dittrich, Frederiks and Luwel, 2004).

Until now, not much is known about the "best way" to train Ph.D. students. In part, this is a consequence of the specific European situation where attention in higher education has been directed more extensively to the lower levels of university education. In the US, at the research-intensive universities, the Ph.D.s and their training schemes are the core of universities (Clark, 1995). A significant larger population of Ph.D. graduates is forced to seek non-academic employment. Continued academic careers are highly uncertain and therefore other occupations are frequently a further career step (Stephan and Levin, 1992). In contrast, a first analysis seems to suggest that the European Ph.D. trajectories are aimed primarily at the continuation of work within the academic arena. For access to industry it has been noted that the career paths of Ph.D. students depend highly on whether they collaborated with industry or any other private sector during their Ph.D. (Mangematin, 2000; see also Slaughter et al., 2002).

Recently, there has been a growing plea for making the Ph.D. trajectory more flexible and heterogeneous. One possibility could be that a full and purely "academic" dissertation becomes less relevant for future Ph.D. graduates. Instead, a portfolio of research courses, publications and relevant work experience (also) outside the academic, approved by an authority, could be enough to gain a Ph.D. (Rip, 2004). It was first and foremost in the Anglo-Saxon world that the traditional doctorate was criticized; the knowledge and skills of Ph.D. holders has not always matched the needs of the labor market. Since the Bologna Declaration, which emphasized the importance of the third tier, the European-based universities have been forced to look beyond traditional Ph.D. systems. To change the Ph.D. tradition will not be easy, since, although the environment of higher education institutions (HEIs) has been subject to change (as will be clear in this chapter), "seemingly the doctorate has been most resistant to change" (Huisman and Naidoo, 2006: 4).

In this chapter, we are especially interested in policies concerning external researchers pursuing a Ph.D., a special and underresearched group within the Ph.D. system. We focus our empirical research on the external Ph.D. in the Netherlands. These graduates work outside the university, for example in the public or private sector as a manager in (the financial) industry or as an instructor at a professional higher education institution, and pursue their Ph.D.s mostly part-time. Barnacle (2004) carried out one of the few studies in this area. As she has shown, for the external Ph.D.s (or the "practice-based" and "professional" doctorates, as they have been called, see Huisman and Naidoo, 2006: 6), pursuing a Ph.D. means an opportunity to gain and develop knowledge that is valued both for its relevance to their work and to academia. Sometimes, it is presented as a program to become a reflexive practitioner (Schön, 1983; Cunliffe, 2004). For the candidates, it is an opportunity to develop skills and to gain knowledge with which they can critically reflect upon their professional lives.

Before dealing with the Dutch graduate system we will elaborate on the general changes in university organization, in order to explain the political and organiza-

tional contexts. Subsequently, we will give details of our empirical findings. We will end the chapter with conclusions and a discussion.

Changes in the University Organization

It is generally recognized that universities are among the most stable and changeresistant social institutions in Western society, with their roots going back to medieval times. Among leaders in higher education consensus exists that the core functions of higher education – to educate (knowledge transfer), to do research (knowledge production) and to provide community service (outreach, emanating from the knowledge base) – must be preserved, reinforced and expanded. However, although universities are longstanding institutions with a respected reputation, they are nevertheless in a process of transforming both in identity and structure.

An important element of that transformation lies in the sphere of governance. A common view on governance is an increased focus on alternative forms of control (Hood and Peters, 2004), not through direct involvement, but in an indirect manner, replacing input and output control by performance-driven steering. Management based on rules and procedures is gradually being replaced by a system based on performance measurement and decentralized decision-making. While some national governments aspire to become more accountable to their citizens, public and semi-public organizations are being required to demonstrate the results of their activities to their customers (Pollitt and Bouckaert, 2000). Higher education is one of the public sectors where such shifts in governance have been witnessed (de Boer, Enders and Leišytė, 2007).

