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MAKING FINNISH UNIVERSITIES COMPLETE ORGANISATIONS

AIMS AND TENSIONS IN ESTABLISHING TENURE TRACK AND RESEARCH PROFILES

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ACADEMIC DISSERTATION

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ABSTRACT

In this dissertation I examine the transformation of Finnish university organisations. The global science policy emphasis on research excellence and the construction of universities as competitors in the higher education and research market have encouraged universities to coordinate their research activities and to develop career paths for academics. Globally-spread policy trends define what a successful research university should look like. By adopting the global policy trends, universities express themselves as progressive, modern research organisations with attractive career opportunities.

In the study I focus on two administrative phenomena in Finnish academia: the establishment of so-called research profiles and tenure track career systems. The research problem is three-fold: How do the research profiles and tenure track systems demonstrate the change of Finnish universities into more coherent, complete organisations? What internal tensions do the changes produce at universities? How do academic leaders and academics in different academic fields respond to the establishment of research profiles and tenure track systems?

The theoretical framework of the study combines organisation and management studies, and higher education research. The study draws on the observation that many traditional institutions, such as universities, are adopting management-oriented organisational forms and practices. Scholars, such as Nils Brunsson and Kerstin Sahlin-Andersson (2000), and Georg Krücken and Frank Meier (2006) have drawn such an inference.

The dissertation comprises three refereed journal articles and a summary article. The main data consist of research interviews of academic leaders and academics working in tenure track positions at Finnish universities. The academic leader interviewees were rectors, deans and department heads, who worked in a range of academic fields.

I argue that the establishment of both research profiles and tenure track career systems contributes to transforming Finnish universities into more uniform organisations. At universities, the reforms have been used as strategic instruments to pursue certain goals. The goals include the strengthening of universities' position as research institutions and attracting academics from the international labour market. However, several things cause internal tensions, when universities position themselves as coherent entities. These include universities' internal heterogeneity, and the dependence of academic career progression, and publication and funding processes on several actors, who have different goals.

The findings also highlight the gap between the portrayed rational processes of tenure track and the everyday life experienced by academics who work in the career path. The work performance of academics was carefully

monitored, but the evaluation criteria were often interpreted as being extensive and too ambiguous, and the evaluation processes were often interpreted as being unestablished.

The dissertation contributes to discussion on how universities structurally and symbolically adapt when they face multiple pressures and opportunities. It also demonstrates how academic leaders and academics deal with globally diffusing policy ideas by reproducing and transforming them.

TIIVISTELMÄ

Tutkin tässä väitöskirjassa suomalaisten yliopisto-organisaatioiden muutosta. Tutkimuksen korkeaa tasoa painottava globaali tiedepolitiikka sekä yliopistojen keskinäinen kilpailu korkeakoulutuksen ja tutkimuksen markkinoilla ovat kannustaneet yliopistoja koordinoimaan tutkimustaan ja luomaan urapolkuja tutkijoille. Globaalisti leviävät politiikkatrendit määrittelevät, miltä menestyvän tutkimusyliopiston tulisi näyttää. Omaksumalla globaaleja politiikkatrendejä yliopistot pyrkivät osoittamaan olevansa edistyksellisiä, moderneja tutkimusorganisaatioita, jotka tarjoavat houkuttelevia uramahdollisuuksia.

Keskityn tutkimuksessani kahteen hallinnolliseen ilmiöön suomalaisella yliopistokentällä: niin sanottujen tutkimusprofiilien ja tenure track -urajärjestelmien luomiseen. Tutkimusongelmani on kolmiosainen: Millä tavoin tutkimusprofiilit ja tenure track -järjestelmät havainnollistavat suomalaisten yliopistojen muutosta yhtenäisemmiksi, kokonaisemmiksi organisaatioiksi? Mitä sisäisiä jännitteitä muutokset aiheuttavat yliopistoissa? Miten akateemiset johtajat ja tutkijat eri tieteenaloilla reagoivat tutkimusprofiilien ja tenure track -järjestelmien muodostamiseen?

Tutkimuksen teoreettinen viitekehys yhdistää organisaatio- ja johtamistutkimusta sekä korkeakoulututkimusta. Tutkimuksen taustalla on havainto, että perinteiset instituutiot, kuten yliopistot, ovat viime vuosikymmenten aikana omaksuneet uusia johtamisorientoituneita organisaatiomuotoja ja käytänteitä. Tällaisen päätelmän ovat tehneet tutkijat, kuten Nils Brunsson ja Kerstin Sahlin-Andersson (2000) sekä Georg Krücken ja Frank Meier (2006).

Väitöskirja koostuu kolmesta referoidusta artikkelista sekä yhteenvetoartikkelista. Keskeinen tutkimusaineisto koostuu akateemisten johtajien ja tenure track -urapolulla työskentelevien tutkijoiden haastatteluista. Haastatellut akateemiset johtajat olivat rehtoreita, dekaaneja ja laitosjohtajia, jotka työskentelivät eri tieteenaloilla.

Osatutkimusten tulosten perusteella väitän, että sekä tutkimuksen profilointi että tenure track -urajärjestelmien käyttöönotto muuttavat suomalaisia yliopistoja entistä yhtenäisemmiksi organisaatioiksi. Uudistuksia on hyödynnetty yliopistoissa strategisina instrumentteina tiettyihin päämääriin pääsemiseksi. Näihin päämääriin lukeutuvat yliopistojen aseman vahvistaminen tutkimusinstituutioina ja tutkijoiden houkutteleminen kansainvälisiltä työmarkkinoilta. Monet seikat kuitenkin aiheuttavat sisäisiä jännitteitä, kun yliopistot pyrkivät asemoitumaan yhtenäisiksi entiteeteiksi. Näihin lukeutuvat yliopistojen sisäinen monimuotoisuus ja akateemisella uralla etenemisen sekä julkaisu- ja rahoitusprosessien riippuvuus useista tahoista, joilla on eri päämäärät.

Tutkimustulokset kertovat myös kuilusta rationaalisiksi kuvattujen tenure track -prosessien sekä urapolulla työskentelevien tutkijoiden jokapäiväisen arjen välillä. Tutkijoiden työsuorituksia valvottiin tarkasti, mutta arviointikriteerit tulkittiin usein laajoiksi ja liian monitulkintaisiksi, sekä arviointiprosessit vakiintumattomiksi.

Väitöskirja tarjoaa tietoa siitä, miten yliopistot sopeutuvat rakenteellisesti ja symbolisesti ympäristön paineisiin ja mahdollisuuksiin. Se myös havainnollistaa sitä, miten akateemiset johtajat ja tutkijat joka päiväisessä toiminnassaan toteuttavat ja muovaavat globaalisti leviäviä politiikkaideoita.

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CONTENTS

LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following publications:

I Pietilä, Maria (2014). The many faces of research profiling: academic leaders' conceptions of research steering. Higher Education, 67(3), 303–316.[1]

II Pietilä, Maria (2015). Tenure track career system as a strategic instrument for academic leaders. European Journal of Higher Education, 5(4), 371–387.[2]

III Pietilä, Maria. (2017). Incentivising academics: Experiences and expectations of the tenure track in Finland. E-print ahead of publication, Studies in Higher Education. DOI: 10.1080/03075079.2017.1405250.[3]

The publications are referred to in the text by their roman numerals.

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1 PURPOSE OF THE STUDY

Since their establishment, universities have been positioned at the centre of cultural life and they have been tightly attached to their surrounding environment. Through the course of history, the state has typically been the most important 'stakeholder' of public universities since in most cases it has been in a key position for determining their responsibilities and controlling most of their finances (see, e.g., Ferlie et al. 2008). More recently, the range of relevant stakeholders has increased, and the governance structures have become more complex. The role of the market has also become stronger. In addition, traditional groups such as students and funders, and even 'society' as an unspecified abstract entity, are at least formally acknowledged in university strategies. With an increasing emphasis on competition, efficiency and managerialism as diffusing ideas in the higher education sector, the global and international dimension has become stronger and the role of the nation state has been challenged (Enders 2004). Overall, universities face a most complex environment and they need to respond to multiple expectations.

This dissertation considers universities situated in a changing social environment. It argues that universities in the 2010s are facing particular pressures to portray themselves as more coherent and autonomous organisations which attend carefully to their research activities, recruitment and career advancement of academic staff. Universities have traditionally been described as atypical organisations with loosely coupled structures and low internal hierarchy (e.g., Cohen et al. 1972; Brunsson and Sahlin-Andersson 2000). However, Musselin (2007) states that since the 1980s, the specificity of universities as organisations (characterised by strong internal control by professors on one hand and external control by the state on the other hand) has been challenged and managerial tools typical in the industrial sector have been introduced into the higher education sector. Due to the significance of global comparison, competition, and diffusion of management ideals, universities are more and more often seen and treated as collective entities which should set rational targets and use resources to achieve those targets (e.g., Krücken and Meier 2006; Seeber et al. 2015; Brunsson and Sahlin-Andersson 2000).

This dissertation presents analyses of two recent reforms in the Finnish higher education sector. With the exception of a study by Herbert and Tienari (2013) these reforms have not yet been studied: the establishment of so-called research profiles[4] and the introduction of a tenure track career

[4] In Finnish policy discourse, the establishment of research profiles at the university level refers to the prioritisation of strong research areas (e.g., Ministry of Education and Culture 2012a, 44).

system[5]. Although there is literature on tenure systems in academia in general, there has been little research on the introduction and institutionalisation of tenure systems.

Whereas the reform of profile-building in research is more state-led than the reform of renewing academic career systems, it is argued in this dissertation that both are examples of how Finnish universities are being transformed into more complete, autonomous organisations. However, despite the pressures for change and the structural reforms being undertaken, the dissertation shows that some underlying characteristics of universities (and their research component in particular), such as the internal variety of academic fields and traditions, and the academic autonomy of academics (cf. Musselin 2007), continue to challenge the efforts for change.

The two reforms under study reflect globally-spread policy trends, which are being diffused into a range of divergent national contexts. It is argued here that as global reform initiatives, the establishment of research profiles and modern career systems retain important symbolic value. By adopting such changes, a university may express itself as a progressive, modern organisation (cf. Meyer et al. 2007).

At a general level, the dissertation contributes to discussion on how universities adapt to conflicting challenges and opportunities structurally and symbolically (cf. Kraatz and Block 2008). Overall, the aim of the study is to enhance our understanding of universities and academic work during periods of change. More specifically, while much theoretical attention has been paid to the transformation of universities as organisations (e.g., Krücken and Meier 2006; Whitley 2008), the dissertation offers an empirical investigation of the changes in the realm of research and academic careers. The diffusion of management practices in the higher education sector makes it worthwhile to study how individuals deal with the global processes at different organisational levels. While both profile-building (e.g., Meier and Schimank 2010; Silander and Haake 2016; Laudel and Weyer 2014) and the introduction of tenure track systems (Herbert and Tienari 2013; Henningsson et al. 2017) have to some extent been studied in earlier research, this dissertation offers new insights by including the top and middle-level academic leadership perspective and academics' perspective in one study. The dissertation shows that because of the variety of relevant actors, underlying interests, goals, and demands, internal tension is likely to emerge when universities are treated as more uniform organisations.

Research activities and career advancement in academia are fruitful research topics because they are both affected by a high level of academic freedom. To a large extent, they are affected and controlled by the work and

[5] Tenure track systems for university research and teaching staff are typical especially in the United States. A tenure track career path is composed of step-by-step promotion and fixed-term appointments before the final tenured full professorship.

decisions of individual academics, research groups, and scholarly communities. As a result, research activities and academic careers are problematic areas to be directed and controlled (cf. Whitley 2008; Musselin 2007).

This dissertation argues that neither the creation of research profiles nor the introduction of career systems is a neutral initiative. Instead, they may be promoted to advance different goals. The study approaches academic leaders and academics as active agents (Meyer 2008), who with their activity, may affect the content and outcomes of policy reforms. The study shows that academic leaders are capable of both strengthening and modifying the original policy ideas. In the tenure track case, the dissertation also provides illumination on how academics working in assistant and associate professor positions weigh up and cope with the abundant expectations of the tenure track.

By studying the establishment of research profiles and tenure track systems at selected Finnish universities, the aims of the dissertation are to answer the following broad questions:

- How do the research profiles and tenure track systems demonstrate the change of Finnish universities into more coherent, complete organisations?
- What internal tensions do the changes produce at universities?
- How do academic leaders and academics in different academic fields respond to the establishment of research profiles and tenure track systems?

By focusing on academic leaders and academics, the study yields both an organisational perspective on the debates about how organisations cope with different demands (cf. Oliver 1991) and a more micro-level perspective on how these demands are reflected in the expectations towards academics' work and, consequently, what tensions follow these myriad demands.

The empirical data, which are composed of interviews and documents, have been collected from Finnish universities. Finnish higher education provides an interesting context for the study because universities in Finland are taking a stronger role in research management and as direct employers of their staff. This is partly due to the national university reform from 2010, which transformed the former state agencies into independent legal entities. The small population (c. 5.5 million), higher education sector and academic labour market expose the country to global pressures. The changed relationship between universities and the state and the more autonomous status of universities have provided an opportunity for the transformation of traditional governance models (cf. Delanty 2002).

The main data used in the dissertation consist of interviews with academic leaders at various organisational levels and academics working in tenure track positions at Finnish universities[6]. Studying the responses of leaders and academics in a range of academic fields and organisational levels to university-level reforms is important, since their responses largely determine whether policy reforms fail or succeed and what consequences they have (cf. Balogun and Johnson 2005). Through this perspective, the aim of the study is to understand the unpredictable nature of change of universities, which is likely to include both intentional and unintentional elements (cf. Balogun and Johnson 2005). To reach at least some of the internal richness and variety of universities, the research design in the sub-studies was arranged so that it included several academic fields.

The content of the dissertation consists of three journal articles and this summary article. While I acknowledge the special features of higher education institutions, I believe the study of universities may greatly benefit from the research, which draws from concepts and perspectives of other fields, such as organisation studies and political science (cf. Ferlie et al. 2008). Thus, the dissertation has been built on a multidisciplinary approach and draws on several fields, especially those of higher education research (itself a multidisciplinary 'field'), organisation and management studies and, to a smaller degree, working life studies (especially Article III). Theoretical concepts and ideas developed in organisation studies, especially within the new institutional paradigm, have been particularly useful. As Ferlie et al. (2008) note, universities are not completely unique organisations. Instead, they share many features with institutes of public administration, for example. Among other things, the common features include the dependency on the state as the source of funds and the many professional and bureaucratic elements.

Universities' strengthening position as more autonomous entities especially cries out for a study on universities as organisations (when compared to studying universities as cultural institutions, for example). The study of universities as organisations also requires studying the perceptions and expectations of academics (Ferlie et al. 2008), which is the focus in Article III. That article complements the overall analysis in the dissertation and investigates the new performance culture introduced by the output-oriented tenure track system as experienced by academics working on the career path.

The purpose of this summary article is to provide the original articles with a broader conceptual framework (Section 2) and to describe their empirical context (Section 3). The set of studies referred to in the summary article has been updated and broadened in comparison with the articles, which had to

[6] In the dissertation, 'academic leaders' refers to university rectors, deans and department heads, who have a formal management position at the university. I acknowledge that other academics, such as principal investigators of research groups and members of recruitment committees, also have powerful leadership and management roles and participate in important decisions. 'Academics' refers here to universities' research and teaching staff.

be of restricted length. With the 'metanarrative' the reader can hopefully position the independent studies in their broader conceptual and empirical context. Another aim has been to revisit the journal articles and to discuss the main findings not only one by one but also as a whole.

This summary article has the following structure. After this introduction, Section 2 draws together the main theoretical foundations and debates that are crucial for the themes of the dissertation. Section 3 describes the context related to recent reforms, which have been aimed at influencing university research, and academic career restructuring especially in Finland. Section 4 introduces the data and methods used in the articles. Section 5 presents a condensed version of the empirical findings of the journal articles and draws together the main findings. Finally, Section 6 concludes and presents discussion of the findings. It also deliberates on the themes for further research.

2 TRANSFORMATION OF UNIVERSITY ORGANISATIONS

The journal articles, which comprise the main substance of this dissertation, draw on literature observing the pressures for European universities to adopt new organisational principles of identity, hierarchy and rationality. These pressures have their origin in new public management-inspired reforms and in other modernisation initiatives in the higher education sector.

In the dissertation, universities have been approached as socially embedded entities. I have used new institutional theory to describe the diffusion of global policy ideas and their translation into the structures and activities of universities and academic work. Whereas many of the diffusing ideas lead to organisational change and practices, for reasons such as the existence of multiple contradictory pressures, it is acknowledged in the dissertation that some changes may take place at the level of formal structures and systems only, such as in marketing and organisation charts. Thus, the research and teaching activities of universities may remain largely untouched despite the structural changes adopted (referred in institutional theory as *decoupling*; see, e.g., Meyer and Rowan 1977).

This section aims to map the institutional environment of universities and to detect the diffusing ideas that cross national boundaries related to profile-building in research and restructuring of academic careers[7]. The section also identifies the transformation of universities into more explicit organisational actors and its effects on academic employment relationships.

2.1 DIFFUSION OF IDEAS IN THE HIGHER EDUCATION SECTOR

Due to the reduced availability of public funds and the massification of higher education, universities in Western countries find themselves in a global market which influences the missions and management of universities, ways of undertaking and financing research, and the nature of academic work (Slaughter and Leslie 1997). The global market is characterised by competition for successful researchers, students, funding, and reputation. International rankings and league tables, which the media, policy-makers, and senior leaders in universities often follow and refer to, imply that universities are in competition with each other (see Erkkilä and Piironen 2014; Hazelkorn 2011).[8]

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[7] A more specific analysis focusing on the Finnish context is provided in Section 3.

[8] In some cases, rankings act as driving forces, when universities design human resource strategies (Hazelkorn 2011; Harley et al. 2004). In addition to rankings, research assessment evaluations, which

Global research competition serves as the constructed environment in which the Finnish universities are now positioned. Reforms aimed at the national higher education and research system, or some of their ‘outdated’ or non-functioning properties, typically refer to successful international baselines and the need for the Finnish system to do well (and to fare better) in comparison with reference countries. Because the reference point is international, it is implied that it is not sufficient to fare well only in national standards.[9]

The quest for the competitiveness of research of international standing (or ‘research excellence’) is a central theme in all the sub-studies of this dissertation. Research excellence is an attractive goal not only because it is perhaps natural to keep on improving performance. Thriving research (with its assumed favorable economic and social consequences) is also a legitimate goal for a modern nation state and university to pursue, because universities worldwide aim at becoming strong research institutions. Development of ‘world-class universities’ with strong research (Salmi 2009) has become an omnipresent policy goal for nation states and for universities’ central leadership. Success is rewarded through gain in status, such as in favorable positions in university rankings.

In the knowledge-based economy, the competitiveness of the national research system is seen in the light of policy ends. In the European Union (EU), the dominant science policy discourse sees the primary role of academic research as a booster of economic growth (Sørensen et al. 2015).[10] The goal of boosting economic growth is not limited only to the EU. The dominant global science policy model (‘science for development’), conceptualised by Drori et al. (2003), refers to the major role of science in promoting the economic development of the nation state. It emphasises the useful end products or consequences of science[11]. The *science for development* policy model has been advanced by international organisations, such as the United Nations and science international organisations, so far as to form ‘a fully institutionalized global organizational field’ (Drori et al. 2003, 106). The model is powerful not least because it is presented as progressive, politically neutral, and transferable to all contexts.

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stress universities’ research success, have further increased incentives to recruit, develop, and reward particular kinds of academics, such as ‘research stars’ (Hazelkorn 2011; Gordon and Whitchurch 2007).

[9] The performance of Finnish universities, academic units and academic research conducted in Finland is evaluated in international comparison on a regular basis. For example, the Academy of Finland regularly reviews the state of scientific research in Finland. These reviews have been produced since the late 1990s. In addition, individual universities regularly undertake reviews of their research activities.

