



## A Shift Towards Academic Capitalism in Finland

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Academic capitalism is currently a widely studied topic amongst higher education scholars, especially in the United States. This paper demonstrates that the theory of academic capitalism also provides a fruitful perspective for analysing the restructuring of Finnish higher education since the 1990s, although with reservations. It will be argued that many reforms in Finnish universities since the 1990s, and especially in the early 2000s, have integrated Finnish universities more tightly with the new knowledge-based economy. As some recent empirical studies indicate, activities and practices related to academic capitalism remain, however, unevenly distributed among different disciplines, and workers in Finnish universities tend to experience increasingly contradictory demands.

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### Introduction

The World Bank (2006, xiii) has identified Finland as one of the prime examples of how ‘knowledge can become the driving force in economic transformation and growth’. Moreover, in Finland, ‘rapid structural transformation’ from an economy based mainly on resource-intensive industries to ‘the most ICT specialized economy in the world’ took place between the mid-1990s and the 2000s. Given the widespread international interest in the Finnish case, it is interesting to ask how the relation between Finnish universities and the new knowledge-driven capitalism has developed in recent decades. Hence, on the basis of an analysis of this relation, we will argue that a shift towards academic capitalism in Finland took place around the same period, and thus equally in a relatively short time.

Slaughter and Leslie (1997, 5) have argued that in the United States, a shift towards academic capitalism was accelerated by globalisation during the 1980s. Moreover, that decade was a turning point in that ‘faculty and universities



were incorporated into the market to the point where professional work began to be patterned differently, *in kind* rather than in degree' (emphasis in original). We will argue that the first decade of the 2000s represents a similar qualitative turning point towards academic capitalism in Finland, although preparation of these changes begun already in 1990. By relying on the relevant empirical research, we nevertheless posit that the implementation of practices and activities that characterise academic capitalism has been very uneven between different disciplines.

Our point of departure is Slaughter and Leslie's (1997) and Slaughter and Rhoades' (2004) work on academic capitalism. In arguing that the theory of academic capitalism is fruitful in characterising the current Finnish higher education system, attention must be paid to a wide range of phenomena that take place at different organisational levels and between different social spheres, that is, markets, state and higher education. Hence, one of the strengths of the theory of academic capitalism is that not only does it focus on higher education, but rather on dynamic relations and boundaries between these different social spheres. We also share the idea that universities and academics should not be seen as passive victims 'of external, encroaching commercial interests' (Slaughter and Rhoades, 2004, 305), but rather as active collective and individual actors who have used (and use) 'a variety of state resources to create new circuits of knowledge that link higher education institutions to the new economy' (*ibid.*, 1).

Hence, it is our aim to demonstrate not only that a shift towards academic capitalism has taken place in Finland, but also that the theory of academic capitalism provides a fruitful framework for analysing the recent changes. We are mostly interested in institutional and organisational transformations in universities, as well as on their effects on research practices that take place in the universities. For this reason, we do not address learning in higher education, and how learning practices may have been affected by a shift towards academic capitalism. After discussing academic capitalism both as a theory and an object of study, we provide evidence for our main argument. We also make some qualifications to our argument by comparing academic capitalisms in Finland and in the United States. Finally, we present our conclusions, as well as suggest some topics for further research.

## **What is Academic Capitalism?**

Slaughter and Rhoades (2004, 7) hold that academic capitalism is a theory that is intended to explain how 'colleges and universities are integrating with the new economy'. They conceptualise this integration process by using the models of public good knowledge/learning regime and academic capitalist