Through the stronger but more indirect role of government, universities feel forced to adapt their organizational strategies, structures and values to such managerial characteristics as budget transparency, output measurement, increased competition, and use of private sector management influences (see Aucoin, 1990; Hood, 1991 and 1995; Pollitt and Bouckaert, 2000 and 2004) in order to meet the societal requirements for accountability of quality. The shifts in governance manifest themselves in, for example, management of performances and accountability, such as the Research Assessment Exercise (UK) and quality assurance through accreditation schemes (the Netherlands). Discussions about educational quality emphasize the diagnosis and assessment of quality, leading to more intensive, extensive and elaborate quality assessment (Pollitt and Bouckaert, 2004). We distinguish two important policy developments, which should be seen in the light of these shifts of governance.

First, performance measurement is increasingly present in higher education (Teelken and Braam, 2002). The organization of quality care and assessment has been topic of discussion for many years, in the Netherlands especially since the *Higher Education: Autonomy and Quality* White Paper (1985). Since the signing of the Bologna Declaration in 1999, European universities have committed themselves to achieve comparability in systems of quality care. The quality care in education roughly has three different functions: monitoring and improvement; accountability; and provision of information. The performance element is also visible in league tables. In the Netherlands, these are published every year on the basis of

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questionnaires completed by students and professors in various areas of higher education (e.g. the Elsevier-magazine in 2005, website the Ministry of Education, Culture and Science: www.minocw.nl). The 1985 White Paper laid the foundation for a system of external quality care, and a number of important elements of that White Paper were introduced in the 1992 Higher Education and Research Act (Wet Hoger Onderwijs en Wetenschappelijk Onderzoek, WHW). To fulfill the external quality demands, institutions had to improve their internal quality care as well. Attempts to form national graduate schools were stimulated, in order to improve the quality of Ph.D. teaching. This encouragement occurred usually at the level of the discipline. These national research schools still exist in areas such as environmental sciences and are accredited by a committee of the Royal Academy of Sciences, but they have disappeared in other disciplines. The increased competition between universities and reorganizations of their faculties into larger units have directed more attention to local graduate schools. Yet, to date, there is no binding qualification system at this level in the Netherlands. The decision is very much left to the ad hoc committees that evaluate the Ph.D. manuscript.

The second important development is that the former system of "visitations" (evaluations including analysis and recommendations based on peer visits at the program level) have been replaced by a more rigid system of accreditation (with an emphasis on meeting accreditation criteria). Accreditation of programs (Bachelor's and Master's degrees) will be a condition for obtaining financial means, the right to award Bachelor's and Master's degrees and the accessibility to financial assistance for participating students. Programs should obtain accreditation by producing a self-evaluation report and through a visitation of an inspection committee. There are also various international accreditation schemes, which may be increasingly attractive for universities to obtain. We agree with Bartelse and Huisman (2008) that we do not expect the Ph.D. system to go through similar changes as have occurred in the first and second tier, but it is likely that Ph.D. courses will also be subject to accreditation (EUA, 2007).

In the above, we have alluded to the general policy changes. However, the interpretation of the effects of such changes has to be based on the manner in which they work out for academics. For the Ph.D. system, this includes the direct effects on supervisors and working environment. Their situation can be characterized by the fact that faculties experience, on the one hand, more autonomy; on the other hand, they are increasingly funded on the basis of their output, in terms of research as well as education. This changes the conditions under which they operate; while the national government remains an important anchoring device, there is a greater need to shift attention to other stakeholders (Neave, 2003). As has been argued by Bleiklie and Kogan (2007), the main principles in steering universities have shifted from collegial control to a significant influence of various stakeholders. In the system changes taking place currently, various organizing principles that are sometimes tangential to each other are operating. With still large sums of money being distributed by national governments directly to universities, output measurement has increased and remuneration based on output performance has become more important. Moreover, in Europe, elaborate assessment and accreditation systems are being developed and directly used to replace central control in many countries. This system change is suggested to increase the freedom of manoeuver for institutions. Accompanying internal changes relegated collegial control and invested in managerial steering, creating an almost corporate image for some universities and faculties. This last managerial reform appears as a dominant theme in much of the recent literature. However, the effects still show significant differences between countries (Bleiklie and Kogan, 2007).