[10] The assumption behind the knowledge-based economy concept is that knowledge drives productivity and economic growth (Sørensen et al. 2015, 4).

[11] This perspective has been influentially conceptualised in *the new production of knowledge* thesis by Gibbons et al. (1994) and *the triple helix* model by Etzkowitz and Leydesdorff (1997).

A more recent, parallel science policy discourse has a wider scope and relates to the role of science in solving megatrends or the grand societal challenges of our time (e.g., Rask et al. 2017). These challenges are related, for example, to energy efficiency, climate change, and demographics. This science policy discourse is similar to the aforementioned discourse as both emphasise 'the usefulness' of science and academic research and the links of science to national and supranational political aims. For example, the Organisation for Economic Cooperation and Development (OECD 2016a) and the EU (e.g., the Research Framework Programme Horizon 2020) both stress the societal role of science.

Powerful actors in the higher education sector disseminate ideas about how to transform universities to more modern and rational entities, which are able to compete in the global market. These actors include not only national, but also supranational and intergovernmental organisations. The more notable ones are the EU[12] and the OECD. In addition, ranking and accreditation agencies, associations of universities and private consultants act as powerful disseminators of ideas in the higher education field. (E.g., Wedlin and Nedeva 2015; Erkkilä and Piironen 2014; Krücken and Meier 2006; Hasse and Krücken 2013).

Many of the non-state actors and networks base their authority on 'soft law' or 'soft regulation' as opposed to binding 'hard law' (Mörth 2006)[13]. The power mechanism of soft law relies on dialogue, benchmarking practices, standards, and peer pressure (Mörth 2006; Olsen and Maassen 2007). The EU's open method of coordination is an example of soft law based on the coordination of member states' policies (Mörth 2006; Maassen 2009). Even if coercive legislation was absent, dialogue and diffusing standards may have significant effects and lead to converging policies (see, e.g., Lemola 2002). In dialogical collaboration, the influence patterns are not unidirectional, but flow from one actor to another. For example, Moisio (2014) argues that the preferences of Finland as a small EU member state have to some extent affected the formation of the EU's higher education policy.

Influential policy reports and strategies set a globally diffusing, transferable message to national policymakers, politicians and university leadership about what a desirable, modern university should look like. For example, *the Europe 2020 Strategy* of the EU contends that European universities suffer from several problems. These include the lack of strategic

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[12] Through the Framework Programmes with extensive funding opportunities, the establishment of the European Research Area, and the Lisbon and Europe 2020 strategies, higher education and research have been put at the centre of EU policies, foremost in the context of the knowledge-based economy (see, e.g., Sørensen et al. 2015; Wedlin and Nedeva 2015; Maassen 2009). This has resulted in an increasing significance of European-level science and higher education policies also at the national level.

[13] Snyder (1993, 198) defines soft law as consisting of 'rules of conduct which, in principle, have no legally binding force but which nevertheless may have practical effects'.

research profiles and inability to attract top global talent (Sørensen et al. 2015). To tackle identified problems, the European Commission has launched ‘a modernisation project’ that aims to modernise the governance, funding, internationalisation, knowledge exchange and regional innovation of European higher education institutions (see, e.g., ESMU 2012).

OECD reports (e.g., OECD 2005) have called for ‘a strategic approach to research policy’ and recommended that academics should be recruited to fields with the most potential for research excellence. By using university rankings as a frame of reference, the widely-cited report of the World Bank (Salmi 2009) goes as far as to give practical advice for policymakers and universities’ senior leaders about how to upgrade a university into a world-class one. The recipe includes, among other things, strong leadership, building research and teaching excellence in a limited number of areas, and international recruitment of foreign professors and researchers with flexible remuneration and employment conditions.

With respect to academic careers, no single European career model exists. National systems are characterised by different career trajectories and features pertaining to internal career paths, different statuses of academics as civil servants or as universities’ direct employees, the use of internal and external labour markets, and career mobility (e.g., Musselin 2007; 2013; Kaulisch and Enders 2005; Fumasoli and Goastellec 2014). Despite the different national contexts and traditions, dialogue is also fostered in this area[14]. Associations based on international collaboration and coordination, such as the League of European Research Universities (see LERU 2014) and the European Science Foundation (see ESF 2009), have been active in trying to harmonise academic career paths. They have made recommendations about how to improve research careers in Europe. In addition, the European Commission (2005) has launched standards addressed to researchers, employers and funders, with which the Commission seeks to standardise the recruitment processes of universities (see also Pausits 2017). Research institutions which adhere to *the European Charter for Researchers* and *the Code of Conduct for the Recruitment of Researchers* receive the ‘HR excellence in research’ award. In this case, the Commission acts as a carrier of modern human resources standards, thus circulating ideals of modern human resource management in Europe (cf. Sahlin and Wedlin 2008, 228–230).

[14] One reason for increased dialogue is the interpretation that European universities should offer internationally more attractive research careers in comparison to American and Asian universities and in comparison, with the career opportunities outside academia (see, e.g., European Commission 2010). Another reason relates to the policy emphasis on short-term and long-term researcher mobility, which requires that national systems are somewhat compatible with each other and understandable for academics and administrators from various backgrounds.

2.1.1 EFFICIENCY AND CONTROL

Many of the modernisation initiatives in higher education have been inspired by reform packages broadly referred to as new public management (NPM) in the public sector (e.g., Seeber et al. 2015; Brunsson and Sahlin-Andersson 2000; Power 1999; Bleiklie 1998; Marginson 2008). Because public entities are increasingly subject to external control and expected to 'show their value' (according to the NPM logic), public universities also have been predisposed to more scrutiny in various forms of monitoring and control, such as audits and quality measurement, which turn performance into quantifiable and comparable forms (Power 1999; Delanty 2002; Marginson 2008).

The new control instruments have supplemented professional forms of intellectual accountability (Delanty 2002, 191–192). At the same time, Marginson (2008) argues that the locus of control over intellectual work has been partly shifted to external agents, such as the government and funders. Academics still affect how externally defined goals should be accomplished, but they may be unable to affect the goals themselves. They are destined to 'set the range of their work so as to maximise the probability of funding support' (Marginson 2008, 280), thus having to internalise the performance signals in one's work.

Michael Power (1999, 43) characterises NPM as a set of ideas borrowed from private sector administrative practice. Among other things, these ideas emphasise cost control, financial transparency, decentralisation of management, creation of market and quasi-market mechanisms, and the enhancement of accountability to customers (rather than to citizens) for the quality of service via performance criteria. In his seminal paper, Christopher Hood (1991) adds professional management, the definition of goals and output control to be central components of NPM.[15] As such, the concept of NPM covers a broad collection of administrative reforms in the OECD countries, which started in the late 1970s (Hood 1991)[16]. According to Power (1999), fiscal restraint, ideological (neoliberal) commitment to the reduction of state service provision and the political discourse of demanding improved accountability of public service have led to the prevalence of NPM ideas. Some of the popular influence of NPM derives from its powerful rhetoric,

[15] Bleiklie (1998, 307) notes that some of the tendencies of NPM pull in the direction of centralisation, whereas some pull in the direction of decentralisation, which in universities is likely to cause tension within internal governance and with respect to the state authorities. For example, the autonomy of university from the state and commitment to keep decision making at the level where services are delivered are emphasised. On the other hand, this decentralisation is expected to be accompanied with strong leadership.

[16] According to Pollitt and Bouckaert (2004), Finland has followed a reform model of the 'Neo-Weberian State' and has used the NPM paradigm to modernise (rather than to marketise) its public sector. For an overview of administrative reforms in Finland, and how they relate to NPM, see Tiili (2008).

which places 'the taxpayer' at the centre and which attaches the goals pursued through NPM with positive connotations (e.g., service quality).

Influenced by NPM ideas, the market context has introduced universities in many countries to new targets and ideals, such as efficiency via performance measurement and control, and accountability via audits and evaluation (Rhoades and Sporn 2002; Deem 2001; Bleiklie 1998; Kallio 2014). These market principles affect both the governmental direction and control of universities and their internal systems. For example, universities' performance management systems aim to objectivate the performance and activities of academics with indicators (Kallio et al. 2016; cf. Courpasson 2000). Performance indicators also offer new tools for management as they make it necessary to package research and teaching activities into standardised and controllable forms.

It should be noted that market-oriented NPM forms a powerful, but not the only relevant discourse when higher education is modernised. Universities as inherently pluralistic organisations face a complex environment (cf. Kraatz and Block 2008), which includes various groups, such as students, alumni, and non-market funders. To exemplify the various expectations socially embedded universities face, Ramirez (2006, 244) argues that in addition to being efficient spenders of the tax-payers' money, modern universities are pushed to portray themselves as socially responsible actors. They are assumed to be socially inclusive and to embrace modern ideals of equity that are manifested in policies of affirmative action. Universities should be responsive to heterogeneous student demands (e.g., demonstrated by various practice-oriented study programs and student counselling) and to be open for collaborative innovation and business partnerships (e.g., demonstrated by the establishment of science parks) (see also Delanty 2002; Krücken 2003). Some of the expectations may be somewhat incoherent, such as when market efficiency needs to be combined with supportive policies for students with disabilities. Nevertheless, Ramirez (2006) argues that the expectations encourage the rationalisation of the university as organisation.

2.1.2 SOCIAL EMBEDDEDNESS OF UNIVERSITIES

Theoretically, Articles I and II of this dissertation particularly draw on the notions of sociological new institutionalism, which states that an organisation's foremost aim is trying to fit their wider institutional environment[17]. Institutions are macro-level abstractions made of taken-for-

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[17] Institutional theory today is one of the dominant, if not the most dominant, approaches in organisation studies (for an overview, see Greenwood et al. 2008). The classic texts of Meyer and Rowan (1977), DiMaggio and Powell (1983) and Zucker (1977) originally came to challenge rational notions of organisations, such as the structural-contingency theory and resource dependency theory, which assumed that organisations foremost aim to adapt to their technical environment (Greenwood et

granted scripts, rules, and classifications (DiMaggio and Powell 1991). Existing institutions are significant, because they limit the set of possible choices for organisations by setting the criteria through which preferences are based (Meyer and Rowan 1977; DiMaggio and Powell 1991).

One of the central components of new institutional theory is isomorphism. According to DiMaggio and Powell (1983), institutional isomorphic change occurs through three mechanisms, as a result of which organisations become more similar (cf. three pillars of institutions in Scott 1995). First, coercive isomorphism, which stems from cultural expectations, formal and informal political influence, is clearest when an organisation responds to new regulation (e.g., new legislation). Second, mimetic isomorphism stems from uncertainties, which lead to the imitation of standard responses (e.g., when universities with strong leadership and steep hierarchy are taken as role models, whose organisational structures are mimicked). Third, normative isomorphism is associated with professionalisation, when members of a profession set standards through formal education and professional networks (e.g., when associations of universities promote certain career models).

According to new institutionalists, maintaining legitimacy and conforming to social rules is critical for organisations' survival and in avoiding conflict and illegitimacy (Meyer and Rowan 1977; DiMaggio and Powell 1983). It is argued here that when universities in a small country are exposed to global trends, they are likely to respond in socially legitimate ways to appear to be modern, responsible actors (cf. Meyer and Rowan 1977). For example, it may be reasonable for the organisational strategy of recruitment to apply the label of a globally known tenure track system in advertising career options in a small, distant country in Europe. It shows the university's adherence to modern recruitment policy ideas in academia.

However, conforming to social rules does not necessarily lead to substantive changes in the organisation, as responses may also be symbolic for various reasons. This means the organisational facade may be loosely coupled or even decoupled from organisational action (Meyer and Rowan 1977; Weick 1976). On the other hand, when key actors in an organisation promote change and when it is compatible with the historical-cultural traditions, the effects are likely to be more tangible (Christensen and Laegreid 2001).

The opportunity to decouple structure and action is important for universities, because faced with a complex environment and a set of constituents, they need to be capable of simultaneously offering multiple

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al. 2008). Of the different variants of new institutionalism, Article I relies especially on literature underlining the micro dynamics of institutional stability and change (Powell and Colyvas 2008; Daniels et al. 2002; DiMaggio and Powell 1991). Article II makes use of the debate around the construction of complete organisations, which draws on the tradition of new institutionalism (e.g., Brunsson and Sahlin-Andersson 2000; Krücken and Meier 2006).

things to multiple people (cf. Kraatz and Block 2008)[18]. Symbolic adaptation enables the university to express multiple identities, as some of the expectations may be responded to without a real change in core activities. Thus, to appear as socially fit, it is sometimes rational to decouple the structure and activities and display the formal symbolic structure to the outside audience (Meyer and Rowan 2008; Krücken 2003). Larsen (2000) notes that universities' research strategies may be particularly apt for serving symbolic purposes, as they are visible tools to communicate with the external audience.

Traditional institutional theory has underlined the stability and constraints created by institutionalised norms to the extent that it has been criticised for ignoring questions of deinstitutionalisation and institutional change (e.g., Dacin et al. 2002; Oliver 1992). Recent research on new institutionalism has underlined the need to focus on the micro dynamics, e.g., how institutions are reproduced, transformed, and resisted (e.g., Powell and Colyvas 2008; Daniels et al. 2002). Human agency (Meyer 2008), dynamics and contestation (Powell and Colyvas 2008; Jennings and Greenwood 2003), and power (Lawrence 2008) have been pushed to the fore. Actors are considered intentional and self-interested, capable of choosing to deviate from institutional norms (David and Bitektine 2009). For example, Oliver (1991) argues that organisations may adopt different strategies: instead of acquiescing or compromising institutional demands, they may also defy, avoid, or manipulate them. In the higher education sector, Delanty (2002, 192) characterises universities as 'far from powerless in the current audit culture' and capable of resisting and accommodating new regimes of governance.

Incorporating change, change dynamics and individual agency in the models of institutionalism have broadened the understanding how organisations respond and adapt to pressures (Jennings and Greenwood 2003; Meyer 2008). While this dissertation identifies the diffusion of global ideas, it acknowledges the possibility of stretching the original ideas to pursue different aims and interests.

2.2 TURNING UNIVERSITIES INTO COMPLETE ORGANISATIONS?

The institutional autonomy of universities has been a central topic in higher education research, drawing both theoretical and empirical interest (see, e.g., Neave 2009; Erkkilä and Piironen 2014; Estermann et al. 2011; Ferlie et al. 2008). According to Ferlie et al. (2008, 327), a traditional organising concept that characterises university-state relationships has emphasised *the*

[18] Krücken and Meier (2006) use universities as examples of organisations which routinely adapt to external expectations without always making changes in activities.

uniqueness of the university organisation compared to other types of organisations, the important role of the state in ensuring the autonomy of higher education, and strong control exerted by academics over research and teaching. This perception, which according to Ferlie et al. (2008) has been the dominant analytical and normative framework in higher education, stresses academic freedom and academics' control over their work.

More recent perceptions have come to challenge the traditional one. Ferlie et al. (2008) note that higher education (and research) is typically today seen by the state authorities as being no different from publicly funded services, which are guided towards meeting public policy goals. Market-like mechanisms are incorporated to increase the efficiency of the system. At the same time, the concept of autonomy in European higher education discourse has moved to reflect managerial and competition ideals, as outlined, for instance, in the European Commission's rhetoric (Erkkilä and Piironen 2014, 183–185; Neave 2009)[19].

A similar shift can be observed in the perceptions of university as organisation. In the 1970s, scholars in organisation studies portrayed universities and educational organisations with somewhat atypical characterisations. These characterisations reflected the observations of Clark (1983), who described universities as 'bottom-heavy' organisations with only limited potential for collective action and weak organisational leadership[20]. Some of the prominent, classic concepts to refer to universities as organisations are those of *organised anarchy* developed by Michael D. Cohen, James G. March and Johan P. Olsen (1972) and *loosely coupled systems* developed by Karl Weick (1976) [21].

Organised anarchy, for which Cohen et al. (1972) used the university as an example, has inconsistent and ill-defined preferences. Its preferences are discovered through action (the so-called garbage can decision-making process), its technology is unclear (the processes are not understood by organisational members and the activities are based on trial-and-error procedures), and the decision-makers and audiences are constantly changing.

Weick (1976) used educational organisations as models of his *loosely coupled system* concept, which in a broad sense refers to a lack of internal coordination and regulation. Loosely coupled systems have several potential

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[19] For instance, Erkkilä and Piironen (2014, 184) state that 'It [autonomy] is treated as an instrument for efficiency and quality, or as a pre-requisite for survival. Autonomy is increasingly seen as the managerial property of the university leadership, and not as the property of the entire academic community.'

[20] For example, in Germany, the university system has been characterised by both strong state control and academic oligarchy, whereas the university as an entity has not been considered a significant decision-making actor (Hasse and Krücken 2013, 189; Clark 1983).

[21] Also, Mintzberg's (1979) concept of *professional bureaucracy* emphasises the peculiarity of universities as organisations.

advantages: for example, loose coupling allows the organisation (or some part of it) to persist, to adapt locally without affecting the whole system, and to preserve the identity and uniqueness of separate elements.

In the past decades, several scholars have noted that more management-oriented, rationalised forms have challenged the traditional organisational characteristics of universities. Hasse and Krücken (2013) observe the transformation of the university into a competitive organisational actor (see also Krücken and Meier 2006; Whitley 2008), whereas other scholars have similarly noted the construction of universities as more complete organisations (Brunsson and Sahlin-Andersson 2000; Seeber et al. 2015; de Boer et al. 2007).

Meyer (2010, 3) notes that it is the construct of the modern society to view individuals and organisations as *actors*. According to Meyer (2010), an actor has clear boundaries, a clearly defined set of resources, and a strong internal control system. It chooses and pursues rational ends with the available means. A modern organisation with actorhood is understood as being agentic, bounded, autonomous, coherent, purposive, and hard-wired.

In their seminal paper, Nils Brunsson and Kerstin Sahlin-Andersson (2000) argue that public sector reforms, such as NPM, have promoted the transformation of traditional entities, such as universities and public agencies, into more complete organisations. In the higher education sector, several issues have fuelled the construction of universities as separate social entities. These include globalisation, the competitive ethos, massification of higher education in student numbers, scarcity of state funding, the pressures for universities to adopt market ideals, and seeing knowledge as a driver for economic growth (e.g., Erkkilä and Piironen 2014; Krücken and Meier 2006; Hasse and Krücken 2013; Ramirez 2010; Sørensen et al. 2015; Wedlin 2008). For example, Enders (2004) notes that in the era of generous state funding, universities were not typically considered as being in a competition with each other. The competitive settings, such as the existence of schemes for mutual observation, comparison, evaluation and ranking, give room for positioning universities in a global frame. As a result, universities are increasingly perceived as competitive actors in the higher education and research market (cf. Hasse and Krücken 2013; Erkkilä and Piironen 2014).

Brunsson and Sahlin-Andersson (2000) specify three properties of complete organisations: identity, hierarchy, and rationality.

First, a complete organisation has a distinct, enduring *identity*, which distinguishes it from other organisations. For a modern university, the management of a proper identity becomes important (Ramirez 2006, 242). Mission statements, profile building, brands and logos differentiate universities as separate entities from their competitors (Hasse and Krücken 2013; Aspara et al. 2014; Wedlin 2008). Identity is built with institutional autonomy (visible in employer status), collective resources that the organisation controls, and by constructing boundaries between the organisation and the outside environment (Brunsson and Sahlin-Andersson 2000, 723–726).

Second, the construction of internal *hierarchy* involves management and centralised coordination of action and control. Hierarchy may be reinforced with organisational policies, division of work, and the strengthening of the authoritative centre. With these, the organisation may come up with organisational solutions to organisational problems (cf. Krücken and Meier 2006). Hasse and Krücken (2013) depict a strategically acting organisation with professional management function as an archetype of *a modern entity* not only in the business sector, but increasingly also in the educational sector. This is shown in studies and reports, which indicate the increase of full-time managers and administrators in European universities (Rhoades and Sporn 2002) and the shift of governance systems in European universities from collegial forms of governance to management-oriented governance systems (Eurydice 2008).