knowledge/learning regime. In the public good regime, basic research is described in terms of Mertonian norms (communism/communalism, universality, disinterestedness and organised scepticism). Knowledge produced by basic research in turn is considered as public good ‘which citizenry has claims’ (*ibid.*, 28). Application of knowledge for commercial purposes, as well as applied research and product development, that take place in corporations are thus sharply distinguished from basic research as the commercial values characterise only the former processes but not the latter. By contrast, in the academic capitalist regime, separation between basic and applied research is blurred because of the fact that commercial values, such as knowledge privatisation and profit making, penetrate basic research that is done in universities. Thus, in the academic capitalist knowledge/learning regime, ‘inventor faculty, and corporations have claims [to knowledge produced at universities] that come before those of public’ and ‘[p]ublic interest in science goods are subsumed in the increased growth expected from a strong knowledge economy’ (*ibid.*, 29). Scientific knowledge that is located in the ‘public domain’ (*ibid.*, 132) is thus treated as ‘raw material that can be claimed through legal devices, owned, and marketed as products and services’ (*ibid.*, 15). Moreover, in academic capitalist regime, higher education has dual economic role. In addition to generating revenue for academic organisations, its task is to produce such knowledge and wealth that facilitates the global economic competitiveness of corporations (Rhoades, 2005).

Now, these two regime models clearly include simplifications and idealisations. It can be doubted, for example, whether (or to what extent) Mertonian norms have actually been followed in basic research before the rise of the academic capitalism and whether the separation between basic and applied research has ever been so strict that is supposed in the previous distinction. For one thing, as Slaughter and Rhoades (2004, 29) acknowledge, ‘In the 1945–1980 period, much scientific and engineering research [in the US] depended on Department of Defence funding for weapons of mass destruction.’ They also suggest that although universities and colleges have nowadays integrated more tightly with the new economy, they do not necessarily seek to become private enterprises, as universities rather want to keep their state and federal subsidies while participating in markets (*ibid.*, 26, 306). Furthermore, Slaughter and Rhoades (e.g. *ibid.*, chap. 12) not only admit that not all faculties or scientists have accepted values of knowledge privatisation and profit making, they also point out various problems and conflicts of interests that are involved in the current practices related to academic capitalism. For reasons of this kind, they explicitly present the previous distinction between these two regime models as an analytical tool and contend that ‘academic capitalism has not replaced the public good knowledge regime’ (*ibid.*, 29). The core argument of their book nevertheless is that the *shift towards* academic capitalism has taken place in the United States. In the next section, we will argue that a similar argument also



applies to Finland, though there are certain important differences between developments in these two countries.

Before addressing the recent developments in Finnish higher education system, we should clarify the theory of academic capitalism a bit further. One important question is what the term ‘capital’ means in ‘academic capitalism’. We suggest that it refers in this context primarily to intellectual property in the sense that knowledge has become a ‘new form of intellectual capital’ (Roberts and Peters, 2008, 17) that can be translated into economic capital, for instance, by selling it on the markets that have been created through legislation of intellectual property rights. In other words, intellectual property implies a possibility to generate profit and enables universities to participate in economic markets. Nevertheless, we suggest that it may be reasonable to differentiate between other forms of capital as well. Thus, following (Bourdieu, 1984, 1986; Munk, 2009), the term ‘capital’ does not have to refer solely to economic and intellectual capital in a previous sense, but also to social, cultural, symbolic, informational, as well as academic, capital. Involvement in academic capitalism may thus bring both material and symbolic profits (e.g. high status, reputation, recognition, prestige and so forth), and the latter can be translated into material profits. For example, cultural capital produced as a result of academic (capitalism-related) activities can be translated into economic capital through increased collaboration with industry or investment in technology transfer activities such as patenting and licensing. We believe that this extended use of the term ‘capital’ is in line with the theory of academic capitalism, which addresses a broad range of diverse academic practices and activities.<sup>1</sup>

Moreover, the theory of academic capitalism (Slaughter and Rhoades, 2004) is a rather loose classification of various social entities, processes and activities that have contributed to the shift towards academic capitalism than a systematic theory with well-defined concepts and specific claims and hypothesis about social reality. Despite (or because of) this, this theory provides fruitful conceptual tools that can be utilised in an analysis of recent developments of Finnish higher education system, and how these developments have enhanced the integration between higher education, markets and state. Slaughter and Rhoades (2004, 15) list the following phenomena that constitute the academic capitalist knowledge/learning regime:

- new circuits of knowledge linking universities and private companies;
- interstitial organisations that facilitate collaboration between universities and private companies;
- intermediating organisations and networks between public and private sector;
- extended managerial capacity for administrating intellectual property rights and patent policies of universities, as well as their direct market activities.