Measuring output may include numbers of graduates, numbers and impact of publications and *ex post* evaluations. The number of annual Ph.D. graduates forms an important part of the faculty output. If the group of external researchers aiming for a Ph.D. is of growing size and relevance, they may therefore soon be within the reach of the policy-makers and management of faculties and research groups. Alternatively, their needs may lead to a consolidation of attempts to invest in the content of graduate schools. Moreover, for many (research) universities it is another way to generate additional income – a reason to see the development of external Ph.D. students in connection with income generation policies (Huisman and Naidoo, 2006).

Particularly interesting is the explicit attention given to the managerial side of the doctorate system, such as quality care, transparency and equal possibilities for development of the participants. This may be a consequence of growing attention given to the educational quality of Ph.D. training in general, stimulating it more in the direction of an actual third tier of the student programs (EUA, 2007), which has been absent in many European universities outside medical and natural sciences. Moreover, it fits well with the general pattern of "managerial" steering of higher education systems, and within that the Ph.D. system. We agree with Leišytė (2007) that new managerialism is visible in stronger, hierarchical leadership, a more top-down structure at the cost of the professional role in decision-making, which coincides with a more tightly coupled university organization (de Boer, Enders and Leišytė, 2007).

The evolving university system encompasses the Ph.D. system. This system appears to develop in policy terms towards conforming more to the general pattern of increased transparency and quality control and increased managerial control. However, attention to such changes assumes that they are pervasive and have an effect that is uniform across groups and institutes. So far, the managerial influences of HEIs seem not to have had much impact on the functioning of external researchers pursuing a Ph.D. We will provide more insight into the managerial influences on this specific group of external Ph.D. students. Our working hypothesis is that new institutional rules concerning this group of Ph.D. students are merely emerging from the day-to-day practices at a local level (Mintzberg, Quinn and Ghoshal, 1998). We suppose that the national governments and local university policy-makers are rather ambiguous with regard to modes of control (Gornitzka and Maassen, 2000); actors at the local level are provided with ample room to set their own rules and standards, especially concerning groups of Ph.D. students, that are not (yet) part of the formal graduation system. This means that in this chapter we will present the paradoxical situation of ad hoc managerial rules and styles surrounding this group within the broader context of an increasing managerial rhetoric in the environment of the Dutch universities.

The Dutch Graduate System

After a brief general description of the Dutch graduate system and its requirements, we will focus on the most relevant changes. The thirteen universities in the Netherlands provide teaching and research in a wide variety of disciplines. Some universities specialize in technical, economic or agricultural studies, but most cover a wide range of subjects. The university system is based on a three-cycle degree system: Bachelor (180 ECTS), Master (60, 90 or 120 ECTS) and Ph.D. The most recent strategic agenda for higher education, research and science policy (Ministerie van Onderwijs, Cultuur en Wetenschap, 2007) emphasizes the importance of a good-quality higher education system, with a relevant contribution to the knowledge society and a clear connection with the current labor market. The intention is to transform the training of researchers into an American model, with a clear starting point and orientation within research schools. HEIs should function as suppliers of highly educated professionals, as well as of knowledge in a closely knit network of teaching, research, innovation and public services. This view of HEIs is part of strategic thinking that in general terms is directed at understanding and steering the processes of knowledge creation (see, e.g., Etzkowitz and Leydesdorff, 2000) and reflects a strategic reorientation of knowledge creation and diffusion in the economy and society.

Within the higher education system, Ph.D. students form a very important, hybrid group. While doctoral programs are considered the third cycle of the Bologna Process, they form at the same time the first phase of young researchers' careers, constituting the main link between higher education and research areas (EUA, 2007). To acquire a doctorate is a testimony of scientific competence, based on an original contribution to scholarship, resulting in the publication of a thesis or dissertation, which should be publicly defended. Generic final achievement standards for a doctorate involve (VSNU, 2004: 25):

- the successful candidate has made an original contribution to academic research of a quality which stands up to peer review at the level usual in the Netherlands;
- the successful candidate has demonstrated their ability to apply the academic methods used in the discipline concerned for developing, interpreting and putting into practice new knowledge;
- the successful candidate has acquired and worked with a substantial body of knowledge which, at the very least, embraces the principles and methods of international academic practice and of theorization, methodology and study in the discipline concerned;
- the successful candidate possesses the ability to design and implement a substantial project for the purpose of developing new knowledge.