Third, the construction of *rationality* entails that the organisation sets objectives from the set of alternatives and measures their fulfilment. Ideally, the organisation has only one or a few objectives, which guide its direction. Also, the idea of accountability for reaching or not reaching the manifested goals ensue from the assumptions of rationality and trust in management.

In the context in which a university is considered to be an organisational actor in its own right, teaching and research become organisational tasks, and not tasks performed by individuals (Meier and Schimank 2010, 218). Activities such as business collaboration, undertaken previously by individual academics, become institutionalised as 'the third mission' and part of the institutional mission and formal structures of universities (Krücken and Meier 2006). This is demonstrated in the establishment of separate divisions for technology transfer and business partnerships at universities.

However, as Hasse and Krücken (2013, 196) note, the social construction of organisational actorhood is likely to produce a lot of loose coupling and symbolic adaptation, where formal structures are used to show adherence to the modern university model (cf. Brunsson and Sahlin-Andersson 2000; Krücken and Meier 2006).

Moreover, despite the changes in governance structures, Delanty (2002) states that the university remains an undermanaged institution. It still has diffused structures of authority, and academics continue to possess considerable autonomy over their work. According to the empirical study of Seeber et al. (2015), which used survey data from 26 universities in eight European countries, European universities mix managerial and collegial forms of governance. The study found no clear dichotomy between complete and incomplete archetype of university organisation.

Whitley (2008) adds that scholarly communities continue to govern the intellectual processes because of the reliance on expert evaluation in the core processes of academic publishing and recruitment. The uncertain nature of research activities, low success rate, and the significance of serendipity make it difficult to make priorities especially in research. Whitley (2008) argues that because leaders are not able to organise the activities of research groups, their role is inevitably restricted to merely *facilitating* the conditions of research groups and academics, for example by providing access to infrastructure and start-up grants.

2.3 ACADEMIC EMPLOYMENT RELATIONSHIPS IN FLUX

Arthur and Rousseau (1996) use academic career as a prototype of the *boundaryless career*, as opposed to organisational career, which takes place in a single employment setting. The boundaryless career concept emphasises the significance of individual agency in managing one's career: academics tend to manage their careers by themselves, flexibly searching for new, interesting projects in different organisations and even in different countries.

However, Dany et al. (2011) point out that the concept of the boundaryless career overemphasises agency and undermines the significance of environmental constraints. Different individuals have different levels of access to relevant resources, such as social networks and the expensive infrastructure which are needed in research work. Even mobile 'cosmopolitan academics' cannot fully escape the constraints. They are continuously under pressure to have their work published in leading international journals.

Interestingly from the perspective of this dissertation, Dany et al. (2011) point out that universities' promotion systems, such as the tenure system in the US, expose individuals to certain rules that have to be followed if they wish to progress in their career. As Barrier and Musselin (2009, 215–216) argue, the new employer-employee relationships evolving in many countries make academics more attached to the strategic vision of the university (see also Musselin 2013).

In this dissertation it is argued that the evolving role of a Finnish university as an employer organisation with its own recruitment and promotion procedures and criteria brings a new and important dimension to the analysis of academic careers. Tenure track as an internal career path attaches the academic closer to the employing university (cf. Hüther and Krücken 2013, 10–11). As Hüther and Krücken (2013) put it, academics in tenure track positions become subject to an organisational logic. Being successful on the career path requires compliance with the university's performance criteria. Overall, performance control, but also the support structures involved in tenure track positions, are more explicit than in ordinary project-based academic employment relationships.

Universities with employer status face a set of new administrative requirements as they have to formulate their own personnel policies and priorities (cf. Barrier and Musselin 2009). Ramirez (2006) argues that in an (idealised) rational university, transparent and standardised promotion procedures come to replace casual and local ones, which emphasise the traditions of each unit (cf. Fumasoli and Goastellec 2014).

When studying academic employment relationships, it should be noted that the attachment to a specific university is important, but hardly the only or even the most relevant commitment relationship in academia. Academic careers are simultaneously embedded in multiple institutional contexts (Kaulisch and Enders 2005). The most notable one is that of the science system and one's academic field, which links the academic to the national and international scholarly community.

Another significant institutional context is the national one. Academic career trajectories and staff structures typically have significant national specificities (see, e.g., Musselin 2010). The characteristics of the national labour market, its size and regulation differ by country (Rasmussen and Håpnes 2012). This leaves a certain amount of leeway for organisational leadership to formulate organisation-specific personnel strategies and for academics to find alternative academic and non-academic workplaces.

There are also opposing tendencies with respect to the changing role of the university in employment issues. First, the pressures for international and national mobility are likely rather to dispel than reinforce organisational boundaries (Barrier and Musselin 2009). Second, the increased use of research assessment, which stresses research success, is likely to intensify loyalty to scholarly communities rather than to universities (Whitley 2014). Third, the global competition for research excellence, international job applicants and prestige is likely to make universities adopt similar career and incentive structures which applicants are familiar with.

The special features of academic work and career progression entail multiple actors being involved in career decisions. These include academic leaders, but also professors, heads of research groups and other (especially senior) academics. Members of scholarly communities influence academic recruitment and career progression in various ways, for example by acting as reviewers of scholarly papers and as members of recruitment committees.

According to a survey conducted by Siekkinen et al. (2016), recruitment committees and external reviewers possess significant authority in the tenure track and professorial recruitment in Finland. Siekkinen et al. (2016) state that the formal procedures and the weight given to peer evaluation separate professorial and tenure track recruitment from other academic recruitment in Finland, which typically follows less formal procedures. This suggests tenure track recruitment is considered to be a key organisational activity and comparable to recruitment of professors. It also emphasises the role of scholarly communities in recruitment decisions.

2.4 EXPECTATIONS ABOUT ACADEMIC WORK

A large body of work has been written about how academic work is changing. For instance, academics face pressures to be highly productive and to adopt entrepreneurial attitudes and working styles (e.g., Slaughter and Leslie 1997). Due to the trends described earlier in this dissertation, academic identities have diversified and become fragmented and blurred (Ylijoki and Ursin 2013). However, research indicates that academics continue to rely on the traditional values of academic freedom and individual autonomy in their work, and changes are interceded with disciplinary and local traditions (Henkel 2005; Ylijoki 2003). Thus, both continuity and change characterise academic work and its underlying values.

By contrast, the competitive landscape seems to have widened the gaps between academic high-fliers and others. Research shows that academics are being stratified into different classes according to the quality (including the length) of employment contract and status[22]. Expanded doctoral education, changes in university funding, and competitive academic labour markets have led to an increase in part-time, project-based, and fixed-term appointments in European academia and beyond (e.g., Kwiek and Antonowicz 2014; Enders and de Weert 2004; Kimber 2003; Snyder et al. 2016). Kimber (2003) uses the labels 'the tenured core' and 'the tenuous periphery' to describe the different classes of academics (see also Enders and de Weert 2004; Nikunen 2012; Herbert and Tienari 2013; Ylijoki and Ursin 2013).

In addition to the differentiation of academics according to unequal distribution of opportunities and resources, Barrier and Musselin (2009) observe the differentiation among academic fields, when a large proportion of funding is expected to come from external sources. The market orientation is especially beneficial to fields which are close to the market and which have traditionally had contacts with industry. Academics in some other fields, on the other hand, may find it difficult to commercialise their research and to find partners outside academia (Ylijoki et al. 2011; Slaughter and Leslie 1997). Although the market influence varies by discipline, Ylijoki (2003) notes that the changes also affect fields, such as the humanities, which have been less attached to external pressures. For instance, in her research, Ylijoki (2003) reports how research in the field of history is increasingly financed with external funding with implications on the organisation of research work.

Kwiek and Antonowicz (2014) note that academic careers in Europe have become not only more competitive, but also more structured than in the past. The timeframe in which an academic should complete his/her doctoral studies, progress to postdoctoral and junior positions, and then to senior positions is being more clearly defined. The tight timeframes are

[22] In addition, Barrier and Musselin (2009) identify a clearer differentiation between teaching-oriented and research-oriented academics with divergent career paths.

problematic, because they leave less room for non-productive phases with possible gender implications (e.g., the effects of parental leave, predominantly taken by mothers in many countries, on academic careers).

From the perspective of this dissertation, a complete university organisation as depicted by Brunsson and Sahlin-Andersson (2000) would have a rationally functioning performance management system, which would guide the work of academics towards the specific goals of the organisation. In such an organisation, the fulfilment of the unambiguous performance criteria would be clearly communicated and measured.

This ideal seems to be difficult to achieve in universities. Academic work is confronted with multiple, diversified, even partly conflicting expectations (e.g., Ylijoki 2013; Ylijoki and Ursin 2013; Rice and Sorcinelli 2002; Mäntylä 2007). Academics face expectations from a range of actors: increasingly from departments, tangible in continuous measurement (Knights and Clarke 2014; Kallio 2014), but also from students and external agencies (Obgonna and Harris 2004; Evans 2015).

Nevertheless, it can be stated that universities' performance systems predispose academics to diverse expectations and demands. Based on a study of job descriptions at Australian universities, Pitt and Mewburn (2016) conclude that the Australian university employers seek 'academic superheroes'. They should not only excel in research and teaching, but also actively participate in non-traditional areas, such as student marketing. Based on their analysis, Rice and Sorcinelli (2002, 104) state that junior academics are 'uncomfortably squeezed between local and cosmopolitan pressures, and between disciplinary colleagues and institutional demands'. The study by Evans (2015) shows that non-professorial academics have a multiplicity of expectations towards professors' work: among other things, they should be scholarly leaders, mentors, and advisors for junior scholars.

Research productivity has traditionally been important in academic recruitment and career progression (e.g., Boyer 1990; Rice and Sorcinelli 2002). However, in an era when journal rankings and internationalisation are emphasised, not all peer-reviewed publications are necessarily considered to be of equal importance. In Finland, so-called Publication Forum, which is organised into panels consisting of academics working in Finland, have classified publication channels, such as scholarly journals, conferences and book publishers, into three levels. Thirteen per cent of universities' performance-based budget funding is determined by the number of publications. Research outputs that have been published in the most prestigious publication arenas are the biggest 'cash cows' for universities.

Although rankings such as these may not be intended to value individual publications or the achievements of individual academics, they offer a tempting tool for university management and administration by compressing complex content and processes into 'an objective measure', such as 'rank 3 publication' (cf. Willmott 1995). Rankings may partly replace the traditional reward systems, which are based on the contributions to knowledge in a particular discipline and make the reward systems more standardised. Lund (2012) argues that today, an ideal academic is an internationally-oriented scholar who produces journal publications in high impact international journals (see also Herbert and Tienari 2013). However, mechanistic use of metrics and performance management is problematic, not least because they fail to take into account the variations in scientific styles, particular career trajectories and academics' individual life circumstances (Nielsen 2018).

In addition to research, teaching is being controlled and evaluated through the increased use of student and peer evaluations (Wolverton 1998; Power 1999, 101–103). However, despite the high status of teaching and student learning in university strategies, teaching performance is not necessarily decisive in recruitment and promotion decisions (Parker 2008; Boyer 1990).

Also, several other criteria have gained in importance in academic recruitment. These include international scholarly experience, mobility and networks (Herbert and Tienari 2013), external funds (Klawitter 2015) and activity and achievements in societal interaction (e.g., Rice and Sorcinelli 2002). Mobility requirements have been explicitly attached to some funding calls. For example, in Finland, from 2016 onwards, the Academy of Finland requires post-doctoral researchers and Academy research fellows to be either nationally or internationally mobile. Kosunen and Kivelä (2017) interpret these requirements as putting academics with caring responsibilities at a disadvantage, because they may be unable to be mobile for a long period of time for personal reasons.

As a conclusion, in this section several trends pushing universities to adopt new organisational forms and practices have been observed. As a result, universities' research activities are considered to be matters that increasingly need organisational attention, such as coordination, organisational choices, evaluation, and marketing. In addition, the development of academic career paths has become an issue that draws organisational attention. New organisation-specific career systems with a set of performance requirements and support structures are being developed.

However, the research cited above also indicates the existence of powerful counter-tendencies and processes of decoupling. Therefore, empirical research is needed in order to elaborate on the responses of actors at the central, faculty and departmental levels of the university to the pushes that encourage universities to adopt new organisational forms and practices.

Following this observation, the dissertation reports on analyses of how the establishment of research profiles and tenure track systems in Finnish universities are used to pursue certain organisational goals, the internal tensions the changes produce, and how the reforms are manifested in organisational life[23].

[23] While the sections 5.1–5.3 present the findings of the independent articles, the section 5.4 gives an overall summary of the findings by focusing on the above themes.

3 FINLAND AS THE CONTEXT OF THE STUDY

This section presents a brief description of the present policy in Finland regarding profile-building in research and universities' academic career systems. The sub-studies of the dissertation were conducted at specific points in time (the research interviews for the studies were conducted between 2010 and 2015). It is argued here that the policies at the national level in Finland (e.g., the Universities Act, 2009) have framed the conditions and the position of universities in a way that encourages universities engaged in global competition to adopt a clearer stance towards their research activities and academics as employees.

3.1 CURRENT STATE OF AFFAIRS: FUNDING AND TYPES OF EMPLOYMENT

In 2018, the Finnish higher education sector comprises 14 universities and 25 universities of applied sciences (polytechnics)[24]. As a small open economy country, Finland has for long invested heavily in research and innovation with a strong belief in the advantages of a well-educated workforce and high research intensity in the knowledge-based economy (Nieminen 2005). Finland's investment in research and development (R&D) is comparatively high. In 2016, R&D expenditure was 2.8% of gross national product (GDP), whereas the OECD average was 2.4% (OECD 2016b). The R&D expenditure amounted to c. €5.9 billion in 2016. Of this, the private sector covered about 66%, the higher education sector about 25%, and the rest of the public sector the remaining 9% (e.g., public research institutes and municipalities) (Statistics Finland 2017a) [25].

[24] The Finnish university sector has undergone several structural changes during the 2010s. Three mergers occurred in 2010. First, the University of Joensuu and the University of Kuopio merged into the University of Eastern Finland. Second, the Turku School of Economics merged with the University of Turku. Third, foundation-based Aalto University was founded in the metropolitan area of Helsinki when three former universities (Helsinki University of Technology, Helsinki School of Economics and the University of Art and Design) merged. In 2013, three universities (Academy of Fine Arts, Sibelius Academy and Theatre Academy) formed the University of the Arts Helsinki. Currently the biggest structural change effort is taking place in Tampere where the University of Tampere, Tampere University of Technology and the Tampere University of Applied Sciences are uniting.

[25] In the 2010s, both the private sector and the public sector have decreased their investment in R&D. The proportion of R&D expenditure of GDP dropped from 3.8% in 2009 to 2.8% in 2016 (Statistics Finland 2017a).

As is shown in Figure 1, R&D expenditure in the university sector totalled c. €1.3 billion in 2016 (Vipunen Database 2017). About half of this consisted of governmental budget funding. About 49% consisted of so-called external funding, which in the Finnish use of the terminology may have a public origin (e.g., competitive research funding granted by the Academy of Finland) or a private origin (e.g., research funding from companies or private foundations). The remaining 1% consisted of universities' own assets.

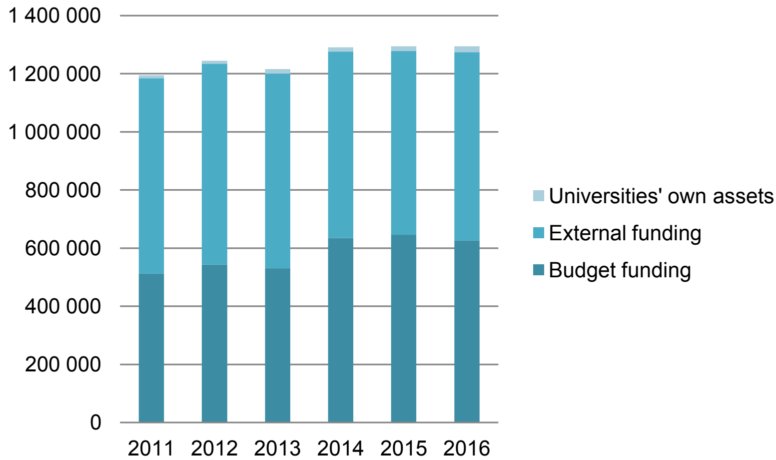

Figure 1 Finnish universities' R&D funding 2011–2016 (€1 000). Source: Vipunen Database (2017).

Finnish universities' budget funding is determined by a national funding model which aims to direct the activities of universities in line with the national policy directions (see Figure 2 in Appendix for the current formula). The funding model comprises of a set of indicators. About 39% of funding is determined by performance in teaching and education and 33% is determined by performance in research. The remaining 28% of funding is related to other education and science policy considerations. Teaching and education performance indicators are related to the number of completed master's and bachelor's degrees, and study credits earned, for instance. Research performance indicators are related to scholarly publications, PhD degrees, competitive research funding obtained, and the number of international academic staff.

The other half of Finnish universities' R&D funding consists of funds, which are not distributed by the state in the universities' block grants. In 2016, c. 61% of this 'external funding' came from two sources: the research council Academy of Finland, which operates under the Ministry of Education and Culture, and the Finnish Funding Agency for Innovation Tekes, which operated under the Ministry of Economic Affairs and Employment[26]. About 12% of external funds came from the EU, 8% from companies, 9% from foundations, 5% from ministries, 3% from municipalities or other public sources, and the remaining 2% from international organisations and other foreign sources (Vipunen 2017).

The disciplinary fields vary significantly according to the significance of budgetary and external funds (Vipunen 2017; Ylijoki et al. 2011). In 2016, the share of external funds of all R&D funding ranged from c. 35% in humanities to c. 63% in technical sciences (Vipunen 2017). This makes humanities especially dependent on governmental budget funding. The significance of different funding sources also differs. According to the study by Ylijoki et al. (2011), the Academy of Finland was assessed as an important funding source across fields, but especially in natural sciences. In technical fields, where it is typical to collaborate with companies, Tekes and company funding were important. In the humanities, the Academy of Finland and foundation-based funding was important. Social sciences resembled humanities with a somewhat wider funding base from ministries and governmental agencies. Medicine and nursing sciences relied on a broad funding base, which ranged from public to private sources.

The current Finnish government (2015–) has decided to freeze the university index, which was designed to keep university budget funding in pace with inflation[27]. In addition, the government removed the so-called pharmacy compensation of the University of Helsinki and the University of Eastern Finland[28]. In 2016, the universities' R&D budget funds had decreased by c. 3% compared with 2015 (Vipunen 2017). The government has also decreased Business Finland (formerly Tekes) funding with implications especially for the technical universities. The current national science and education policy has been widely criticised in the Finnish media and among the academic community, especially as the financial cuts have been linked to layoffs at universities[29]. There has been discussion in the Finnish media on the academic brain drain as a result of the deteriorating circumstances of

[26] In 2018, Tekes merged with Finpro, a corporation owned by the Finnish state, which supported the internationalisation and export of Finnish companies. Together Tekes and Finpro formed Business Finland.

[27] University index is comprised of the index of wage and salary earnings, the consumer price index and the retail price index. The index has been cut or frozen also by former governments.

[28] The University of Helsinki and the University of Eastern Finland have retained a special right to possess pharmacies whose profits have been used for universities' operation. Prior to the removal of the pharmacy compensation, the two universities received special funding from the state to cover corporate taxes and pharmacy charges.

[29] The number of academic staff at Finnish universities (measured in full-time equivalent personnel) decreased c. 3.1% between 2014 and 2016 (when calculated with the original, not the rounded figures in Table 1). The number of 'other staff' has decreased much more dramatically, by c. 11.4%.

research and teaching (e.g., Yle 2017; Helsingin Sanomat 2017). Lindström and Kolu (2017) estimate that the balance between PhDs emigrating from Finland and PhDs immigrating to Finland is skewed: Finland suffers from PhD emigration to countries assessed as having a more favourable environment in which to conduct research.