All of these entities link universities more tightly to the new economy and enable members of university communities to engage in new kinds of economic activities (*ibid.*, 15). Thus, academic capitalism can be said to refer to a wide variety of market (e.g. patenting, making investments and establishment of spin-off companies) and market-like (e.g. competition over grants, competition over wealthy and talented students, establishment of university–industry partnerships and introducing or increasing tuition fees) activities within universities, as well as between them and private corporations that all aim *to generate revenues by securing and diversifying external funding of universities* to compensate reduced public funding (e.g. Slaughter and Leslie, 1997; Slaughter and Rhoades, 2004). This means that the focus of academic capitalism (as a theory) is not only restricted to commercialisation of research, but also takes into consideration other aspects of universities (e.g. instruction and administration) and changing relations within universities (e.g. decreasing status of many social sciences and humanities), as well as between universities and their social environment. Moreover, in the theory of academic capitalism (Slaughter and Rhoades, 2004; Slaughter and Cantwell, 2012), both the neoliberal state and the globalising knowledge economy are seen as important elements of the broader structural context that provide openings and incentives to universities to move towards academic capitalism.

A sceptic may protest that universities have surely collaborated with industries and engaged in market-like behaviours for a long time (e.g. Etzkowitz, 1998) and claim that there is nothing new in the current developments. We agree with the former claim, but want to question the second one. As Slaughter and Rhoades (2004) demonstrate, recent decades have witnessed the rise of such networks and practices that have introduced *direct* market behaviours, the profit motive and the capitalist ethos increasingly into universities, at least in the United States. In line with this, Slaughter and Leslie (2001, 154) define those university employees that interact with markets as ‘state-subsidized entrepreneurs’ as they ‘are simultaneously employed by the public sector and are increasingly autonomous of it’, that is, ‘they are academics who act as capitalists from within the public sector’. This implies that academics and universities are not only developing partnerships with private corporations, but also may act in markets in order to make profits (Rhoades *et al.*, 2004, 317).

However, it has to be remembered that current universities are very complex entities with many different disciplines, and this has some obvious implications also for discussions on academic capitalism. Although some disciplines (such as modern biotechnology and information technology) are able to interact quite easily (depending on the regulatory environment) with private market actors, other disciplines (e.g. humanities and many social sciences) are located further away from markets. In other words, there are differences among disciplines and to what extent they are engaging with activities and networks that characterise



academic capitalism. This does not mean that disciplines like sociology would be insulated from the effects of academic capitalist practices and institutions as there is a growing risk that non-market-oriented disciplines of this kind may become marginalised in universities insofar as they cannot sufficiently engage with market actors (see also, Slaughter and Rhoades, 2004, chapter 12). This sort of engagement tends to be more valued in the context of knowledge economies than many other ways of engagement in which social sciences and humanities may be (and have been) very productive (see, e.g., Esko *et al.*, 2012).

It can be argued that a shift towards academic capitalism took place relatively smoothly in the United States because the needs of (especially high-tech) corporations and universities supported each other in the 1970s and 1980s. On the one hand, corporations were looking for new products and skilled workers in order to compete in world markets, and universities, on the other hand, were searching for new external funding sources after the decline of state funding in order to maintain resources and to maximise prestige (e.g. Slaughter and Leslie, 1997, 6–7, 15; also Slaughter and Rhoades, 2004). Thus, there were incentives for both universities and corporations to develop such practices that enhanced their integration.

Many aspects of this integration has been empirically studied in the context of the United States: the establishment of technology transfer offices, legislative changes, US research universities' intellectual property rights policies, increased managerial capacity, board interlocks between universities and corporations and increased tuition fees (see, Slaughter and Leslie, 1997; Slaughter and Rhoades, 2004). Slaughter and Cantwell (2012) in turn have argued that a shift towards academic capitalism has also taken place in Europe.