The Dutch Ph.D. system was implemented in 1985. In it, Ph.D. students are considered temporary employees. They are supervised by a professor (the *promotor*

and often one or more co-promotors) and are often supposed to attend various courses. They may also be required to teach undergraduate students. Until the establishment of this system, the doctorate system appeared "a black box" and the exclusive domain of the individual supervisor (Bartelse and Huisman, 2005: 24). Obtaining a Ph.D. used to be an informal arrangement between a professor and the Ph.D. student. This apprenticeship model was gradually replaced by the appearance of more structured forms of postgraduate education (Enders, 2004), such as research or graduate schools (VSNU, 2004). A relatively large percentage of Ph.D. students are now trained in research schools, which are defined as centers of high-quality research offering young researchers a structured education. Some research schools managed to obtain accreditation from the KNAW (Royal Netherlands Academy of Arts and Sciences). These research schools achieve high graduation rates (Sonneveld and Oost, 2005), while there is great heterogeneity between and also within these schools (Sonneveld and Oost, 2006). Also, because of increased managerial pressures, the Ph.D. trajectory has generally become more closely supervised and controlled (e.g. selection after the first year of the Ph.D., publication pressure, etc.).

As an alternative to regular Ph.D. programs there is an international trend towards producing "industry-ready" graduates with links to the needs of non-academic environments, that is industry (Harman, 2004). Although this is not new – there have been many Ph.D. programs embedded in or funded by industry – its massification occurred only recently. Universities, facing the pressure to increase the number of Ph.D.s awarded, are looking for new ways to attract graduate students. The current managerial developments necessitate a radical rethinking of the doctorate experience and consequently a reconceptualization of doctorate candidature as a form of knowledge-producing work contributing a complex mix of personal, social and economic benefits" (Pearson, Evans and Macauley, 2004: 352).

External Ph.D. Students in the Netherlands

In order to obtain an impression of the current situation of Dutch external Ph.D. students, we carried out interviews and document analysis at two faculties in two different Dutch universities: the Faculty of Management Sciences of the Radboud University Nijmegen and the Faculty of Social Sciences of the Vrije Universiteit (VU University Amsterdam). We held interviews with the vice-dean responsible for research, with the coordinator of the Ph.D. training center and with several professors who supervised many external Ph.D. students. In addition to this indepth study, we performed an internet review through scanning the websites of all Dutch universities. We used Google to find information on the institutionalization of external Ph.D. students for which we used the search terms buitenpromovendus and buitenpromovendi (the Dutch terms for external Ph.D. students). After going briefly into the general characteristics of these external Ph.D. students, we will present our findings with the help of three dimensions that emerged from our empirical data gathering. The first dimension concerns the financial aspects and discusses whether external Ph.D. students should be considered a welcome addition to the faculty's increasingly tight financial situation or a risky factor in the

extracurricular activities of individual professors. Second, we will explore the tension between control versus autonomy at the individual level. Our third dimension concerns (a lack of) faculty strategies and policies.

External Ph.D. students are defined here as researchers working on a Ph.D. thesis under the supervision of a professor from the Radboud University Nijmegen or VU Amsterdam but without an employee contract with the university. Candidates should have at least a Master's degree. The website of the Radboud University mentions a contact-person who can assist in finding a promotor (provided that the candidates develop a research proposal), but it appeared during the interviews that she is contacted only a few times a year. External Ph.D. students are entitled to follow a number of courses, for example in the field of academic writing, presenting research and didactics. They may apply for membership of the university library and get some funding for the printing of their thesis (to a maximum of €2,200). At the VU Amsterdam there are no formal arrangements – the supervision is left to an individual arrangement between *promotor* and the Ph.D. student. Some professors draw up an agreement including a fee for supervision on an annual basis. Usually arrangements are less formal and more open.

Unfortunately, national statistics concerning the number of external Ph.D. students or graduates do not exist, but it is clear that their numbers are extensive. In some subjects external Ph.D. graduations can add up to one-third or even half the total number of graduates (e.g. at the Radboud University Nijmegen, management studies; at the Tilburg University, law studies).