However, as the Figure 1 shows, the overall level of universities' R&D funding in recent years has remained quite stable. The funding of the Academy of Finland has increased, but not in the form of bottom-up research projects and new academic positions, but in the form of targeted funding, for instance for strategic research themes (decided by the Finnish government) (see Vipunen 2017; OECD 2017).

In 2016, Finnish universities had c. 28 700 full-time equivalent personnel (Vipunen 2017, see Table 1)[30]. This included c. 17 400 research and teaching full-time equivalent personnel and c. 11 300 personnel classified as 'other staff' (including a heterogeneous group ranging from administrators to laboratory technicians).

Table 1. *Full-time equivalent research and teaching personnel, other personnel 2010–2016. Source: Vipunen Database (2017).*

Year	Research and teaching personnel	Other personnel	Altogether
2010	18 400	13 200	31 600
2011	17 800	13 700	31 500
2012	18 000	13 800	31 800
2013	18 000	13 400	31 400
2014	17 900	12 800	30 700
2015	17 700	12 200	29 900
2016	17 400	11 300	28 700

When academic positions are classified according to four stages or career ladders[31], the largest group of academics consists of individuals working in the doctoral training stage (see Table 2). Overall, in 2016 55% of academics in Finland were men and 45% were women. There were significantly more men (71%) than women (29%) in the highest career stage.

[30] This does not include individuals who work on personal grants, because in Finland they are not employed by a university.

[31] A four-stage researcher career model (see Ministry of Education and Culture 2008; ESF 2009; Välimaa et al. 2016) begins with the first stage of doctoral training (doctoral student positions). The second stage is the post-doctoral stage (post-doctoral positions). The third stage is an independent researcher stage (e.g., lecturer positions). The final, fourth stage is that of established researchers (e.g., professor and research director positions).

Table 2. *Full-time equivalent research and teaching personnel in 2016 according to the career stage and gender. Source: Vipunen Database (2017).*

Career stage	Men (%)	Women (%)	Altogether (N)
I (e.g., doctoral students)	53	47	6 300
II (e.g., post doctoral researchers)	51	49	3 700
III (e.g., university lecturers)	53	47	3 900
IV (e.g., professors)	71	29	2 400
Part-time teachers	54	46	1 000
Total	**55**	**45**	**17 300**

Table 3. *The proportion of permanent contracts among research and teaching staff according to job requirement levels[32] in 2016. Source: Association of Finnish Independent Education Employers (2017, 8).*

Requirement level	Women (%)	Men (%)	Altogether (%)
1–4	2.2	1.9	2.0
5–7	39.6	37.9	38.7
8–10	68.8	75.1	73.3
Total	**28.3**	**31.1**	**29.9**

The reduction of fixed-term (non-permanent) contracts in Finnish academia has been on the national agenda for a long time (Kuoppala et al. 2015). Ministerial direction has emphasised that all universities should have a plan on how to reduce the number of fixed-term contracts. Nevertheless, c. 70% of research and teaching staff at Finnish universities had fixed-term contracts in 2016 (Association of Finnish Independent Education Employers 2017, 8, see Table 3). Nearly all academics (98%) in the first career stage, who work typically as doctoral students, had fixed-term contracts. The limited length of their project may explain this. However, the majority of academics (c. 53%) with doctoral degrees (and c. 27% of academics at the highest career stage) also worked on fixed-term contracts (Association of Finnish Independent Education Employers 2017, 8). These are high figures compared to the national equivalents: in 2016, only c. 15% of all employees in Finland had fixed-term contracts (Statistics Finland 2017b). As Table 3 indicates, more women (71.7%) than men (68.9%) worked in fixed-term employment. The

32 The job requirement levels in the table originate from the collective agreement for universities. Levels 1–4 refer to doctoral education stage. Levels 5–7 refer to mid-level stage, where typical titles are, e.g., university teacher, university researcher, and post-doctoral researcher. Levels 8–10 refer to the highest career stage, where typical titles are professor and research director.

difference between women and men is largest in the highest academic career stage (levels 8–10).

As was noted earlier, academic career trajectories and staff structures have significant national specificities (e.g., Musselin 2010). Based on the international EUROAC survey, which covers ten European countries, Höhle (2017) classifies Finland as belonging to the countries characterised by late selection; qualification and selection continues late in one's career. In the countries of late selection, temporary contracts are also typical in the later stages of career with implications on academics' intentions to leave academia.

This is shown by Siekkinen et al. (2015; see also Puhakka and Rautopuro 2017) who observe that academics working on fixed-term contracts at Finnish universities find their career prospects to be insecure. Many have considered alternative working places. Hakala's (2009a) earlier study showed similarly that junior researchers working at Finnish universities find investing in an academic career to be risky, with implications on the future attractiveness of academic career.

Apart from the tenure track and minor use of teaching-oriented career tracks, the majority of academics in Finland are not on any formalised career path. In addition, Välimaa et al. (2016) estimate that tenure track recruitment covers only a small minority of all vacant positions.

3.2 DOMINANT IDEA OF FOSTERING COMPETITIVENESS

From the 1990s, but reflecting earlier national decisions and guidelines, Finnish science policy has emphasised innovation. The innovation focus in the 1990s was related to the need to reform Finnish society, which had suffered from recession and high unemployment, to be more responsive to the requirements of globalisation and digitalisation. High-level research and education were expected to generate knowledge and know-how, which in turn were expected to support business growth (Nieminen 2005, 42–66).

The 1990s saw the introduction of science policy reforms that aimed to advance the level of Finnish research to reach international standards. The reforms included the establishment of graduate schools, the first Centres of Excellence Programme by the Academy of Finland, and an increase of competitive R&D funding. When Finland joined the EU in 1995, the EU became a significant funder of R&D and provided academics at Finnish universities with an option to enter new networks (Hakala 2009b, 45–47).

At present, Finnish science policy underscores competition, efficiency, the economic role of research, and utility produced by universities (Ylijoki et al. 2011; Kallio 2014), reflecting the global science policy discourse (Drori et al. 2003). Competition in the sphere of academic research (and higher education) is seen to be taking place at the international level, which requires universities in a small country to open up and to respond to the needs of a changing society. This global competition obliges both academics and students to be more internationally mobile (see Nokkala 2007).

Also, the relationships between the state and universities have been following a market-oriented strategy since the late 1980s or early 1990s (Kuoppala 2005). Drawing on the studies by Kekäle (1997) and Kivinen et al. (1993), Kuoppala (2005) describes the NPM-inspired *management by results* doctrine as being characterised by innovativeness, flexibility and attempts to make universities able to react to external change.[33] According to Kuoppala (2005), the management by results orientation has also affected universities' internal governance arrangements with an increase in the authority of rectors, deans, department heads and administrators in contrast to the earlier more collegially-oriented models of governance.

In addition to the advancement of economic growth and innovation, academic research in Finland is increasingly expected to promote societal well-being and to solve societal problems. Requests to address societal challenges have been accompanied by calls for more co-creative policymaking and opportunities for citizen science[34].

Overall, the science system has been directed towards general national policies with an emphasis on trying to evaluate the effectiveness and products of research (cf. Ferlie et al. 2008; Drori et al. 2003)[35]. In Finland, the research–policy nexus has recently been strengthened with the establishment of new funding instruments, of which the so-called strategic research funding instrument is the most significant. It focuses on societal challenges being faced by Finnish society. The large-scale projects funded by the Strategic Research Council of the Academy of Finland need to have a multidisciplinary research team and to maintain close contact with stakeholders. The increased focus on the societal relevance of research and the new expected collaborative work practices increase pressures for universities to extend the performance criteria of academics beyond the traditional criteria of research and teaching.

In trying to foster the international competitiveness of Finnish universities, the state has promoted profiling initiatives. Allocation of

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[33] In the relationships between universities and the state, Finland has followed the international trend in shifting regulation towards performance-based funding with the emphasis on outputs instead of inputs (Kuoppala 2005; Kallio 2014; cf. Ferlie et al. 2008). The management by results doctrine, or performance management, is not limited only to the higher education sector as it has dominated the whole public administration in Finland since the end of the 1980s (see, e.g., Kuoppala 2005; Tiili 2008).

[34] In practice, this may mean engaging a broader range of stakeholders and citizens in the formulation of priorities for research, engaging them in research programs or projects (see Rask et al. 2017; Aarrevaara and Pietilä 2015).

[35] The evaluation of the effectiveness of research involves a controlling aspect: it shows policymakers do not trust academics necessarily do research, which would be societally relevant.

resources to top-level research and strategic focus areas was one of the central aims of the Universities Act (558/2009). The Research and Innovation Council of Finland[36] (see, e.g., the Research and Innovation Council 2010) has been urging Finnish universities to prioritise activities, to develop a national and an international profile, and to specialise in competitive areas of strength. In trying to strengthen the effectiveness and commercialisation of research results, the current Finnish government (2015–) has stated that

> *'[T]he profiles and respective responsibilities of higher education institutions and research institutes will be clarified and cooperation between them will be increased. Knowledge and expertise will be pooled in competitive centres of excellence.'*
>
> *(Prime Minister's Office 2015, 19)*

It follows that higher education institutions and research institutes will be required to produce a proposal *'on their respective responsibilities and faculties' and research units' closer cooperation.'*

The Ministry of Education and Culture has advanced the sharpening of the research (and educational) profiles of universities in the performance negotiations between the ministry and each university (Virtanen et al. 2014). Instead of detailed regulation, universities have been left with the choice to decide on their profiles by themselves. Initiatives, such as the structural development projects conducted by Universities Finland (UNIFI), have aimed to clarify 'the division of labour' within the Finnish higher education sector.

However, universities' voluntary profiles have advanced slowly. As a result, the Ministry of Education and Culture has increased the proportion of strategy-based funding of universities. Moreover, since 2015, the Academy of Finland has been funding research initiatives (existing high-quality areas, emerging areas with potential to reach the top level, and new areas with high potential) to support and speed up the strategic choice-making of Finnish universities (Academy of Finland 2018). Both initiatives strongly encourage universities to make priorities as organisations (cf. Krücken and Meier 2006). Whereas the policy of increasing selective R&D funding is nothing new, it can be seen as a continuation of theme-specific research programmes and the Centres of Excellence Programme policy in Finland (see Nieminen 2005). What is new is that universities are the entities which establish the priorities. This requires universities to behave like systematic organisations

[36] The Research and Innovation Council, which is one of the main actors in the Finnish science, technology and innovation system, assists the Finnish government and discusses matters relating to the development and coordination of research and innovation policy in Finland. Its term equals that of the ministerial term. Prime Minister chairs the Council. Other members represent politicians (ministers), universities and business.

and to have formal procedures and evaluation practices with which they can prioritise some initiatives over others.

3.3 THE UNIVERSITIES ACT AND CRITICISM OF IT

The Finnish government of the late 2000s, which consisted mainly of conservative and central parties, initiated a national university reform. The parliament passed the new Universities Act in June 2009 and it came into effect in 2010. It replaced the previous act, which dated back to 1997. The themes of this dissertation, such as universities' profile-building and career system initiatives, are linked to the more autonomous status of Finnish universities granted by the Act of 2009.

The university reform had several aims:

- to make universities better able to react to the changes in their operational environment,
- to diversify their funding base and to compete for international funds,
- to cooperate with foreign universities and research institutes,
- to allocate resources to top-level research and universities' strategic focus areas,
- to ensure the quality and effectiveness of research and teaching, and
- to strengthen the universities' role within the system of innovation (Ministry of Education and Culture 2010).

The reform entailed several changes for universities (see Aarrevaara et al. 2009 for an overview)[37]. The reform made universities independent legal entities. They were granted more financial power and institutional autonomy 'in order to give the universities a stronger financial and administrative status [...]' (Ministry of Education and Culture 2009, 1).[38] Finnish universities today are independent financial entities, which means they have their own budget and they bear responsibility for their finances (Tirronen and Kohtamäki 2014). Universities may also solicit private funds, such as endowments.

As a result of the Act, universities had the option to become institutions subject to public law (at the moment, 12 universities have such status) or foundations subject to private law (at the moment, two universities have such status) (Aarrevaara et al. 2009).

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[37] One of the changes, the Finnish universities' new status as employer organisations, is discussed in Section 3.4.

[38] The adopted interpretation of autonomy follows the NPM paradigm instead of the interpretation of autonomy as Humboldtian freedom to conduct independent research and teaching (Keränen 2013; cf. Neave 2009; Erkkilä and Piironen 2014).

The Universities Act (558/2009) identifies three administrative bodies that all public universities must have and regulates their responsibilities and composition. All public universities must have a board, a rector, and a university collegium. In addition, a public university may have a chancellor and other bodies. The board is the highest decision-making body (the board determines the main objectives of the university operations and finances, the strategy and management principles). In addition to the members of the academic community (who represent professors, other academics and staff, and students), a public university must have a minimum of 40% of external members on the board.

The Universities Act (2009) sets out that the administrative bodies of a foundation university are the board, the president (rector) and the joint multi-member administrative body of the university. The board of a foundation university has seven members, including the chair and the vice-chair. The board must comprehensively represent the highest national and international expertise in the sciences and arts in the field of operation of the university and in societal and business life[39].

The reform portrays individual universities as independent entities – competitors in the global environment. A clearer division of work (including the development of profiles and research focus areas) and the new status as independent employer organisations were both seen as providing leverage in improving Finnish universities' competitiveness (e.g., Ministry of Education and Culture 2010). Overall, the university reform can be interpreted as a push towards universities' stronger actorhood, including making room for the autonomous entities to make organisational choices (cf. Brunsson and Sahlin-Andersson 2000). The strengthened status of universities also reflects the European Commission's wish to promote more autonomy for universities and less public control and 'over-regulation' of the state (Erkkilä and Piironen 2014).

Despite the changes, to a large extent, Finnish universities remain state-chartered (cf. Whitley 2008). For example, the state continues to control which organisations are entitled to function as universities and in which academic fields they may offer degree programmes. State funding still provides the majority of universities' funding. The Universities Act also limits the alternatives of internal governance arrangements. It also sets the mission of universities (in a broad sense) and the conditions for arranging degree studies (e.g., languages of instruction).

Thus, dependence on the state remains high. As Keränen (2013, 76) points out, ministerial influence from a distance does not necessarily mean less regulation. Universities continue to be controlled by a *management by results* system. Kallio's (2014, 252) interpretation is that in times of austerity, the rather detailed performance-based ministerial control has tightened rather than loosened, despite the rhetoric of increasing autonomy (see also

[39] Thus, the board of a foundation university may consist entirely of external members.

Keränen 2013).[40] Keränen (2013, 76) concludes that in the spirit of autonomy, universities are compelled to make some of the unfortunate decisions by themselves, although they are not necessarily left with alternatives.

The Finnish university reform has been broadly criticised by members of the university community both during the legislative process and after its launch (see, e.g., Tomperi 2009; cf. the activities of so-called Professor Rebellion in 2016). Politicians justified the reform by granting universities (or their senior leadership) more financial and administrative autonomy, although academics on a broad front opposed the reform (Keränen 2013). Ylijoki et al. (2011) state that the Universities Act reflects the ideals of managerialism and market orientation. Keränen's (2013, 76) interpretation is that the market logic behind this 'university autonomy' is likely to push universities to eliminate 'unnecessary', marginal fields and to invest in fields with an attractive, sellable image.

At present, Finnish universities decide on their own internal governance arrangements (with some constraints). Critics (e.g., Rinne et al. 2012) have stated that in practice, the reform has led to the strengthening of top-down governance and to diminished university democracy. After 2010, many universities have renewed their internal governance regulations and have extended the formal responsibilities of rectors and deans at the expense of collective bodies. In addition, rectors, deans and department heads at many universities are now appointed rather than being elected, which makes room for strengthened organisational actorhood through a more unified chain of command.

Two evaluations have assessed the effects of the Universities Act and the experiences of university staff. According to the first evaluation report (Ministry of Education and Culture 2012b), the reform has affected universities' internal governance arrangements. About a half of the academics responding to the survey felt that top-down management had strengthened. The majority of respondents felt that organisational sub-units have a limited impact on the content of university strategy.

The second evaluation of the effects of the Act (Ministry of Education and Culture 2016) found that universities' governance systems have become more centralised. Decision-making power has concentrated, which has estranged the academic community from decision-making. As a result, well-being at work has deteriorated.

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[40] The effects of the performance management are multiplied as many Finnish universities use the national funding model when allocating their internal funding (Kallio 2014).

3.4 UNIVERSITIES AS EMPLOYERS

Finnish universities' freedom to design their own personnel policies have extended gradually over the decades. For example, the President of Finland had the right to appoint professors until 1998 (Siekkinen et al. 2016).

Prior to the Universities Act in 2009, the universities were state agencies in a legislative sense. In the collective agreement negotiations, the Ministry of Finance represented the government as the employer. The new Act entailed changes to both the status of universities and the status of employed academics. First, the reform made universities independent legal entities, each with employer status. The new employer status was expected to enable the universities to develop unique human resource policies and to improve their attractiveness as employers (Ministry of Education and Culture 2010). Second, the status of university personnel changed from being civil servants to being direct university employees[41]. Compared to centralised systems, in which organisations have to seek external approval from the state about central human resource issues, today Finnish universities possess significant autonomy in personnel issues (cf. Gordon and Whitchurch 2007; Farnham 2009; Whitley 2008; Estermann et al. 2011). They can build their human resource policies independently of the state policies.

The autonomy for personnel matters in universities implies the need for a more professional human resource management function at universities, as they need to pay more attention to areas such as recruitment and career progression (Pausits 2017). Consequently, the role of universities' human resource management department is likely to be pronounced for example, in streamlining processes and in contributing to recruitment decisions (cf. Musselin 2013, 29).

Despite the increased autonomy, several issues promote the coherence of universities' personnel policies. First, universities act as a unified whole in the collective negotiations between the university employers and trade unions. A single association, the Association of Finnish Independent Education Employers (a member of the Confederation of Finnish Industries, Elinkeinoelämän keskusliitto EK) has been empowered to act on bargaining rights on behalf of the universities. A single collective agreement, which sets the conditions of work, covers all the universities and binds them despite the level of unionisation.[42]

Second, as was noted earlier, there have been attempts to harmonise academic career paths in both Finland (Ministry of Education and Culture

[41] Prior to the reform, professors, lecturers, university teachers and assistants had the status of state civil servants, which meant they were regulated by legislation on nomination to civil service. However, by then, project researchers already had the status as employees and their employment was regulated by labour legislation.

[42] Overall, Finland is a small country with comparatively small academic circles. Therefore, rough competition of the conditions of work between university employers is unlikely.

2008) and wider in Europe (ESF 2009; Hynes et al. 2012). As Barrier and Musselin (2009, 217) note, international mobility might foster the transfer of career schemes from one country to another. For example, the so-called four-stage career model aims to improve the predictability of careers in research (ESF 2009; Ministry of Education and Culture 2008). These initiatives are likely to lead to the convergence of universities' human resource policies related to academic career models.

Third, the opportunities for universities to act as autonomous employer entities are limited due to the high proportion of external R&D funds. It means the funding and recruitment decisions are largely controlled by individuals who receive funding (and are thus able to employ themselves and to recruit research staff), academics who act as evaluators, and the funding organisations, which emphasise their own priorities (cf. Whitley 2008). From this perspective, the human resource strategies are shaped only after major funding decisions have been made.

Fourth, ministerial pressure is likely to continue to influence the allocation of positions and recruitment decisions. Hakala (2009b, 48) states that the composition of academic staff at Finnish universities has typically followed policy reforms and changes in funding. She uses the increase in external research funding in the 1990s as an example. The changes in funding led to a rapid increase in the number of university researchers, most of whom worked on temporary contracts. It should also be noted that personnel policies are likely to be influenced not only by research but also by teaching needs (taking into account the teaching responsibilities of universities in certain fields, for example).

3.5 TENURE TRACK AT FINNISH UNIVERSITIES

In the 2000s and 2010s, some countries or individual universities in Europe have had initiatives to pilot tenure track systems in addition to their established systems (see LERU 2014; Dance 2016; Henningsson et al. 2017). Through its structure with explicit career steps, there is a perception that the tenure track is useful when developing long-term academic career paths for individuals with a PhD. Still, the use of such models in European research universities is at an early stage and the tenure track systems vary largely between countries and between individual universities (LERU 2014).