## **Academic Capitalism in Finland**

Indeed, trends in the university–industry linkages (Kauppinen, 2012), treating higher education as a commodity (Naidoo, 2003) and the establishment of technology transfer offices (Kauppinen, 2013), as well as various legislative changes, show that higher education institutions also in many other countries have become more and more directly involved with those networks, organisations, practices and circuits of knowledge that characterize academic capitalism. There are many studies that have explored similar topics in various European countries without necessarily referring to academic capitalism (for Finland, see, Rinne, 2004; Kutinlahti, 2005; Nieminen 2005; Patomäki, 2005; Miettinen *et al.*, 2006; Tomperi, 2009; Välimaa, 2010; Välimaa, 2011; Ylijoki *et al.*, 2011). In the following, we focus on academic capitalism in Finland.

The roots of a shift towards academic capitalism in Finland can be traced at least to the 1990s (e.g. Rinne, 2004; Välimaa, 2010; Välimaa, 2011), and even to



the mid-1980s (e.g. Kauppinen and Moisio, 2008; also Kutinlahti, 2005, 163). Rinne, for example (2004, 128–129), wrote that the change towards market-oriented higher education in the 1990s was ‘exceptionally rapid and profound’. New leading principles and mechanisms introduced in the 1990s included ‘entrepreneurialism, managerialism, competition, funding by results, continuous assessment, Centre of Excellence policy, contracting and fighting for external funding’. According to Rinne (*ibid.*, 129), the most important reasons for this transformation were ‘the rapid massification of higher education, the deep economic depression, joining the European Union (EU) [in 1995] and the radical changes to the right in the political climate as well as in the coalition of the basis of government in the country.’ He continues that these events and tendencies ‘reflect more global and international changes in the role and functions of the university institution in the nation-state and in international relations’ (*ibid.*, 129).<sup>2</sup> Finally, though in absolute terms the state-based budget funding of universities has increased as universities have grown bigger (except in the early 1990s), Rinne (*ibid.*, 126) indicates that the relative share of their budget funding decreased significantly (over 30%) when compared with external funding (including both public and private) between 1980 and 2000.<sup>3</sup> In the early 2000s, the relative share of the budget funding in Finnish universities nevertheless stabilised to the level of 64–65% of their operative expenditures (Välilmaa, 2011, 47).

Despite these and other important changes regarding public funding, legislation and academic ethos during the 1990s (see, Nieminen, 2005; Välilmaa, 2011), we identify the first decade of the new millennium as a period in which a qualitative shift towards academic capitalism took place in Finland. This is because institutional conditions for academic entrepreneurship were significantly facilitated particularly during this decade through establishing technology transfer offices and enacting new national legislation (Kauppinen, 2013). The establishment of technology transfer offices (as an example of interstitial organisations facilitating collaboration between universities and corporations) can be interpreted as a direct marker of academic capitalism because ‘technology transfer is perhaps the most direct form of academic engagement with the market’ (Slaughter and Leslie, 1997, 19). Furthermore, *The Act on the Right to Inventions Made at Higher Education Institutions* institutionalised the ownership of intellectual property by universities. This Act also defined the status of researchers in a significantly new way. After the Act came into force in 2007, researchers were identified in relation to invention activities as any other employee who is working for an employer — including those working in private enterprises (Kauppinen, 2013). This changed status of academic workers in Finland reflects developments in the United States (e.g. Slaughter and Leslie, 1997, 5). Thus, new legislation and new interstitial organisations enhanced academic entrepreneurship in Finland in a qualitatively new way during this decade.



Moreover, the definition of the third mission of universities to serve their larger societal environment was added to the university law in 2004, and, even more importantly, The New University Act came into force in 2009 (e.g. Tomperi, 2009; Välimaa, 2010, 2011). According to the new act, ‘Finnish universities have transformed into independent corporations under public law or foundations under private law, meaning that universities are no longer part of the state budgeting bureaucracy but have financial autonomy and liability’ (Ylijoki *et al.*, 2011, 725). The New University Act also changed the status of academics working at universities from civil servants to wage labourers and enabled universities to engage in markets and make contracts with private companies more easily by defining them as juridical persons. It further increased the number of external members in boards of universities by requiring that 40% of board members should come from outside higher education. It as well brought more power to the hands of rectors and university boards.<sup>4</sup>