The backgrounds of external Ph.D. students are very diverse: some candidates are already retired and see the achievement of a Ph.D. as a conclusion of their career by composing their *magnum opus*. However, most external Ph.D. students are employed elsewhere, e.g. in policy research, which means that they can use their various findings of research reports to compose a Ph.D. thesis as proof of their ability to conduct academic research. Others may be employed in professional higher education, a category that receives special support in order to increase the number of qualified scientists in this higher education sector.

On the basis of our internet scan we can conclude that the universities and faculties deal in three different ways with external Ph.D. students. Some universities (e.g. the University of Amsterdam, the University of Groningen and the Radboud University Nijmegen) facilitate external Ph.D. students actively; they recruit them (among others) through advertisements and provide various facilities. For example, at the Radboud University Nijmegen, the "Center for Doctoral Research" gives unemployed researchers the opportunity to complete their Ph.D. studies. The center is particularly assisting the integration of women and ethnic minorities into paid employment. Potential researchers can apply to the center on the basis of a research proposal (approximately 8 pages), which should be supported by a *promotor* from the Radboud University Nijmegen. The researchers are not employed by the university, nor do they receive a salary, but they are entitled to various facilities, such as the library, work space, personal computer and various courses. They should devote at least twenty-four hours a week to their Ph.D. research. There are also funds for traveling, visiting conferences and seminars.

There are about ten places available, and there is also a waiting list of about ten to fifteen potential researchers. The area of research concerns the arts and philosophy (40 percent) and social sciences (60 percent). Other universities express the intention to recruit more external Ph.D. students (e.g. Maastricht University) but provide no institutional support as yet. A third group only mentions the possibility of supervision by a full professor and that potential external Ph.D. students should contact a suitable professor directly (e.g. Leiden University).

Financial Assets Versus Risks

From our interviews in both faculties, it becomes very clear that external Ph.D. students are currently a relevant source of additional funding, at the faculty level but also for the individual supervisors. Research at universities is financed progressively in a more restricted manner. The former annual rounds, when six to eight new Ph.D. students could be appointed at the Faculty of Management Sciences, were abolished in 2003. At the VU University Amsterdam, formal attachments of positions to departments were abolished around the same time. Currently the only direct support is in the form of Ph.D. posts attached to newly appointed professors or as a conditional funding for proposals to be submitted to the Dutch research council. Most of the financial means for internal Ph.D. students should be obtained through external funding (national or European research councils). Other examples of financial restrictions are that staff are encouraged (or even forced) to earn part of their own wages externally; at the Radboud University Nijmegen future targets are set for approximately 30 percent of the annual salary.

The national funding allocation mechanisms put a premium on completed Ph.D. theses. Universities have translated these mechanisms locally. Faculties receive approximately €35,000 (Radboud University Nijmegen) and €25,000 (VU Amsterdam) for every completed Ph.D. thesis. This is the common fee for Ph.D. graduations in the arts and social sciences. In the natural sciences and medical sector, the fees are usually much higher, about €70,000-100,000 for the natural scientists and engineers and sometimes as much as €135,000 for dissertations in the field of medicine. The salary costs of an internal Ph.D. student add up to about €240,000, but for external Ph.D. students the fees received will always exceed the costs.

Currently, this financial system at the VU Amsterdam is under revision, with the intention to abolish the difference between the various faculties (arts, sciences, social sciences, medicine) and introduce one uniform financial reward for all graduations of €50,000. It will be paid sooner after graduation, making the relationship between performance and reward clearer and more direct. At the Faculty of Management Sciences at the Radboud University Nijmegen, the number of external Ph.D. students is relatively large: of the 109 graduations which took place between 1995 and 2007, 35 (32 percent) were external Ph.D.s. There is no clear increasing tendency over time. The financial rewards are transferred to the faculty in two to four portions, with the first portion usually rewarded two years after graduation, and the other portions following in subsequent years. Figures

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from the VU Amsterdam are not known, according to the respondent at faculty level. Only if an external Ph.D. student makes use of the educational system of the VU University Amsterdam, for example if he or she follows additional methodology courses, do they become visible to the administration and faculty management. However, the *promotor* is able (and by law authorized) to offer a candidate professional training. There are no records at the VU Amsterdam about the actual number of external Ph.D. students at faculty level. Although we asked several people in key positions about the financial arrangements concerning external Ph.D. students, we had to rely on oral information because no formal documents could be retrieved.