Finnish universities have not traditionally had tenure track or other internal academic career paths. Career progression has been based on individuals applying for vacant positions. When the majority of academics in Finland work in fixed-term employment with no explicit career prospects, an internationally-known and understandable career path may be desirable from the perspective of both universities and academics.

However, from an organisational perspective, internal career systems also require the establishment of new rules and procedures. For example, how uniform or diversified across the organisation should the overall system and the performance criteria be? How can it be ensured that committees and individuals with employment responsibilities are competent to evaluate and support the performance of academics? How can the career system be made predictable, transparent and fair from the perspective of academics? From the organisational perspective, the establishment and implementation of a tenure track requires certain rules and procedures, and commitment to support the recruited individual's career in the given organisation.

Because the tenure track in Finland was originally an imported career model (see Herbert and Tienari 2013), this section briefly describes the main characteristics of the tenure track system and how it fits the Finnish context.

Tenure track is originally an American academic career model. In tenure track systems, a successful academic progresses gradually from fixed-term appointments to a tenured full professorship. The career steps are usually called

- (fixed-term) *assistant professorship* as the entry-level,
- (fixed-term or tenured) *associate professorship* as the mid-level, and
- (tenured) *full professorship* as the highest career level.

Tenure means a guarantee of permanent employment until retirement[43]. The probationary period or 'tenure clock' before achieving tenure typically varies from six to eight years. The tenure clock may in some institutions be extended for scholarly (e.g., sabbaticals), medical or family reasons (e.g., illness, childbirth), while others also allow accelerating the review process. In addition, at some institutions tenured professors have to go through post-tenure reviews with varying sanctions and rewards (Trower 2002a, 36–56).

'Tenure track' was established in the United States not only to protect the job security of academics, but foremost to support academic freedom. *The 1940 Statement on Academic Freedom* set forth by the American Association of University Professors and the Association of American Colleges set the purposes of academic freedom and academic tenure. These include protecting teachers from institutional censorship and discipline: with tenure, academics should be able to take on controversial lines of inquiry without the fear of not having their contract renewed (AAUP 1940).

Although the tenure track has been a defining feature of academic employment in the US, data show that tenure track positions are no longer the dominant type of appointment. Fewer colleges and universities have tenure systems (also, many of the full-time positions are non-tenure track positions) and the proportion of tenured staff has declined. In addition, the number of academics who are employed part-time has increased more rapidly than the number of academics employed full-time, although the

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43 However, in the US, a tenured professor may be dismissed 'for an adequate cause', such as incompetence or neglect of duty, or under extreme conditions, such as programme reorganisation or financial exigency (Trower 2002a, 56–61; Rhoades 1998).

percentage of full-time and part-time academics differs according to the type of college and university (Snyder et al. 2016, 409; Baldwin and Chronister 2002; Trower 2002b).

As the declining numbers suggest, Chait (2002) argues that the feasibility of tenure policy in the US has been questioned to some extent. According to Baldwin and Chronister (2002, 128–130), reasons to the decreasing proportion of tenure track appointments include economics (high cost of tenure), flexibility (e.g., option to reallocate positions when employees have fixed-term contracts), and better access to resources through more flexible work arrangements (see also Huisman et al. 2002; Farnham 2009; Barrier and Musselin 2009). The diminishing proportion of individuals with tenure is likely to have several implications, such as changing the power dynamics in universities with a diminishing weight of academics in internal governance (Rhoades 1998).

The main difference between the tenure track and traditional academic career progression in Finland is the opportunity given by the tenure track to promote or give tenure to an already employed academic (without having the position publicly vacant) based on agreed performance criteria and supported with administrative processes and guidelines. The tenure track system also opens new career opportunities for junior-level and mid-level academics, which in countries like Finland typically have to wait long before gaining a permanent contract (cf. Höhle 2017).

The processes and guidelines of each university in Finland may define (with some constraints[44]) the actors involved when allocating new tenure track positions, the actors involved in recruitment, promotion and tenure decisions, the sites for marketing new positions, the use of external reviewers, the length of fixed-term contracts, recruitment criteria, and the performance criteria.

Based on the literature review, so far there has been no research on tenure track systems in Finland except the study by Herbert and Tienari (2013), the study by Siekkinen et al. (2016) and the report by Välimaa et al. (2016), which among other things discuss the tenure track. In their study Herbert

[44] To some extent, the Universities Act regulates the tasks and selection procedures of (permanent) professors. Concerning the tasks of professor, it states that he/she should carry out and oversee scientific or artistic work, provide research-based teaching, follow developments in science or art, and participate in societal interaction and international cooperation in his/her field. Concerning selection procedures, the Universities Act states that professorships at Finnish universities must be publicly announced to be vacant if the position is permanent. A professorship may be filled by invitation without public notice of vacancy when ‘an academically distinguished person’ is invited to the position or when the candidate is appointed to the position for a fixed term. The Act also marks out that statements on the qualifications and merits of applicants or invitees to a position must be requested from a minimum of two assessors if the recruitment is permanent or lasts at least two years. The internal regulations of each university may specify the selection procedures.

and Tienari (2013) state that the tenure track system represents *a radical change* to academic employment traditions in Finland.

All 13 research universities in Finland report on their websites that they have their own tenure track systems. However, as the career models are the universities' internal systems and because there is no national coordination, the content and structure of the systems vary (see Välimaa et al. 2016). For example, there is wide variety between universities and even between departments on the use of external evaluators in recruitment and promotion, in the transparency of performance criteria, and the length of contracts (Välimaa et al. 2016). This makes the systems somewhat incompatible with each other and the formal status of assistant and associate professors ambiguous.

According to Välimaa et al. (2016, 61), with some exceptions, the proportion of tenure track recruitment of all open positions at Finnish universities has been less than 5%. However, as many universities lack comprehensive recruitment data, there are currently no reliable statistics on the use of tenure track systems in Finland[45]. Nevertheless, it can be stated that at present, the majority of academic recruitment in Finland is not related to the tenure track. Its strategic significance relates to universities' intent to broaden its use in professorial recruitment (Academy of Finland 2014, 9).

The tenure track may offer the selected individuals more job security, status, independence, resources and long-term orientation for research and teaching than project-based or other forms of fixed-term employment. However, several issues have been raised as problematic in earlier studies and addresses that are relevant in the Finnish context.

First, despite the status and prestige attached to the final stage of academic tenure (Williams 1999), life during the tenure track has been reported to be often stressful, characterised with competition, insecurity, and sometimes a sense of isolation and work overload (Rice et al. 2000; Greene et al. 2008; Acker et al. 2012). While tenure track dropouts in the US face a vast academic labour market with ample work opportunities, dropouts in Finland have a much more limited pool of academic job alternatives, especially if they wish to stay in Finland for personal or other reasons.

Second, studies focusing on the gender aspects of academic careers (e.g., Bagilhole and Goode 2001; van den Brink and Benschop 2011; Husu 2001) have paid attention to gender inequalities in academia and the gender gap especially in the highest academic career stage. The tenure track system in particular may be problematic for female junior-level scholars who wish to start a family or who have young children, because the most decisive years for career before entering the tenure track and in the tenure track typically coincide with the potential years for family formation (see, e.g., Forthergill

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[45] In addition, because the career systems vary, collection of comparable statistics would be difficult.

and Feltey 2003). Parental leave (*vanhempainvapaa*) is predominantly taken by mothers in Finland (Salmi et al. 2009). For academics, parental leave may cause breaks in academic productivity. In the Government Report on Gender Equality, the Finnish Ministry of Social Affairs and Health (2017, 27–28) has noted that tenure track systems may have implications on gender equality in Finnish academia. However, the report states that as there are no systematically collected statistics of the universities' recruitment decisions, it is difficult to track the proportions of recruitment decisions according to gender.

Third, tighter ties to the university employer in the case of internal career systems offer opportunities for control over academics' work (cf. Hüther and Krücken 2013). For example, the study by Herbert and Tienari (2013) found that middle-level academics at a Finnish university experienced the tenure track as a restriction to their work because of the extensive performance measurement involved and the emphasis on research publications in discipline-specific and 'top-tier' journals.

Fourth, the tenure track system may disregard senior academics. That is, if the positions are open only to applications from junior-level academics and if the proportion of tenure track positions of all academic vacancies increases, senior academics who are 'too qualified' or 'too mature' in an academic sense may be disregarded in career advancement (e.g., Vuola 2010). If career choices are made early on, mobility between different sectors may also become more difficult.

Fifth, tenure policies in the US have been criticised for stressing research performance at the expense of performance in teaching and service (Boyer 1990; see also Rice and Sorcinelli 2002; Wolverton 1998; Parker 2008). If promotion and tenure criteria are biased, teaching- or service-oriented academics may be disregarded in professorial recruitment.

Sixth, the tenure track system is somewhat incompatible with the Finnish labour legislation. In Finland, labour legislation is based on permanent contracts. The Finnish Employment Contracts Act states that

> *'An employment contract is valid indefinitely unless it has, for a justified reason, been made for a specific fixed term. Contracts made for a fixed term on the employer's initiative without a justified reason shall be considered valid indefinitely. It is prohibited to use consecutive fixed-term contracts when the amount or total duration of fixed-term contracts or the totality of such contracts indicates a permanent need of labour.'*
>
> *(55/2001, section 3)*

Thus, a fixed-term contract is an exception that requires a justified reason from the employer. A justified reason to draw up a fixed-term contract (on the initiative of the employer) instead of a permanent contract may include substituting for a permanent employee who is on parental leave or on study leave. The probationary period cannot exceed six months. At present, the legal base of discontinuing fixed-term assistant or associate professor contracts (which may have a 'probationary period' extending even to four years) in dispute situations remains unclear, especially if the need for research and teaching is interpreted to be permanent (see Miettinen 2010). This narrows the leeway of universities, because discontinuing contracts may be risky and result in lawsuits. For academics, tenure track is problematic if it normalises the use of fixed-term contracts in academia and detaches their norms of employment from the norms of working life outside academia.

Seventh, the establishment of tenure track systems may lead to the creation of steeper hierarchies between tenure track professors and the majority who are left outside any career path. It may also create hierarchies between full professors as 'real' professors and the 'incomplete' ones with stricter performance control and less compensation (Cf. Kimber 2003; Enders and de Weert 2004; Nikunen 2012; Herbert and Tienari 2013).

4 DATA AND METHOD

The above sections have described the changes in the higher education sector mostly at the macro level. They have also emphasised the social embeddedness of universities with implications on the need to show adherence to social expectations. The data for this dissertation have been collected at the micro level of universities. Articles I and II concentrate on academic leaders' sensemaking of the case policies. Article III investigates the experiences and expectations of academics who work in tenure track positions. The data for the dissertation consist of qualitative textual objects: three sets of interviews complemented by documentary data.

With the focus on both the central and the local level of universities, the aim in the dissertation is to understand the top-level aspirations, but also to go beyond them. I have pursued this by unravelling the multiple arguments about why research profiles and tenure track paths are (or are not) needed, how their content is understood, how they are translated into action, and by tracing the expectations and experiences of academics in tenure track positions.

I argue that it is necessary to examine academic leaders' responses to change initiatives, because they have gained more power in university governance both globally and in Finland (e.g., Bleiklie and Kogan 2007; Rhoades and Sporn 2002; Eurydice 2008; Rinne and Koivula 2005). Although the structures of influence in professional organisations such as universities do not directly follow the hierarchies of organisational charts, academic leaders have formal and informal opportunities to affect the content of change initiatives and their effects.

The academic leaders interviewed included rectors/vice-rectors, deans, and department heads. Because of their strong formal position in the organisational hierarchy, it was necessary to interview rectors/vice-rectors. As promoters, translators and re-shapers of top-down change initiatives, agenda-setters, and mediators between the work community and top leadership, deans and department heads are in an important middle-level position in universities (cf. the literature on *middle management* in strategic management, e.g., Rouleau and Balogun 2011; Floyd and Wooldridge 2000). Their opinions and interpretations reflect the characteristics of the academic fields they represent, and may influence the outcomes of career systems and profile-building. That is why I also chose to interview deans and department heads.

The perspective of the leaders is important but insufficient in itself. Interviews of leaders do not provide information on how the establishment of the career path is experienced and what tensions and inconsistencies the individuals in the tenure track career system identify. Therefore, Article III draws on interviews of academics who work in tenure track positions.

In what follows, I describe the data collection and analysis, including the obstacles I faced. The aim is not only to describe how I collected and analysed the data, but also to make the different stages of the work and the choices made transparent to the reader.

4.1 DATA COLLECTION

The main data of the dissertation comprises three sets of interviews (55 primary research interviews; see Table 4). The interview data are complemented by documents and 13 additional interviews, which provided background and contextual information.

Table 4. *The interview data sets*[46]*.*

Data set 1	15 interviews of academic leaders at two Finnish universities Documents, interviews of administrative leaders and heads of university boards (N=6) as background information[47]	Article 1
Data set 2	1) 19 interviews of academic and administrative leaders at two Finnish universities 2) Documents: university strategies, decision-making procedures of tenure track recruitment and promotion Interviews of national stakeholders (N=7), documents on national objectives about academic careers as background information	Article 2
Data set 3	21 interviews of assistant and associate professors at two Finnish universities Interviews of national stakeholders (N=7), academic and administrative leaders (N=19) and documents as background information	Article 3

Qualitative interviews were an appropriate method of data collection, because they offer rich and holistic reflection of the phenomena being studied, and because they acknowledge the particular social, historical and temporal context (cf. Vromen 2010; Miles and Huberman 1994). Instead of trying to obtain quantifiable responses or trying to achieve generalisable

46 University A and University B in Articles I and II do not refer to the same universities. On the other hand, the case universities University A and University B in Articles II and Article III are the same.

47 For all the sub-studies of this dissertation, additional data were collected to provide general information of the reform under study (e.g., about its aims and significance) and the prevailing circumstances of the academic units.

responses, the aim in the studies was to see the research topic from the perspective of respondents, to understand why they formed particular perspectives – to get data on the perceptions of local actors 'from the inside' (King 1994; Miles and Huberman 1994).

At universities, disciplinary fields differ in terms of reward structures, labour market mechanisms and leadership cultures (Musselin 2010; Becher and Trowler 2001; Kekäle 1997). To grasp some of the internal variety of universities, the interviewees were selected from different universities, academic units and disciplinary fields.

An extensive body of documents complements the interviews. They included research strategies prepared at different organisational levels, descriptions of organisational decision-making processes, and guidelines. The documents provided valuable information by presenting, e.g., focus areas of academic units and official performance criteria in the tenure track system.

Data set 1 was collected as part of the research project 'Priority-setting in Research Management (PrisMa) – Organisational and Leadership Reactions to Institutional Reforms in Finnish and Swedish Universities', which ran in 2010–2012[48]. The data set consists of 15 interviews of academic leaders at two Finnish universities: four rectors or vice-rectors who were in charge of research activities, five deans or vice-deans who were in charge of research activities, and six current or former department heads. Twelve of the interviewees were men and three were women. The interviews were conducted between September 2010 and June 2012.

In addition, four interviews of administrative leaders (three planning directors or the like and one head of research administration) and two heads of university boards provided information on the procedures related to the establishment of research profiles at the case universities and their links to the universities' strategic management initiatives. University-level, faculty-level and department-level documents, including strategies, research policies, minutes of meetings, seminar presentations, and notes, were collected and used as supplementary data.

The leaders interviewed were selected from two research-oriented universities. These universities contained three levels of analysis: central administration, faculties and departments. The universities were chosen on the grounds of difference. University A represented an established, large, comprehensive university with a staff of over 8,000 people and 35,000 students[49]. University B with a staff of nearly 3,000 people and 15,000 students represented a younger middle-sized, merger university. We

[48] Docent Dr. Turo Virtanen ran the project. It was funded by the Network for Higher Education and Innovation Research at the University of Helsinki. Also, senior lecturer Dr. Charlotte Silander from the Swedish Linnaeus University participated in the project.

[49] The descriptions of the case universities here originate from the Article I. It should be noted that some of the key figures might have been updated after writing the article.

assumed that organisational routines and cultural scripts might be stronger at the established university than at the new merger university, which may not have been in such a strong position to influence its environment and to resist external changes (cf. Leišytė 2007; Meyer et al. 2007). Thus, from a management and leadership perspective the creation of research profiles was expected to be more difficult at the established comprehensive university than at the younger, smaller university, where the merger could serve as an occasion for bringing about a change.

The case departments were also chosen on the grounds of difference: computer science represented so-called hard sciences with both theoretically and application-oriented traditions and history represented so-called soft sciences (see Biglan 1973; Becher and Trowler 2001). The case faculties were those in which the departments were organisationally situated at the case universities. Including leaders from different fields in the data was justified because the prerequisites and needs to prioritise research may differ. Different values, norms and environments pertain different disciplines with implications on the opportunities to resist and accommodate to change (Becher and Trowler 2001; Hakala and Ylijoki 2001). In addition, the knowledge domains and social characteristics of disciplines affect the cognitive models of academics (Becher and Trowler 2001).

The interviewees were approached either by the head of the research project (Turo Virtanen) or by me (MP) by phone or with email[50]. In these first contacts, we described the project's aims and explained why that particular individual had been selected as an interviewee for the project. Participation was voluntary. All the people contacted agreed to participate in the study.

The interviews (all in Finnish) were conducted face-to-face except for one phone interview. They took place in the premises of the University of Helsinki (my home university) or at the work premises of the interviewee. One interview took place at a public space (restaurant) of the interviewee's request. I took part in all the interviews and Turo Virtanen participated in nine of the interviews. The interviews lasted 1–2 hours. All interviews were recorded. A professional company Tutkimustie, which committed to treating the data confidentially, transcribed the interviews.

The interviews were semi-structured. They concerned the following themes:

- the aims related to establishing research profiles;
- internal and external factors that encourage or discourage the direction of research;
- the traditions of focusing research (and teaching) on a limited number of areas within the department/faculty/university;

[50] The order of contacts was such that Turo Virtanen as the head of the project first contacted the rectors. Their approval served as an institutional consent to participate in the study. After that, the other interviewees were contacted personally.

- the process of defining research focus areas (e.g., who had been involved, in which occasions the topic had been discussed collegially);
- the effects of profile-building (e.g., allocation of universities' internal funding, investments in infrastructure, allocation of researcher positions), and
- the profile-building process as a leadership experience.

The format of the interviews was flexible enough to enable adapting the questions to fit the experience and expertise of each interviewee.

I collected *data set 2* (and data set 3) solely for the purposes of this dissertation[51]. Data set 2 consists of 19 interviews of academic and administrative leaders at two Finnish universities and a set of documents. I conducted the interviews in 2014.

Data collection started with seven pre-interviews between September and October 2013. The interviews provided necessary information about the recent developments related to academic careers in Finland and beyond, the new employer status of Finnish universities and its implications for academics, the areas seen as especially problematic and in need of reform, and experiences of the tenure track system. The interviewees were national stakeholders representing the following organisations:

- the Ministry of Education and Culture (two interviewees),
- the Academy of Finland,
- the Finnish Union of University Researchers and Teachers (Tieteentekijöiden liitto),
- the Finnish Union of University Professors (Professoriliitto),
- the Union for University Teachers and Researchers in Finland (Yliopistojen opetusalan liitto), and
- the Association of Finnish Independent Education Employers (Sivistystyönantajat).

I wrote a short article based on these interviews in Acatiimi, which is a professional journal for professors, researchers and teachers in Finland (see Pietilä 2014).

As study cases I selected two large research universities which had recruited a number of individuals to tenure track positions. This guaranteed that the case universities had developed some formal processes for recruitment and tenure track evaluations. I considered some experience of establishing a tenure track to be necessary also because I wanted to include leaders who had deliberated upon the justification of launching the career path in the sample.