The boundaries between universities and markets were also blurred by establishing Strategic Centres for Science, Technology and Innovation (in Finnish, SHOKs) in 2007 (e.g. Poutanen and Kovalainen, 2010). SHOKs exemplify those intermediating organisations that increase the universities’ chances to diversify their external funding sources and to engage in markets through systematised industry–university collaboration. Their main objective ‘is to thoroughly renew industry clusters and to create radical innovations’ (Tekes (the Finnish Funding Agency for Technology and Innovation), 2012). In order to pursue this goal, ‘companies and research units work in close cooperation, carrying out research that has been jointly defined in the strategic research agenda of each Centre. The research aims to meet the needs of Finnish industry and society within a five-to-ten-year period.’ (*ibid.*) It should then not come as a surprise that the SHOKs have so far focused mostly on projects that aim to commodify some of the new research results of the technological, medical and biological disciplines.

What is also important to our topic is that all SHOKs adopted the organisational form of a limited company to manage and govern their activities, and the majority of the shareholders in all SHOKs are private corporations (Poutanen and Kovalainen, 2010). The latter point out that because of the fact that the evaluations of funding applications and funding decisions in SHOKs are done by their shareholders, needs and interests of their shareholder companies largely determine the content of research done in SHOKs. Indeed, the representatives of shareholder companies have told that SHOK programmes are led by corporations in a successful way and that corporations are able to predetermine the content of the research conducted in SHOKs (Annala and Ylä-Jääski, 2011, 3).

Other significant changes during the first decade of 2000s included managerialisation of Finnish universities, which is exemplified by implementation



of a performance-related pay system (2006), the system of time management (2006) and complex systems of quality control (2004) (e.g. Rinne, 2004; Jauhiainen *et al.*, 2011, 188–192). One aspect of this change was the establishment of a new-line organisation within universities where the authority relations between supervisors and supervised academic workers are strictly defined and managerial evaluations of the performance of each worker are regularly conducted between supervisors and supervised. It can thus be argued that the managerialisation of Finnish universities altered many aspects of professional work at universities and transformed administration of universities in the direction of management of private companies (including budgeting).

These profound institutional changes support our temporal framing that a qualitative shift towards academic capitalism took place in Finland during the first decade of the 2000s, although the preparation of the restructuring of the Finnish higher education system had begun already in the 1990s, and that the development has been uneven between different disciplines (for the differences between disciplines in commercialisation of research, see, e.g., Nieminen, 2005; Ylijoki, 2003; Ylijoki *et al.*, 2011). Nevertheless, each of these changes and reforms in Finnish universities contributed directly or indirectly to a shift towards structural conditions that were favourable to increased collaboration between higher education institutions and market actors, and this collaboration was often promoted, enabled and facilitated by various governmental agencies. While it might be plausible to argue that part of those changes that occurred during the first decade of the 2000s merely represented intensification of many trends that already started during the 1990s, we argue that it is the first decade of the 2000s when academic capitalism became properly institutionalised in Finland — albeit without the introduction of tuition fees. In this respect, our temporal framing is based on the idea that the establishment of technology transfer offices, SHOKs and the implications of the New University Act are significant markers of academic capitalism, and simultaneously they institutionalised and partly normalised those initial steps towards academic capitalism that were taken in the 1990s.

It is possible to identify a wide variety of actors who have contributed to a shift towards, and/or reproduced, academic capitalism:

- individual researchers (as practitioners of technology transfer and owners of start-up/spin-off firms);
- research teams (acting as partners to corporations in research projects);
- rectors (as supporters of legislative changes that have increased the possibilities of universities to act like market actors or to collaborate with market actors);
- interstitial organisations (such as technology transfer offices);



- intermediating organisations (such as SHOKs);
- corporations (as components within multi-scalar R&D networks with universities or donors);
- state agencies (such as the Ministry of Education and Culture that provide incentives for universities to collaborate with private sector);
- international organisations (such as WTO, World Bank and OECD that produce discourses and narratives that emphasise the importance of the integration of higher education and markets for national innovation systems); and
- supranational organisations (such as the EU that tends to subordinate higher education policy to economic and innovation policy through various strategies such as the 2000 Lisbon strategy).