An important difference between the two faculties is that at the Faculty of Social Sciences at the VU Amsterdam, half of the funding is retained at faculty level, while only €12,000 is transferred to the research group. At the Faculty of Management Sciences at Radboud University Nijmegen, it is explicit policy that graduation premiums are transferred to individual professors. As the vice-dean at the Radboud University Nijmegen explained: "Imagine that you are very good at supervising Ph.D. students, and good at organizing, and then the funding is not returned for your efforts. That can be very frustrating."

Control Versus Autonomy at Individual Level

In contradiction to the external Ph.D. students, internal Ph.D. students have to function increasingly in a more controlled and embedded system. We found various forms of control and support in the different stages of the Ph.D. process. At the Faculty of Social Sciences at the VU Amsterdam, which comprises seven different disciplines, graduation projects are now centrally administered. More emphasis is being laid on the recruitment and selection of Ph.D. students. Consequently, upon employment, Ph.D. students have to compose a training and supervision plan, there are courses at faculty (the Radboud University Nijmegen, VU Amsterdam) or even university (VU Amsterdam) level that they can follow in order to prepare themselves thoroughly for their work.

Courses may involve generic skills, methodology, particular theories or thematic training. Ph.D. students are entitled to yearly performance interviews with their supervisor. But most importantly at both universities, internal Ph.D. students have to submit a research proposal (theoretical and methodological framework) after nine or ten months This then has to be approved by a faculty committee in order for the student to continue their Ph.D. student. For research projects which are in a preliminary phase and not developed in detail by the supervisors (e.g. when they have to go to the Dutch research council for assessment), this can be a stressful and demanding pursuit. However, some consider this a form of academic freedom – allowing time and scope for Ph.D. students to create and thoroughly think through their research proposals is considered the ultimate example of the academic profession. Unfortunately, the nine or ten months they are allowed can be considered insufficient (interview with the vice-dean at Radboud University Nijmegen).

All these more strictly enforced regulations do not apply to external Ph.D. students. The only control (in terms of content, quality, etc.) they experience is through the supervision of their *promotor* and eventually the thesis committee. According to the doctorate regulations (VU Amsterdam, article 21) the thesis shall be subject to the appraisal of the supervisor, who can take into account the assessment of a co-supervisor, if applicable. After the thesis has been approved by the supervisors, it will be submitted to a relevant thesis committee. This committee will be appointed by the doctoral examination committee (appointed by the professor of the faculty), and consists of a minimum of four (VU Amsterdam) or three (the Radboud University Nijmegen) members, at least one of them being a member of the faculty in question. Committee members should hold a doctorate or preferably have the ius promovendi (meaning they are eligible to act as supervisors). The thesis committee shall consequently assess the quality of the doctoral research as a whole, particularly the research questions, the treatment of the subject, the command of the literature and the systematic presentation of the research (article 12.5). Decisions shall be taken on the basis of a majority vote. The committee should not attach conditions to its decisions, although individual members are free to add suggestions and/or recommendations to their assessment.

The success rates of the internal Ph.D. students have been quite low, with both faculties showing high drop-out rates and on average long periods before graduation, which are supposedly typical of the social sciences (interview, VU Amsterdam). There is evidence, though, that success rates have increased due to the more managerial approach towards internal Ph.D. students. As far as external Ph.D. students are concerned, they are seemingly (and surprisingly) more successful than internal students and make it to graduation in a shorter period of time.

Faculty Policies Versus Local Initiatives

Looking closely at the managerial side of the doctorate system, we found that despite the increasing importance of external Ph.D. students, there was hardly evidence of formal policies concerning this group: "There are actually no policies in the supervision of external Ph.D. students, nor are there any systematic arrangements on how to deal with partners, with organizations whose employees may be interested in obtaining a Ph.D." (interview with the vice-dean at the Radboud University Nijmegen). (There are, however, contacts between individual supervisors and organizations.) Even the financial arrangements concerning external Ph.D. students seem vague, to say the least.