Both case universities launched the career system in 2010. University A, with a staff of about 4,700 people and c. 20,000 students, was a merger

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[51] I received funding for this part of the dissertation from private Finnish foundations and the Finnish Work Environment Fund.

university established in 2010[52]. The university consists of academic units spanning fields from science and technology to engineering, business, art and design. Introducing a tenure track to the university was presented as a crucial part in implementing the university strategy. By March 2014, 135 people had been recruited either to tenure track positions or to tenured academic professorships through the tenure track recruitment procedures.

At University A, tenure track recruitment calls were targeted at assistant, associate, or full professor level, or at all levels in the same call. The academic positions were supplemented by practice-based professor nominations. The first contract as *assistant professor* was made for three to five years, followed by a second term as assistant professor for four years. The second career stage of *associate professor* was in most cases a permanent position, followed by permanent *full professorship*.

University B was an established comprehensive university with academic units ranging from humanities and social sciences to natural sciences and medicine. University B had a staff of 8,400 people and 36,000 students. The tenure track was used at the university only as a parallel channel for recruiting professors, because the majority were recruited directly to full professorship. By December 2013, 35 staff had been recruited to tenure track positions.

At University B, the tenure track began with a contract for three to five years as *assistant professor*. This was followed by a second contract as *associate professor* for three to five years. Recruitment directly to the second stage was possible but used only in exceptions. The third stage was *tenured full professorship*. Only people who had completed their doctoral degree in the past ten years were eligible to enter the track.

The academic leaders who were interviewed included two vice-rectors who were in charge of personnel policies, four deans, and eight current or former department heads ('former' if the department head had just been changed). In addition, I interviewed two human resource directors and three human resource professionals about tenure track processes and guidelines. Thirteen of the interviewees were men and six were women.

I selected the department heads for the interviews from similar departments in the case universities to reach some of the variety related to academic careers in different fields (cf., e.g., Musselin 2007; 2013) while keeping the research framework as comparable across the case universities as possible. The departments encompassed empirical and theoretical natural sciences and behavioural sciences/business studies[53]. The case faculties were

[52] The descriptions of the case universities here originate from the Article II. It should be noted that some of the key figures, procedures and guidelines might have been updated since the article was written.

[53] For anonymity reasons, I do not specify the exact units. This is important in order to protect the anonymity of department heads.

those in which the departments were organisationally situated at the case universities.

As the first step in the data collection, I approached the human resource directors of the case universities with a letter and email. I briefly described the aim of the study, funding, and informed them about the pre-interviews that had been conducted.[54] After these first interviews, I contacted the deans and department heads and inquired about their willingness to participate in the study, which was voluntary. All those contacted agreed to participate in the study except for one department head, who did not respond to the emails. I chose a substitutive department head from another department.

The semi-structured interviews covered several themes, such as the broader context and the goals of the career system; organisational processes and guidelines; how the career system was put into practice; perceived problems; and areas to be developed. The interviews lasted from 45 minutes to two hours. I conducted all the interviews face-to-face at the workplace of the interviewee. I recorded and personally transcribed all the interviews.

The documentary data consisted of university strategies, decision-making procedures of tenure track recruitment and promotion, and recruitment and performance criteria in tenure track positions.

Data set 3 consists of 21 interviews of assistant and associate professors, who worked at two research universities, which are the same as in data set 2. I considered having the same case universities in data sets 2 and 3 reasonable, because I was already familiar with the goals and procedures of tenure track, and some of the internal tensions within the universities. I conducted the interviews in 2015. The data are unique as they offer the first view to the experiences of academics working in tenure track positions in Finland.

The interviewees comprised a theoretical sample (non-probability sample). I selected them from a list that included all tenure track academics in certain organisational subunits (departments) of the two universities. The main goal of theoretical sampling was to maximise the variety of contextual factors. The subunits represented individually-oriented and group-based (infrastructure-intensive) fields, and basic and application-oriented fields. I selected interviewees from various academic fields to ensure inclusion of those who worked mostly individually and those who worked with research groups with implications on the nature of work, such as publishing, funding, and administrative work. The interviewees represented individuals in different career phases, different nationalities and genders. I prioritised the diversity of academic fields and different career phases over other classifications.

I approached the selected individuals via an email in which I briefly described the aim of the study and how it was being funded. In the email, I

[54] As in the first sub-study, the approval of the human resource director served as an indirect institutional consent to participate in the study.

emphasised that participation in the study was voluntary, that I would treat the data confidentially, and that no single respondent could be directly or indirectly identified in the articles. The individuals who were interested in participating in the study responded to the email.

The interviewees included 15 assistant professors and six associate professors. In addition, I had approached six more individuals. Out of these, five individuals either did not respond to the first email (or the ensuing reminder email) or did not respond when trying to agree on the interview date. One individual declined to participate in the study because she was on maternity leave. I did not find any systematic bias attached to the denials. Overall, the academics were very interested in the study and went to considerable effort to organise the time for the interview (some interviews were conducted on national holidays, during the evening, and during the interviewee's parental leave).

At the time of the interviews, three interviewees had a permanent position, and 18 had a fixed-term employment contract. The contracts had a length from three to five years. The interviewees included 15 men and six women, and 13 Finns and eight non-Finns. The fields encompassed natural sciences, technology, social sciences and business studies[55].

At the time of the interviews, the interviewees were on average 39 years old (ranging from 34 years to 47 years) and had 1.3 children. The children were on average six years old. All but two were in a stable relationship. On average, the interviewees had obtained their PhD eight years prior to the interview. The majority already had extensive research and teaching experience, including postdoctoral phases, lectureships, and work with personal grants (e.g., from the Academy of Finland). A few also had longer work experience in industry. The majority had been employed in foreign universities or research institutes at some phase of their career, most often in European countries (especially in the United Kingdom) or in the United States. It is noteworthy that all the interviewed non-Finns had some personal link to Finland: some had studied or worked in Finland earlier in their career, some had a Finnish spouse or family in or near Finland.

The interviews lasted from 45 minutes to two hours. I conducted all the interviews face-to-face at the workplace of the interviewee or at the premises of the University of Helsinki (my home university) except for one phone interview. I recorded and personally transcribed all the interviews. It should be noted that at the time of the interviews, Finnish universities were facing some financial difficulties and there were staff layoffs. To some extent, these influenced some interviews. For example, the interviewees' perceptions of

[55] To ensure the anonymity of interviewees, I do not specify their specific academic fields and departments. At the time of the interviews, some fields and departments at the case universities had only one or few academics in tenure track positions, so the specification of fields or departments could indirectly reveal the identity of some interviewees.

the opportunities to build research consortia in the near future were somewhat gloomy because of the tight university budgets.

The interviews concerned a variety of themes. They included the academics' work history and career aspirations; relationship with the university as employer; recruitment, promotion and tenure processes and criteria; academics' expectations in the employment relationship; and work-life balance. Overall, the emphasis was on the academics' interpretations of what the university expects of them in tenure track positions and what expectations the academics have for the university.

4.2 DATA ANALYSIS

In the sub-studies of the dissertation, the focus of the analysis was the goals, meanings and perceptions individuals attach to the concepts and implementation of tenure track and profile-building in research. In this analytical approach, the meaning constructing individuals are seen as active creators of their organisational environment and human reasoning is seen as grounds for social action (cf. Parsons 2010). This research approach adheres to constructivist research traditions. It is also consistent with new institutional theory, which sees diffused collective norms and ideas as important filters in how we perceive the world.

The analysis in all the sub-studies relied on systematic data collection, transparent argumentation, and critical analysis. The following descriptions aim to illuminate the approaches adopted and stages of analysis.

Data sets 1 and 2

The creation of research profiles and the introduction of tenure track career systems were fruitful topics for a qualitative analysis, because in the interviews, they turned out to be somewhat *ambiguous reforms*: individuals attached different meanings and goals to them.

For example, when we started to conduct interviews about profile-building, I had assumed that it would be quite clear to our interviewees what the creation of research profiles in a university setting would mean. However, because not all academic leaders approved of the official policy, which aimed at clarifying the division of work in the Finnish higher education sector and giving priority to certain research areas over others, it became evident in the interviews that leaders strategically attached *their own meanings* to the phenomenon under study, reflecting their goals and aspirations.

Similarly, in the tenure track interviews, there was a continuous contest between 'an American interpretation' of tenure track (interpreted as including harsh competition and having the capacity to discontinue contracts) and a softer 'Nordic interpretation' of the system (interpreted as including less competition and a more secure career path). Furthermore, as the department heads and deans represented different fields and departments, for different individuals the context of profile-building and academic career restructuring also varied. In some departments, the idea of resource concentration was nothing new, but had been the mode of operation for decades. In other departments, especially those with individualistically-oriented working styles, the tradition had been to 'let all flowers bloom'. Thus, the traditions differed, as did the prerequisites and the estimated need to concentrate resources.

In both instances (launch of research profiles and a new career system), academic leaders were in a situation in which they had to make sense of an issue they did not necessarily have prior experience of. On the other hand, they all had extensive work experience in academia. The experience enabled them to make sense of the new issues by ascribing meaning to them through social interaction and reflection with experiences in ambiguous situations for which no clear instructions existed or which left room for multiple interpretations (cf. Weick 1995; Rouleau and Balogun 2011). The academic leaders needed to construct meaning and reconcile different viewpoints in their specific context (Weick 1995; Rouleau and Balogun 2011; Balogun et al. 2008). The leaders' social constructions of their organisational world and environment led to different interpretations of the underlying goals of the two reforms.[56]

Data analysis in the first two articles adopted the so-called sensemaking perspective. According to Weick (1995, 16), sensemaking is simply about making something sensible. Meaning construction (and reconstruction), which is a social, ongoing process, is important as it enables one to interpret the world. Understanding is seen to be dependent on the meaning assigned to events. The Weickian notion of the environment is not a static, fixed one, but underscores the environment as being actively enacted by individuals, who 'create the materials that become the constraints and opportunities they face' (Weick 1995, 31).

In the dissertation I approached academic leaders as political actors. They are not seen as passive adaptors to external pressures, but it is acknowledged that they may influence other people's opinions and viewpoints by trying to disseminate their vision while also borrowing ideas from others (Balogun et al. 2008; Rouleau and Balogun 2011).

The analysis of the data was data-driven. Although I had theoretical ideas in mind prior to the interviews, they did not strictly guide the interviews or the first readings of the interview transcripts. Data collection and analysis took place side by side in simultaneous and continuous processes: the analysis drew my attention to interesting, emergent issues in the collection of new data. Data collection and the first reading of the transcripts were

[56] Overall, academic leaders are in no easy position, because they need to find arguments to justify reforms that evoke competing viewpoints and sometimes even strong resistance within the academic community and which they do not necessarily support themselves.

supplemented by investigating the theoretical concepts and debates that would be useful in the realm of the ongoing work and especially in sorting through the large body of data.

When looking back to the data analysis, a few stages may be identified.

For data set 2, I first transcribed the recorded interviews as soon as possible after each interview[57]. While doing the transcription (data set 2) or while listening to the recording and reading through each interview (data set 1), I paid attention to noteworthy or subtler occasions for emphasis, amusement, irony, and hesitation. I read the individual interview transcripts several times. While reading, I tried to make sure the interviewee had understood the interview questions and that there had been no misunderstandings.

During the reading of the transcripts, I made margin notes about the emerging perceptions of profile-building and tenure tracks, which differed quite a lot and which were creative in content. To give an example, one interviewee differentiated between the research focus areas of the faculty and 'the true strategic perspective of units', which led me to consider that profile-building in some cases had purposes other than resource concentration. I examined each interview separately and made several summaries of them. After working on each interview, I moved to comparison. Comparison of the interview data across informants helped in finding patterns of convergence and divergence. This comparison was supplemented by the analysis of documentary data, which provided information about the formal policies, goals and procedures, which were repeatedly compared to the interview data.

The second step was to integrate the first-order findings into a meaningful theoretical or conceptual framework. During this stage, I wrote several seminar papers, one article (Pietilä 2013) and gave seminar presentations to scholarly audiences. These public treatments and discussions made me more confident that it was the contested understandings, the clash between the different goals in the creation of research profiles and tenure track, and the tensions in internal governance in large universities that were interesting and relevant in my data. The seminar discussions helped me to sharpen the theoretical approach to focus more clearly on the integral parts and to connect the observations to the international scholarly debate.[58] As the establishment of research profiles seemed to entail aspects of both change and continuity, I found new institutionalism to be a suitable theoretical framework for interpreting the findings in Article I.

In the case of tenure track, I was originally interested in the goals academic leaders perceived in the new career system. There was more convergence of views compared with the establishment of research profiles. However, the interviews brought up a new emergent theme, which focused

[57] The transcriptions of data set 1 were done by a professional company.

[58] It should be noted that the review processes of the journals *Higher Education* and *European Journal of Higher Education* greatly influenced the final content of the articles.

on the tensions between the hierarchical levels in relation to the distribution of authority when selecting the positions and individuals for tenure track. The discussion on the transformation of universities as more complete organisations provided a chance to interpret the management efforts and the tensions they created in Article II.

The third step was to work more thoroughly with the meanings, goals, rationales behind the goals, and the tensions. With content analysis methods (Krippendorf 2004), I classified the data by reducing and summarising it in various steps. I identified the most typical goals attached to the career system and the creation of research profiles from the interview transcripts step by step with the help of Microsoft Word and Excel spreadsheets. I specified the explicit and implicit rationales behind certain goals, reflecting also on the environment the academic leaders saw their academic units to be operating in, which stakeholders they found important and which science policy trends they interpreted as requiring a reaction.

However, the analysis did not focus solely on the establishment of research profiles and tenure track systems at the conceptual level but extended to their outcomes. For example, I asked in the interviews, whether the creation of research profiles had led to changes in the allocation of funding.[59] In addition, Article II included an analysis on the decision-making procedures in recruitment, promotion and tenure decisions and official recruitment and performance criteria. This analysis was based mainly on university documents.

Data set 3

Prior to my third data collection, I was originally interested in utilising the concept of *psychological contract* (Rousseau 1995) in data analysis. According to Rousseau's definition (Rousseau 1995, 9), psychological contracts are 'individual beliefs, shaped by the organisation, regarding the terms of an exchange agreement between individuals and their organisation'. Psychological contracts are reciprocal and based on exchanges. The research tradition emphasises the need to understand the perceived commitments and obligations that constitute the employment relationship.

However, after becoming more familiar with the literature and especially after conducting the first interviews with assistant and associate professors, the conceptual framework did not seem to fit. This was because the research on psychological contracts ignores some relevant issues. These include power differences in employment relationships (Cullinane and Dundon 2006), career agency (Seeck and Parzefall 2008), the structural dimensions of

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[59] In Article I, the implications of building research profiles were important also, because they differentiated, whether academic leaders adopted a 'strategic management' perspective or a 'symbolic management' perspective of creating research profiles (a separation made in the Article I).

employment relationships (Cullinane and Dundon 2006; Rasmussen and Håpnes 2012), and complex commitment relationships in academia.

Because of the limitations, I chose a more open-ended and data-driven approach influenced by the literature on NPM and academic work. Overall, the aim of the qualitative analysis of the interview transcripts was to gain understanding of the experiences and expectations of academics who worked in the new tenure track system. I assumed the narrative descriptions of academics would enable an understanding of the various demands of academic work in general and work in tenure track positions in particular.

Data analysis was undertaken in several stages. I transcribed the data as soon as I had conducted the interviews. The analysis began with reading through the individual interviews several times. I observed a certain mismatch between the rationalised portrayal of tenure track given previously by academic leaders and the somewhat messy portrayal given by many tenure track academics. It seemed to be typical for the introductory phase at the beginning of the contract to be informal or almost non-existent. According to the interviewees, some individuals with employment responsibilities were not aware of the performance criteria in tenure track. In addition, the very status of assistant professorship seemed to be vague. Despite the official performance criteria, the interviewees seemed to be consistent in their views of the criteria that really mattered in career progression.

Although the interview data were rich, extensive and versatile, in Article III, I decided to focus on the performance criteria perceived as being the most important by the interviewees and the personal descriptions of managing the various demands in the new ambiguous position, including the need to find a balance between work and private life.

In the second stage, I identified, coded and systematised the extracts related to recruitment, promotion and tenure criteria, managing demands, and work-life balance from all the interviews. I especially focused on the insecurities experienced and the inconsistencies perceived in the tenure track. I used Atlas.ti software in the classification, which helped in forming an overall picture of the selected themes and in finding patterns across the individual interviews. During the process, I presented the drafts of the manuscript at seminars and conferences, which helped to clarify the essence of the paper.[60]

[60] The review process of the journal *Studies in Higher Education* also greatly influenced the final content of the article.

4.3 LIMITATIONS AND REFLECTION ON THE INTERVIEW PROCESS

The data used in the dissertation have certain limitations that should be acknowledged when planning further studies. Some of the limitations and potential areas for further work are discussed in Section 6 (Conclusions and Discussion).

The dissertation data consist primarily of interviews in order to grasp the meanings, goals, tensions and contradictions related to the creation of research profiles and tenure tracks at Finnish universities. If the dissertation had adopted a broader scope, it could have included some additional data. Interesting supplementary data could have included statistics on academic recruitment over a long period of time, advertisements of all the tenure track positions at the case universities, data about external funding decisions and how they relate to the research profiles and recruitment decisions, and interviews of members of recruitment committees, and academics who applied for tenure track positions but were not selected. However, broadening the body of data would have meant different research questions (and would have required more months of work).

Because the sub-studies in the dissertation were cross-sectional, they present a kind of snapshot of the phenomena studied. Further research should investigate the topics longitudinally. While I found the specific point of time of the interviews to be important (framed by the debate on the level of funding in the Finnish higher education sector), a challenge in the interviews and in the analysis was not to focus too heavily on prevailing issues. In the analysis, I therefore tried to present more general-level goals and tensions, which were not tied to particular events that happened to take place at the time of the interviews.

Overall, the academic leaders and academics were easy to interview, because they were verbal, communicative, probably used to being interviewed, and enthusiastic about the research topics. The nature of the relationship between the interviewer and the interviewee is a significant and often complex feature in qualitative research interviews (see Kosunen and Kauko 2016). As Kosunen and Kauko (2016) point out, a research interview is always composed of an interaction relationship. It involves power relationships especially when the status difference between the interviewer and the interviewee is large, explicit for example in the hierarchical position or age. In conducting interviews, this could be observed in the more balanced relationship between me as interviewer and assistant/associate professors as interviewees compared to the interviews with leaders. Although the leaders were also talkative and friendly, the atmosphere in the interviews of assistant and associate professors was more collegial and open, and academics often treated me as researcher as part of 'the insider group' (cf. Kosunen and Kauko 2016)[61].

Before the interviews, I read up on the university, faculty, and department to be familiar with the overall context in advance. This also allowed the specific interview questions to be modified when needed. In the case of some university rectors and administrative leaders, the challenge was how to go beyond purely ceremonial talk in the interviews. This was partly overcome by asking questions that required tangible answers, such as asking questions about the effects of creating research profiles and tenure track system. However, at times the responses remained quite vague. I acknowledge in some cases that leaders in particular might have been tempted to respond in socially desirable ways, for example by presenting tenure track as a solution to nearly all the problems of academic employment.

The research themes in the articles varied and the grounds for selecting individuals to the sample of participants were different. In data sets 1 and 2, academic and administrative leaders participated in the study because of their formal position. Thus, they were able to speak as representatives of their position and academic unit. For data set 3 this was not the case, because the interviews concerned the academics' own careers, including their insecurities and troubles. Considering the sensitivity of the issues involved in the Article III, I placed special emphasis on guaranteeing the anonymity of the interviewees. For example, I did not use interview extracts which could indirectly reveal the identity of an interviewee. The source of my research funding (grants by private foundations and the Finnish Work Environment Fund with no specific link to the research topic or to individual Finnish universities) may have helped in building a confidential atmosphere in the interviews.