This lack of any formal policy and absence of stimulation and encouragement at the faculty level were recognized by Ph.D. supervisors:

It is not stimulated, it is an individual activity. You are allowed to do it, but not compensated in time. All you get is the graduation premium, but that is after the graduation. It is considered a completely individual activity, which I carry out in my spare time.

(Interview, Radboud University Nijmegen)

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With respect to external Ph.D. students, the individual professors are still completely autonomous in the supervision process, despite the possible increased importance of external Ph.D. students.

However, while no formal policies at faculty level could be found, we did come across several initiatives at departmental or research group level which involved the provision of a framework for supervision and courses for (external) Ph.D. students. Remarkably, though, interviewees at faculty level were unaware of these local initiatives. Initiatives at the VU Amsterdam involved the annual €3,000 fee, requested by several department heads to be paid by the external Ph.D. student. Another initiative suggests setting up an academy, which would offer executive courses in cooperation with large organizations that have their headquarters close to the VU Amsterdam campus. At the Radboud University Nijmegen an initiative for a Ph.D. training center was turned down by the university's executive board despite receiving consent from the faculty dean. It was supposedly too commercial and insufficiently embedded in academic research. The initiators intend to resubmit their proposal. Three employees (two full professors, one associate professor) from the Faculty of Management Sciences at the Radboud University Nijmegen initiated a post-academic course titled "The Responsible Organization." The intention is to support potential external Ph.D. students by offering them courses in methodology and research capacities, which should result in a research proposal. The course consists of six modules and lasts one year (fee of €10,000). The idea is that after the course, participants carry on with their research individually, under supervision of a promotor.

All in all, it seems that the local initiatives are more directly influenced by international developments, such as the Bologna Process, the three-tier system and the creation of a structured doctoral system, while there is a lack of policy initiatives at the faculty and university levels.

Conclusions and Discussion

External Ph.D. students, compared to internal Ph.D. students, are not (yet) part of increasingly pervasive managerial control systems. Attracting external Ph.D. students can be seen as a financially lucrative activity (see Harman, 2004, on similar developments in Australia). However, despite the increasingly tighter finance and the financial rewards for external Ph.D.s, few faculty or university policies concerning external Ph.D. students have been developed so far. Inviting potential external Ph.D. students is still left to the individual supervisors (*promotors*) or occurs as a result of the initiative of the potential students themselves. Various local initiatives have been developed, with the intention to explore and to benefit from this attractive market, but with mixed success and limited awareness. In contradiction to the tendency of increased steering through managerial and quality control, external Ph.D. students are still subject to the autonomous supervision carried out by their *promotor* and are not under the influence of the increasingly pervasive market- or businesslike activities of the current higher education system. While the general suggestion of New Public Management is that control and

assessment efforts are comprehensive, our study shows a more variegated land-scape. The logics of collegiate control still dominate this area, and the fact that external Ph.D.s are both outside and inside the system may contribute to a lack of attention from New Public Management.

Another explanation may be that with the evolving set of instruments connected to the Europeanization of higher education policy, education and regulation practices are not yet fully implemented for the third tier. In our case the changing logic of national financing of the Ph.D. system seems to stimulate the attraction of Ph.D.s. It moreover suggests that for new control and managerial mechanisms to be effective, some degree of control over academic loyalty is necessary. This is easier achieved with respect to the employee status of internal Ph.D.s.

A final explanation might be that the current university system in transition is exhibiting a variety of conflicting dynamics. External Ph.D.s in this light represent a clear external link to stakeholders in practical, professional or corporate areas that are therefore in essence a different breed than internal Ph.D.s precisely because of the increased paradoxical demands from two different logics that are part of New Public Management (Hood and Peters, 2004). It shows a tinge of the old-fashioned call for academic freedom, which coincides with an operational connection to stakeholder importance. Therefore, the external Ph.D. is in itself a contradictory category, and forcing academic quality control would not only diminish income but damage a valuable, legitimate group. This situation, combined with the non-employee character of the external Ph.D. might be temporary, and will decline when a third-tier transformation leads to strengthening graduate education. However, the actual practice of Ph.D. training might be very different from the policy ideals of Bologna (see, e.g., Neave, 2002).

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