As the goal in this dissertation was to study the research phenomena through speech and dialogue, mutual understanding in the research interview was crucial (cf. Rastas 2005). As Rastas (2005) observes, differences in language and culture may hinder this understanding. Seven of the interviewees in the data set 3 were non-Finns, and these interviews were conducted in English. However, English was not the mother tongue of the interviewee or the interviewer. In a few cases, this may have led to practical misunderstandings in some parts of the interview. Overall, the interviews of assistant and associate professors from outside Finland implied some problems related to socialisation and the low level of internationalisation in their academic units. Future research should address these concerns, not least because the internationalisation of research and science has been a major national research policy aim in Finland.

In the interviews with assistant and associate professors, it turned out that some academics had had problems or concerns during their

[61] The openness may also be related to the fact that I had gained more experience in conducting interviews.

employment. This was especially the case with some foreign academics. These cases led to some ethical deliberation on my role as a researcher who had ample information of the tenure track system and the related formal and informal practices of the case universities. The dilemma was whether I should somehow advise the individuals who had concerns. I decided not to give individual advice to the interviewees. Instead, I compiled the key findings from the interviews in data set 3 into a practically-oriented summary, which was sent both to the academ cs and the academic and administrative leaders who had been interviewed earlier for data set 2. This summary also included a list of the problems and unclarities in identified in the tenure track system.

5 FINDINGS

Sections 5.1–5.3 present the findings of each of the journal articles in a condensed format. With these brief summaries, I have attempted to provide the reader with the core substance of the sub-studies so that he/she is able to follow the overall argument of the dissertation. Section 5.4 includes a summary of the findings with respect to the research questions of this summary article.

Research management and academic careers are central topics for universities. However, as the findings indicate, they are also complex phenomena which involve numerous actors and interests. The section shows that the rationalisation of research activities and academic career systems creates new tensions within the universities, both in the internal governance and in the work of academics.

5.1 ARTICLE I: BATTLE ON THE MEANING OF ESTABLISHING RESEARCH PROFILES

As the title suggests, the theme of the first article is the diverse meanings attached to the establishment of research profiles. Drawing theoretically on the ideas of micro-level new institutionalism and empirically on 15 interviews with academic leaders at several organisational levels at two Finnish universities, the article had two research questions. First, it asked what perceptions of profile-building in research academic leaders have. Second, it asked how these perceptions are connected to the goals that the leaders are trying to achieve with profile-building.

Previous studies have largely focused on how academics in research and teaching positions adapt to changing conditions, such as changes to funding and governance (Leišytė and Enders 2011; Marttila et al. 2010; Laudel 2006). Fewer studies (e.g., Degn 2015) have examined academic leaders' responses, although they have in many cases achieved a strong position in university governance.

As a starting point, the article identifies the global and national science policy pressures discussed above which emphasise research performance and which encourage the concentration of resources on fewer universities and academic units.

The article makes use of the research conducted within the new institutional paradigm, which emphasises the micro dynamics of institutional stability and change (Powell and Colyvas 2008; Daniels et al. 2002; DiMaggio and Powell 1991). The creation of research profiles is a controversial theme, not least because demands for the freedom of research and demands to direct it may be contradictory. Although the macro-level idea of selective excellence frames the profile-building initiatives, the article concludes that leaders have competing, even conflicting perceptions of it.

Drawing on the ideas of Renate Meyer (2008), I approached academic leaders as active agents who may attach their own meanings to the concept of profile-building in research, reflecting their goals and ideals. Individuals may reproduce, but also transform institutions by ascribing different meanings to them. Theoretically, the study attempted to combine Weickian sensemaking ideas with new institutional ideas of the interorganisational and intersubjective dissemination (cf. Jennings and Greenwood 2003).

The study identified two general concepts of research profiles. Both concepts are linked to a range of rationales, by which the leaders legitimate their stand. It should be noted that the categorised rationales represent ideals and the same leaders typically referred to multiple rationales.

The first concept was labelled 'research profiles as an instrument of strategic management'. It emphasises choice-making in the research portfolio and determinate leadership. Profile-building is presented as a self-initiated change process, although also supported by stakeholders, such as the steering ministry. A distinct, strong profile is pursued with human resource management and allocation of funding to the selected research focus areas. The focus areas are used in multiple areas, such as in infrastructure acquisitions and even in the elimination of 'marginal units'.

Four rationales were attached to the strategic concept. The predominant rationale sees the creation of research profiles as an instrument to strengthen research and the university's status as a research university. The rationale fits well with the prevailing science policy discourse as it highlights critical mass, research concentration, and internationalisation of the research environment. The establishment of research profiles is expected to have several positive implications, such as improvements in competitive advantage, international visibility of research, and improved research performance. Achieving research excellence and a high position in the international research environment is presented as requiring critical mass. At the level of departments and faculties, organising research in groups and networks is promoted in both hard and soft sciences.

The second rationale, often mentioned as *the only rationale* for choice-making, sees the costs of research and the tightening of university budgets as reasons to prioritise activities. Deans, especially in the natural sciences, but also other deans and department heads mentioned this rationale. They argued that the high price tag of research demands choice-making, because faculties and departments cannot afford to do everything.

The third rationale, mostly pronounced by rectors and deans, emphasises that research profiles are important in responding to societal challenges: researchers should tackle societally relevant research questions. Thus, resource allocation should focus on areas that are central to society. Research focus areas should reflect the national and global needs, spurred by advancing interdisciplinary and multidisciplinary research initiatives.

The fourth rationale interprets the creation of research profiles as a power and resource game between academic fields. This means that all departments and faculties have incentives to try to become visible in research policies to secure their position within the university. The leaders of soft sciences at the smaller case university particularly used the defensive rationale. Visibility in university strategies is important to secure funding, but also for reputation, honour, and the motivation of staff.

The second, symbolic concept of profiling-building in research is also framed in a social context, where the ministry, other universities and funders create pressures to make changes: profile-building is a general norm in Finland and globally, 'the world we live in'. While acknowledging the prevalent policy, some leaders adopted the rhetoric, while research profiles served as façades to the external audience. In this case, the creation of profiles did not clearly affect universities' internal activities (apart from marketing): although focus areas were defined, they did not affect funding and recruitment decisions, for example.

The first rationale behind the symbolic concept centres on the protection of individual orientation of researchers and emphasises the negative consequences of research management. The negative consequences include the exclusion of researchers who work in small fields, and fears about creating outsiders. This rationale was voiced mostly by leaders at the larger case university and especially in soft sciences. In the soft sciences, leaders identified a clash between curiosity-driven individualistic work and research management, which emphasises big projects and research groups as 'the right form of research'. They remarked that not all research necessarily benefits from a further division of labour and specialisation.

The second rationale addresses the incompatibility of research management with the unpredictable nature of research. Choice-making in basic research was seen as risky especially in infrastructure-intensive areas because of the possible 'wrong choices' and the difficulty of changing direction afterwards. Profile-building was also seen risking investments in emergent research.

The third, practical rationale is based on the view that choice-making is especially difficult in a large, comprehensive university. Leaders at the larger university found it especially difficult to define focus areas because of the large size of the university and its unique national position. Variety was seen as strength especially in teaching and in building commitment among staff with heterogeneous research and teaching topics.

The fourth rationale connects the creation of research profiles to communicating with universities' external environment, such as the responsible ministry, potential recruits, and funders. From this perspective, the research profile has a marketing function as it is designed to communicate an attractive image for people outside. In the context in which external, competitive research funding comprises a major proportion of research funding, it may be rational to maintain a broad profile, so that academics can refer to it in funding applications.

The analysis showed the variability and richness, but also the incoherence and conflict of leaders' perceptions about profile-building in research. It also showed the various underlying rationalities behind the perceptions. Thus, the study reveals the rival, strategic and symbolic, interpretations of the phenomenon and contributes to knowledge on how academic leaders respond to various demands. The strategic concept was more prevalent at the younger, smaller University B, which had emerged from a merger. The symbolic concept was more prevalent at the larger, more established University B.

Academic leaders are positioned in a social environment which is characterised by science policies and university priorities, but also the specific traditions and interests of the academic communities, fields and academic departments. Thus, academic leaders do not comprise a homogeneous group; instead, they pursue different aims. Making sense of their social environment, they construct their own perspectives and take advantage of the perspectives of others either implicitly or intentionally (cf. Weick 1995; Balogun et al. 2008; Rouleau and Balogun 2011). Thus, the study emphasises academic leaders as active agents and the opportunity for individuals to deviate from the 'right', given interpretation of policies. It also challenges whether research management that focuses on big projects and large teams is feasible in all fields.

5.2 ARTICLE II: TENURE TRACK AS A STRATEGIC INSTRUMENT

The second article focused on how academic leaders use the new tenure track career system as a strategic instrument. As discussed above in Section 2.3, academic recruitment and promotion are complex terrains, where multiple actors are directly or indirectly involved. The justification for adopting the approach in the article stems from the observation that while academic careers have been extensively studied, the organisational and academic leaders' perspective has largely been neglected.

Academic leaders may possess significant authority in recruitment and promotion decisions, for example, by determining the areas for which new academics are to be recruited, influencing the composition of committees and recruitment and promotion criteria, choosing external evaluators, and evaluating the performance of individuals. By encouraging certain kinds of behaviour with appraisal and rewards, career systems may be used to serve organisation- and field-specific needs. The allocation of positions may also be tied to a university's strategic aims.

The exploratory study had four themes. First, it examined the goals academic leaders perceive in the new tenure track system. Second, it examined the administrative procedures by which the goals are pursued. As the goals are translated into action, some leeway is left for active agents to be used. Third, the study investigated how deans and department heads make sense of ambiguous situations for which no clear procedures or instructions exist. Fourth, the study examined the tensions between the university organisation's hierarchical levels in relation to the distribution of authority in allocating the positions and individuals for tenure track.

Traditional notions of universities, which depict them as loosely coupled, decentralised organisations (Weick 1976; Cohen et al. 1972), and the more recent notions, which indicate that universities are being pushed to adopt new management-oriented forms, are somewhat contradictory. The latter include the establishment of unified strategies, central coordination and control, and the construction of a coherent identity (Brunsson and Sahlin-Andersson 2000; Meier and Schimank 2010; Krücken and Meier 2006; Musselin 2007; de Boer et al. 2007; Whitley 2008). The Finnish universities' status from the start of 2010 as independent employers and having discretion over internal authority structures give room for increasing the actorhood of universities (cf. Krücken and Meier 2006; Whitley 2008).

The findings, which were drawn from nineteen interviews of academic leaders at several organisational levels, indicate that tenure track is presented as offering long-term organisational commitment to academics. The article demonstrates the centralised decision-making procedures and standardised human resource procedures in tenure track decisions, for example in the use of university-level tenure track committees.

The goals academic leaders attached to the new career system were similar to each other, affected possibly by the constructed competitive environment characterised by evaluations and funding schemes. The need to achieve research (and teaching) excellence was presented as the organisational goal of the career system.

To achieve this, academic leaders used the career system to try to attract high-performing junior academics to the case universities and to an academic career: it was expected that these individuals could strengthen the quality of research and teaching. This shows how the introduction of a tenure track is used to control the research strategy of the universities. The competitive landscape and academic labour market were portrayed as being increasingly international, challenging traditional Finnish inward-looking academic recruitment. Tenure track was presented as a potentially attractive career path also for foreign junior-level academics, who would not otherwise consider moving to Finland, situated 'on the edge of Europe'.

The second goal of the tenure track was to use it for resource allocation. The opportunities for reallocating professorial positions make the career system a considerable control mechanism for the universities' central leadership. At both universities, departments suggested fields for new positions, but the final decisions were centralised. According to the interviewees, the proposals reflected the needs of the departments, based on the departments' current research areas, educational needs, or areas that needed to be developed because of their societal importance or potential in academic terms. Connected closely to the theme of creating research profiles, the department heads and deans emphasised the departments as *organisational units* and the tenure track candidates as part of the work community. The new employer status was interpreted as legitimising the strategic visions of departments to be emphasised in the recruitment decisions.

Leaders also had to make sense of processes and incidents for which no clear instructions existed. One theme, which aroused varying responses, was the contradiction between expected organisational commitment to the tenure track academic and the opportunity to discontinue contracts. However, according to Finnish labour market regulations, which at the general level define what can be considered appropriate employer behaviour, the discontinuation of fixed-term assistant and associate professor contracts may be deemed to be an illegitimate act (cf. March and Olsen 1989)[62].

As the case universities strengthened their position as autonomous actors, they established new hierarchies and standardised organisational processes that came to replace more local and informal ones (cf. Brunsson and Sahlin-Andersson 2000). Although informal decision-making procedures may be criticised for supporting local candidates at the expense of competitive open recruitment, the new processes were also problematic, because the universities simultaneously tried to centralise and decentralise their internal governance (cf. de Boer et al. 2007; Bleiklie 1998). According to audit logic, departments were held accountable for performance. Yet, due to the centralised decision-making, some department heads felt they did not have control over where new positions were allocated and what recruitment and promotion criteria were used in their department. Overall, hierarchy was seen to cause tension in the autonomy of departments, slowness and rigidity in decision-making, and experiences of alienation and distrust.

Furthermore, tenure track was seen as an inadequate career path in academia in general and in some fields in particular because of its strong focus on research productivity and internationalisation at the expense of teaching and national knowledge interests. The article suggests that as universities invest in tenure track academics with start-up funding and special support, the career path may generate new gaps between research- and teaching-intensive positions and between academics in the tenure track system and those outside it (cf. Kimber 2003; Nikunen 2012; Herbert and Tienari 2013).

The article demonstrates that despite the similar goals of leaders positioned at different organisational levels and academic fields, the enacted environments of leaders differed to some extent. Senior leaders rationalised the need for hierarchical recruitment with pressures present in their

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[62] In Finland, labour legislation is based on permanent contracts. See Section 3.4.

operational environment, probably influenced by global policies, which push the transformation of universities towards stronger organisational actorhood (see Krücken et al. 2009). The centralised governance structures, regulated career paths and standardised systems of performance management (cf. de Boer et al. 2007; Kärreman and Alvesson 2004), however, collide with the interests of departments. The environments of the departments were characterised by unique research endeavours, teaching needs, and different representations of what constitutes good research and teaching. These justified the need for more decentralised governance structures and autonomy at the local level.

The study contributes to research on the changing academic career structures of European universities. It also contributes to research on university governance by indicating the tensions brought up by hierarchical systems. The findings indicate academic leaders at Finnish universities are well aware of the new employer status. It seems that due to the increased autonomy of universities, both the university as a collective organisation and individual departments are positioned as more cohesive entities. However, the findings demonstrate the contention between the right balance between centralisation and decentralisation in personnel matters.

5.3 ARTICLE III: EXPERIENCES AND EXPECTATIONS OF THE TENURE TRACK

The third article continued from the second one and focused on the experiences and expectations of academics in tenure track positions. It drew on research on organisation studies and working life studies, particularly research with a focus on work in academia (e.g., Obgonna and Harris 2004; Clarke and Knights 2015). The study contributes to research on tenure track positions, which has predominantly been conducted in north America with its vast academic labour market and with labour regulation that is quite different from in Finland and the other Nordic countries.

As a starting point, the article observed that academics are under pressure not only to do well, but also to excel at work (Pitt and Mewburn 2016; Knights and Clarke 2014; Acker et al. 2012). University employers incentivise academics to aim high in research and teaching. In addition, other groups such as students and funders have their own expectations (Ogbonna and Harris 2004; Evans 2015), constituting a wide array of demands towards the activities of academics. The output-oriented tenure track system reflects the ideals of NPM, which emphasises efficiency, monitoring and control. The article states that the tenure track system subjects academics to an explicit performance culture, as assistant and associate professors need to deliver tangible results in a given timeframe.

The study had the following aims. It illustrated the tensions and inconsistencies along the career path as experienced by assistant and associate professors. Second, it analysed which criteria the academics believe are emphasised in the system, and how the system enables academics to combine work and private life.

Based on previous studies, the tenure track system operates between two contrasts: commitment and control. On the one hand, it builds on long-term commitment between the university and the academic. Tenure systems in the US have been important in protecting academics' authority over questions about the substance of research and teaching (e.g., McPherson and Schapiro 1999). On the other hand, tenure systems emphasise performance measurement and evaluation and they may be used as a mere management instrument (Acker et al. 2012; cf. Knights and Clarke 2014). High efficiency pressures may be especially problematic for academics positioned in challenging life circumstances.

Drawing on 21 interviews with assistant and associate professors working at two Finnish universities, the study showed the uncertainty involved when career models are brought to new contexts. The novelty of the career system coupled with high and sometimes ambiguous performance criteria, large number of people involved in the tenure track evaluations and universities' budget cuts raised confusion and insecurity among some interviewees. Overall, the unestablished assistant professor position makes the individual in the position vulnerable to managerial whim and susceptible to work overload. On the other hand, despite its shortcomings, tenure track with open competitive recruitment, at least some criteria for promotion, authority over one's research and teaching, long-term career prospects and stability outshone the project-based work alternatives in academia.

Tenure track, which involves both internal and external performance evaluation, was seen to require continuous performance in a number of areas. In the output-oriented, 'metric-oratic' system[63], one is incentivised to achieve tangible results. However, there is always some contingency involved in the publication processes and funding decisions, which from an individual perspective makes them somewhat unpredictable and difficult to control[64].

Because of the focus on one's career, the tenure track system may encourage adopting an individualistic career strategy (cf. Clarke and Knights 2015). Despite the implied organisational commitment in the tenure track system, one's progression in the path was seen to be most dependent on one's own ability 'to deliver'. Mechanisms of social control, such as self-discipline, self-control and feelings of insufficiency, were central in the

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[63] An interviewee used the word 'metriikka-kraattinen' ('metric-oratic') to describe the performance evaluation in the tenure track system, which emphasises metrics. These metrics include, e.g., the number of publications, the quality of publications according to journal rankings, and citations.

[64] It should be noted that the performance pressures and the ambiguities in career processes are most likely not only related to the tenure track nor are they completely novel issues in Finnish academia.

descriptions of tenure track employment[65]. As a management instrument, the tenure track system is efficient because it enables the employer to set most of the conditions of work while it renders the individual responsible for his/her career progress.

Despite the output orientation, not all areas of academic work were assessed to be of equal worth in the evaluations. Instead, a distinction was made between recognised and unrecognised tasks. The recognised tasks were particularly related to research, tangible outputs being publications in international high impact journals. The unrecognised tasks were related to collegial work, such as committee work and conference organising. Overall, research performance was consistently seen to override teaching.

Despite the stability offered by tenure track employment compared to project-based employment, which is temporary in nature per se, academics in tenure track positions could not escape the market mechanisms of academia: the majority of tenure track academics felt they were explicitly expected to apply for and win competitive external funds. External funding acquisition was often not only interpreted as a tenure track performance criterion, but also as a requirement to fulfil other criteria, such as to show academic leadership and to have a research group. In infrastructure-intensive fields, especially if the contract did not include a start-up grant, external funds were necessary to be able to conduct research at all. For many individuals, tenure track meant a requirement to adopt new leadership roles, such as those of a supervisor and project manager.

International mobility as a formal requirement in tenure track positions was problematic for some individuals with children because of their caring responsibilities. This was voiced by both men and women. As a performance criterion it is not neutral, as it puts individuals in different life circumstances in an unequal position.

While most of the recruitment criteria identified by the interviewees were related to personal achievements, some individuals connected their own recruitment to the strategic positioning of the university or the department. Therefore, good or excellent performance is not always enough if one's research and teaching do not fit within the future visions of the organisation. This remark connects the career system explicitly to profile-building. In addition, job interviews were seen as occasions to demonstrate personal characteristics, such as team spirit and one's commitment to the university strategy, also questioning tenure track recruitment solely as a merit-based system.

The study concludes that assistant and associate professors at Finnish universities are exposed to a new kind of performance culture, which in the spirit of NPM emphasises efficiency, tangible outputs, and evaluation. While the performance criteria in tenure track positions are extensive in order to

[65] I acknowledge that here the Foucauldian concept of *biopower*, which refers to the regulation of societal actors via self-disciplinary practices, would have offered conceptual tools for analysis.

represent the variety of scholarly work, they sometimes lead to work overload and exhaustion, when one interpreted that he/she had to perform a perfect academic (cf. Pitt and Mewburn 2016).

Despite the freedom of universities to design and implement their own career paths, based on this study, an ideal candidate for a tenure track position is an internationally and research-oriented scholar, who runs big projects with external funding. While this emphasis reflects the global policies of research excellence and market tendencies, it offers a somewhat narrow outlook for academics wishing to have a long-term career in academia.

5.4 SUMMARY OF EMPIRICAL FINDINGS

In the dissertation I have studied the possible process of Finnish universities turning into more complete organisations by investigating two empirical cases. Both – the creation of research profiles and the design and use of tenure track systems – are important cases to be studied, because research activities and academic careers are areas of major concern for university organisations. They are also areas for management which involve multiple actors with decision-making authority and different interests. This makes them interesting research topics from the point of view of organisation studies and political science. Moreover, they relate to questions of academic freedom that is in the interest of the academic community as a whole.

It is argued in the dissertation that the establishment of research profiles and organisation-specific career paths are deeds of a rational organisation, which is able to set collective goals and make organisational prioritisations. Some of the decisions on research focus areas and career systems apply to the whole organisation, and as such, they contribute to making Finnish universities more coherent entities. The strengthened position of the Finnish university as an organisation sets new organisational requirements as the universities need to attend more carefully to personnel issues and research management. Global competition as the constructed environment requires creating favourable circumstances for research and career development.

The two reforms studied in the dissertation are intertwined. Both are promoted by global notions of research excellence, which imply that universities are not likely to be excellent in all existing fields and research topics, but they have to focus on a limited number of fields or research themes. The profile-building initiative is backed up by state authorities and supranational organisations, which suggest that universities should make choices that have implications for internal finances and staffing.

This section provides a brief summary of the key findings of all the articles read as a whole.

Profile-building and tenure track system as strategic instruments

The sub-studies of the dissertation indicate that there has been strategic use of profile-building and career models: to some extent both are seen to be useful in trying to stand out from other organisations and academic units in the competitive environment. This is exemplified in the attempts to offer attractive career paths with favourable work conditions and long-term career orientation and in the attempts to create research profiles, which would look interesting to an external audience.

Article I identified a so-called strategic concept of creating research profiles. It showed a number of academic leaders wished to make clear decisions, which would allocate resources to the selected research focus areas of their department, faculty or the whole university. Some leaders in departments or faculties had analysed the research and teaching composition of similar Finnish units in order to find *a specific niche* to attract new recruits, students, and funding. This kind of an analysis of competitive advantage treats organisational units, such as departments, as rivals and assumes that units will profit from identity-building and strategic positioning.

Also, the university as an entity might try to separate itself from others with a profile which represents its collective strengths (cf. Brunsson and Sahlin-Andersson 2000). However, this is more problematic and difficult to carry out than at the level of departments and faculties. The study found that the research profiles were in many cases either all-encompassing or only window dressing, as the decisions had little implication for resource allocation.

Academic leaders also used the tenure track system to form more collective departments. Career systems and recruitment may be used to create *coherent teams* through the recruitment and promotion of individuals whose capabilities supplement the existing staff (Engwall 2006).

Tenure track systems and the creation of research profiles were considered to be significant strategic instruments in the quest for building stronger research universities. The strategic value of the tenure track was visible in investments in start-up funding, special events and services targeted at assistant and associate professors. This emphasises their status as the universities' 'core employees' as opposed to more peripheral employees, such as project researchers. The personal accounts of assistant and associate professors echo this interpretation as they felt they were through their position more visible in organisational life than in their previous positions.

Adopting the market rhetoric, one administrative leader stated that the tenure track system in the case university was the best way to 'focus on making results', both for the university and the academic. At the organisational level, this subordinates the significance of the career system to boost the university's ability to fare better in the global competition. The career systems, which academics in tenure track positions interpreted to emphasise outputs and metrics, were portrayed as a modern alternative to the earlier local traditions of recruitment. However, as goal-setting and the measurement of results become central in how the organisation is run with reflections on career systems, some areas of academic work, which resist quantification and financial rewards, risk remaining somewhat unrecognised.

The two sub-studies on the tenure track system indicate the active use by the Finnish universities of their new employer position: there were examples of active recruitment (e.g., international marketing of positions, direct contacts to desired applicants) and flexible individual-specific negotiations of work conditions (e.g., about salary, start-up packages and teaching workloads). While this approach may serve the interests of the university organisation, it should be noted that the somewhat closed and individual-specific procedures may be problematic for the equality of employees and the transparency of the processes.

Tensions in the content and aims of profile-building and the tenure track

Some of the tensions identified in the articles arise from the complex environment of universities, which involves multiple constituents and expectations (cf. Kraatz and Block 2008). Instead of having only one or few objectives that an ideal rational organisation should aim for (cf. Brunsson and Sahlin-Andersson 2000), the studies illustrate *the heterogeneity of relevant aims and interests*, which makes it difficult to prioritise one aim over all the others[66]. For example, the strategic concept of creating research profiles was seen to be narrow because of its unsuitability for individually-oriented fields and expected detrimental effects in funding acquisition.

Whereas the case universities differed in terms of the internal governance structures and their level of centralisation, all the sub-studies suggested that internal hierarchies had steepened. The department heads were particularly critical of the hierarchies in decision-making. For example, in personnel matters, hierarchical, standardised human resource processes were seen to override field-specific reward structures and traditions. However, different fields which are not even internally homogeneous, have different perceptions of what ‘research excellence’ is. Uniform policies and hierarchical processes are problematic if they fail to acknowledge the different representations about what constitutes good research, teaching, and service in different fields.

The sub-studies also identified some tensions in tenure track positions. Academics on the career path are exposed to *a flood of demands and requirements*. They should excel in research and teaching, but also be

[66] All the case universities in the sub-studies wished to be seen as strong research universities with excellent teaching. However, as organisational aims research and teaching success are not organisation-specific, but more or less self-evident goals for legitimate universities.

capable of acquiring external funding, running big projects, engaging with the surrounding society, being enthusiastic academic leaders and collaborators, and so forth. With insufficient organisational support, the high demands may lead to work overload and problems in finding work-life balance. In addition, the performance criteria, often seen as ambiguous and unpredictably changing during one's contract, challenge the rational notions of organisation.

The strengthening position of deans and rectors and the centralised decision-making procedures at the case universities are signs of adopting a more complete organisational model. However, the dissertation raises some questions about the functioning of universities' internal governance structures. For the central leadership, uniformly defined processes and criteria help in guaranteeing equality and uniformity in recruitment and career advancement, for example. However, for department heads and academics, centrally defined processes and criteria represent a shift in authority away from the local level. In making career decisions, centralisation was seen to cause organisational inflexibility. Among academics, centralisation of decisions caused concern, because in such a system, decisions are more likely to be based on a distant reading of standardised documents than close familiarity with the particular circumstances of individuals. Furthermore, if departments are to be held accountable for performance according to NPM logic, they might also legitimately claim decision-making in resourcing and recruitment.

Mismatch between rational processes and the everyday academic life

In a complete organisation as described by Brunsson and Sahlin-Andersson (2000), organisational policy is translated into action through the use of strategies. Ideally, the rational goals flow down the organisational ladder to manage internal action and employee behaviour. However, the empirical findings of the dissertation indicate that a great deal of decoupling takes place at universities when they respond to institutional pressures. This was most pronounced in the study of profile-building, when the profiles sometimes had little effect on internal activities. Decoupling was sometimes portrayed even as *critical* for academic units' success, because at the time of scarce resources it enabled the inflow of external funds from various sources (an all-encompassing profile allowed academics to refer to it). Thus, decoupling (for instance, adopting the symbolic concept of creating research profiles identified in Article I) may also be a highly strategic act. This shows the creative translation of introduced reforms in a heterogeneous organisation.

The experiences of tenure track academics show there is some discrepancy between the rational organisation ideal visible in the formal procedures, criteria and proclamations of organisational support, and the everyday life in departments where the actual work is conducted. For example, many assistant and associate professors referred to vague and changing supervisor relationships, insufficient support, unclear performance criteria and incomplete communication. These experiences are opposed to the rational organisation model, which depicts the lines of authority and responsibilities as orderly. It should be noted that when viewed from this perspective, a functioning rational organisation would not necessarily subordinate academics, but instead it would contribute to improving the opportunities for employees to conduct their work. This is because the established hierarchy of responsibilities and management instruments are likely to increase the predictability of decisions.

Due to the significance of one's academic community, which consists of scholars in different locations, individualised responsibility for one's own career advancement, primary commitment to one's own research team and the hollowness of Finnish universities in terms of providing resources for research (and previously in terms of providing long-term careers), academics in tenure track positions typically saw the university as a collective entity as remote or even insignificant for one's work. This significantly limits the extent Finnish universities can be considered to be organisational actors.

The disparity between the rational ideals and the messy organisational practices also point to confusion when global models, such as tenure track systems, are brought to new national settings. For example, unfamiliarity with the tenure track career system in Finland, including uncertainty about how the career model should work in practice and the career model's unsuitability with the national legislation, reminds us that the tenure track model is not home-born. Instead, it has been created in a different social context, at a different time, and to respond to different needs.

6 CONCLUSIONS AND DISCUSSION

This dissertation has presented analysis about how two broad changes in Finnish academia have been disseminated, interpreted and put into action. With empirical data consisting mainly of interviews, the analysis shows what targets the establishment of research profiles and tenure track career systems entail and what work demands academics experience in tenure track positions. By doing that, it shows the tensions ensuing from the endeavours to transform universities into more uniform, managed organisations.

It is argued in this dissertation that with the establishment of research profiles and internal academic career paths, Finnish universities are portraying themselves as autonomous entities. The study interprets the reform initiatives in Finnish academia as being part of a trend of transforming universities into stronger organisational actors, promoted by supranational and national modernisation attempts (cf. Whitley 2008; Krücken and Meier 2006; de Boer et al. 2007; Enders et al. 2013; Musselin 2007; ESMU 2012). However, the findings of the dissertation suggest that because of some underlying characteristics of the academic research systems and university organisations, tensions arise when ideas of identity, hierarchy, and rationality are promoted. These special characteristics include the various demands universities, academic research, and academic work are faced with, the internal variety and heterogeneity at the department level, the uncontrollability of research, and dependence on academics and scholarly communities who control academic publishing, funding decisions and career progression.[67] Thus, the empirical cases show the structural constraints when building more complete university organisations as described by Brunsson and Sahlin-Andersson (2000).

The dissertation also presents the argument that although universities are pushed to specialise, to focus on their strengths and to create organisation-specific career structures, the common institutional environment of universities encourages them to adopt similar responses. The global competitive academic labour market and competitive 'research game' (Lucas 2006) as the constructed environment make it difficult for universities to differentiate significantly.

The emphasis in the dissertation is that to understand the sometimes unpredictable and unintended outcomes of policy reforms in academia, it is necessary to approach universities as complex organisations. This

[67] For example, the study on research profiles found that the created profiles reflected both the year-long initiatives and traditions of research groups and academics on one hand, and the decisions of funders on the other hand. When the research profiles originate from the bottom-up initiatives of academics and when the control over funding is decentralised, it is difficult to treat universities as strong organisational decision-makers in research.

dissertation has illustrated some examples of how this complexity is manifested. First, the findings show the universities' need to balance between the different organisational identities and expectations. Second, the dissertation underlines the many opportunities the pluralistic environment offers and shows the creative responses of academic leaders and academics in pleasing different constituents (cf. Kraatz and Block 2008). For example, some pressures are responded to with changes in internal activities, whereas some are responded by ritual adaptation, for example when a research profile serves a buffering function protecting the research and teaching activities (cf. Meyer and Rowan 1977; Larsen 2000).

The dissertation argues that reforms in academia should be studied from a perspective which acknowledges the internal variety of universities. Interestingly, the institutional autonomy universities have from the state in Finland seems to have opened the door for a new power struggle in academia, including questions of who in the organisation should possess power and in what circumstances, and who has the necessary information and legitimacy to use it. The sub-studies of the dissertation indicate that the establishment of research profiles and tenure track systems can be considered neither as change processes, which would be executed unanimously, nor as change processes, which would be directly rejected. Instead, there is considerable variety and many interests involved between the extremes. Both organisational capitulation to institutional pressures and challenging them can be interpreted as interest-based political acts.

Standardisation and uniform processes make performance in messy and insecure research activities and academic recruitment more controllable for leaders. Moreover, coherence supports the equality of academics and academic units. However, standardised management initiatives are easily rejected as unsuitable for all fields and individuals. The study shows that because of the internal variety, tensions arise when certain views of research and human resource management are diffused to all fields; for example, when major projects and group-based research funded by external sources are seen as indicators of successful research across fields (cf. Välimaa 2005; Neave 2002). For instance, the creation of research profiles following the model of group-based research and big projects is problematic in the humanities, but also in more theoretical fields of sciences and social sciences, where research projects may be legitimately carried out by individual academics.

The dissertation also underscores the diverse expectations new assistant and associate professors face. As employees in the universities' internal career paths they are offered attractive job prospects. At the same time, they are susceptible to a new kind of performance management, which makes it necessary to respond to the university employers' expectations if one wishes to advance along the career path. The findings emphasise how academics in tenure track positions actively consider they should prioritise their work, acknowledging not only the formal requirements, but also their own ideals and future work endeavours.

The limitations and potential areas not fully covered in the dissertation should be considered when planning future studies. First, the data used in this dissertation were collected from a limited number of universities, faculties, and departments. Different organisational contexts might produce different patterns in the case of restructuring career paths. Longitudinal studies with a diverse body of data, including both qualitative and quantitative data and with a coverage of different organisational settings, are likely to provide further insights into the long-term effects of the profile-building efforts and new career paths in Finland and elsewhere. This is also important because the sub-studies of the dissertation were conducted relatively soon after the introduction of the reforms and changes in Finnish legislation. With the help of register-based data, future studies could trace the career trajectories of tenure track academics to find out whether their careers differ from the rest of academics, and how.

Second, more research and discussion is needed of the wider implications of the tenure track system. For example, how does the tenure track change the representation of what an ideal academic is? Who are intentionally or unintentionally excluded from stepping onto the career path? Do academics outside the tenure track find satisfactory career alternatives in academia and outside it? The findings of the dissertation suggest use of the tenure track system in the case universities emphasises certain aspects of academic work. What are the societal consequences if the career paths turn out to be one-sided? Further research could also study the extent to which the changes in academic labour markets reflect the labour market outside academia, and to what extent they differ. In Finnish academia, does the tenure track lead to a higher proportion of permanent contracts, or does it legitimise the increased use of fixed-term contracts? How do the changes affect universities' internal governance and academics' ability to affect key organisational decisions?

Third, having a tenure track system puts emphasis on the early years of career and requires productivity early in one's academic career. Kwiek and Antonowicz (2014) note that academic careers have become more and more structured. This leaves less room for unproductive phases, such as periods of parental leave. The dissertation also indicates that myriad formal and less-formal criteria are being used in recruitment decisions. Future research should focus on the gender implications of the career system and study, how academic mothers and fathers are able to combine work and private life. Furthermore, what are the gender implications of the increased competition and demands for international mobility (cf. Kosunen and Kivelä 2017)? The universities' recruitment procedures showed that more and more weight is being given to university strategies and the strategic visions of departments. It is worthwhile to study in detail what gender implications the new employer status has, if more weight is given to situation- and individual-specific discretion[68]. Future research could also focus on the experiences of particular groups of academics in tenure track, such as academics having different backgrounds in terms of nationality and ethnicity (cf. Acker et al. 2012).

Fourth, how does the establishment of research profiles and tenure systems affect the composition of the academic staff at the department level: for example, how is the allocation of research, teaching and service tasks among staff affected? What kinds of full-time and part-time, permanent and temporary staff compositions emerge? What are the tensions when different groups with different work conditions and career perspectives coexist?

Fifth, related to research on organisational actorhood, there is need for studies on the significance/insignificance of job resources in the university context, such as the level of support in the work community and supervisor feedback, and their effect on employee satisfaction, performance and career advancement (cf. Bakker and Demerouti 2007).

Sixth, this dissertation focused especially on the research function of universities. It would be worthwhile to study the implications of profile-building and academic career restructuring on teaching, including the content of teaching (e.g., whether teaching becomes narrower as a result of profile-building). Future research on the transformation of universities could incorporate other reforms, such as the restructuring of degree programmes. Also, the study of the evolution of universities' internal administration (e.g., the human resources offices) is interesting in order to understand how universities can turn into more complete organisations.

Seventh, the debate on the construction of complete organisations offers a powerful framework for interpreting recent management changes at universities. Isomorphic, global pressures that recommend that universities make choices and specialise seem to have promoted a traditional interpretation of an organisation as a machine-type of entity with strong management and established hierarchies (cf. Mintzberg 1992). However, some of the findings in this dissertation suggest that profile-building and career restructuring may be seen as power games within the universities, where certain individuals are able to contribute to defining the rules of the game. Therefore, future studies should approach universities as organisations from different theoretical perspectives. For example, future analysis could be enriched by approaching universities as political systems (e.g., Morgan 2006). Such perspectives could elucidate what successful personnel and research management could look like in a university that is inherently dominated by interests, conflict and power issues.

Finally, further studies could contribute by unravelling some of the interaction processes in academia. How do academic leaders come to change their opinion in social settings? Who are the people who perform in influential 'sensegiving roles'? What are the social arenas, where meaning

[68] Husu's (2001) study, for example, shows that the invitation procedure in filling professorships favoured men when compared to appointing professors with open competition.

construction and reconstruction take place (cf. Balogun et al. 2008)? For example, the influence of management and leadership training as an arena for the isomorphism of ideas would be worth studying.

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APPENDIX

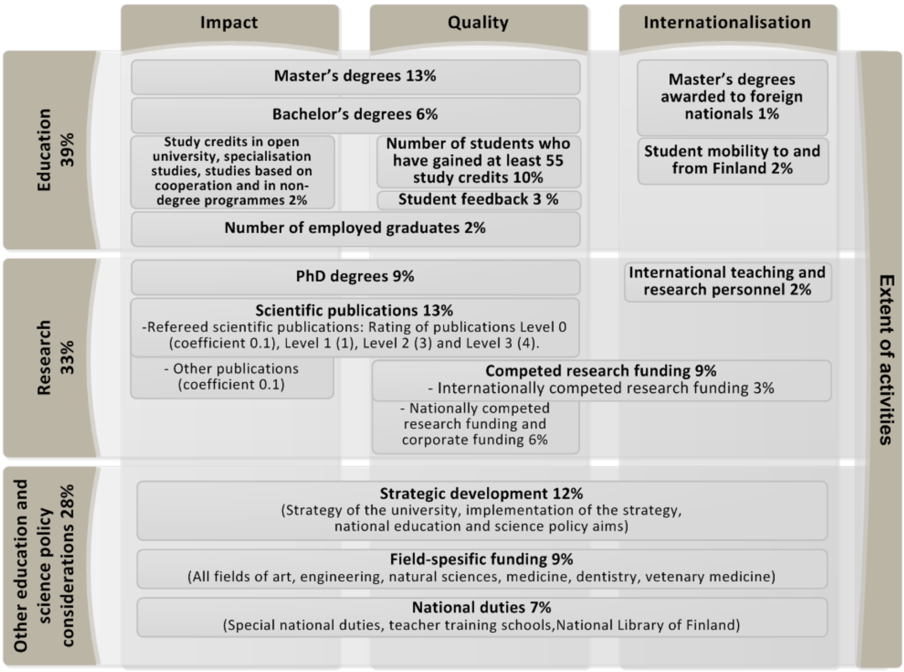

Figure 2 Funding model of Finnish universities (universities’ budget funding) from 2017 onwards. In comparison with the previous funding model, this new model emphasises the strategic development indicators and field-specific funding. Source: Halonen, T. (2016). Research Indicators in the Finnish Universities Funding Model. Presentation at the Nordic CODATA Data Citation Workshop, 23 Nov, 2016. Ministry of Education and Culture.