Finally, the influence of international and supranational organisations implies that the restructuring of national higher education systems cannot be understood exclusively in the nation-state framework and in their own terms, but rather in relation to global politics, and how various global and regional pressures are affecting policy priorities of national higher education systems. (Rizvi, 2009, 113). This applies also to the Finnish case.

### **Transnational Aspects of Academic Capitalism**

A shift towards academic capitalism in Finland is closely related to the introduction of innovation policy during the 1990s as the aim of innovation policy was to integrate science and technology policy in Finland. However, the introduction of innovation policy and a shift towards academic capitalism in Finland cannot be understood in a nation-state centric framework. These transformations are rather linked to the development of supranational higher education policy in EU, and more broadly to the EU's competitiveness policy, as well as the OECD's recommendations and reports, which had a key role in making the concepts of national innovation system and knowledge-based economy very popular within its member states (for a study of the emergence of the concept of 'national innovations system' and its variable uses in Finnish science politics, see Miettinen, 2002). In this respect, one of the key drivers is the Lisbon Agenda as its aim was, on the one hand, to make Europe the most competitive knowledge-based economy in the world, and on the other hand, to emphasise the role of higher education in achieving this goal. At the nation-state level, this goal was translated into policies that aimed to increase the competitiveness of Finland in the globalising knowledge-based economy. Increased global competition was one way to justify the supposed necessity to reform Finnish higher education system (e.g. Rinne, 2004; Välimaa, 2011). Currently, the restructuring of European higher education is linked very closely



to the Europe 2020 growth strategy in which, amongst other things, transnational aspects of higher education and transnational R&D networks are strongly emphasised, for instance in the case of ‘Knowledge and Innovation Communities’ (see, e.g., Kauppinen, 2012).

Thus, a shift towards academic capitalism in Finland is tied to a broader process of transnationalisation of academic capitalism. The latter is a geographically and institutionally uneven process that is based on practices and networks that integrate higher education institutions and market actors across nation-state borders (*ibid.*).

One implication is that a shift towards academic capitalism in Finland has tightened integration between Finland and the globalising knowledge-based economy. Moreover, what is perhaps even more important here is that Finnish higher education policy ‘is no longer very national nor very Nordic, but more and more EU and OECD-like’ (Rinne, 2004, 127). Of course, there are national differences in how shifts towards academic capitalism have taken place, but for instance the increased influence of many international organisations, such as OECD (for the influence of OECD on Finnish higher education, see Kallo, 2011) and the development of EU-level higher education policy means that national higher education policies *tend* to adopt similar strategies in reforming their higher education institutions (Rinne, 2004).

## Differences between the US and Finnish Cases

Although recent developments in the US and Finnish universities exhibit many similarities with respect to academic capitalism, there are nevertheless important differences between these two cases. While academic capitalism in the United States involves tuition fees as one of the key sources of external revenue, in Finland tuition fees are largely absent<sup>5</sup> and all universities are still financed mostly by the state. Unlike in the United States (see Slaughter and Rhoades, 2004, 131–180), in Finland there are no institutionalised copyright policies that would give institutions a right to make ‘claims to faculty’s copyrighted materials’ (*ibid.*, 131). Furthermore, the volumes of certain activities such as patenting have been very modest in Finland compared with the United States (e.g. Slaughter and Rhoades, 2004; Kaataja, 2009). Moreover, administrative changes in Finnish universities slightly differ from those that took place in the United States as in Finland they were largely implemented by means of top-down policies that were significantly influenced by international organisations such as the OECD and the EU, as well as the doctrine of New Public Management (e.g. Jauhiainen *et al.*, 2011). By contrast, according to Slaughter and Rhoades (2004, chap. 8), administrative changes in US universities were mostly indigenous, although they were subsidised by the



state, as well as federal governments, and influenced by a neo-liberalist ideology. In many other respects, Finnish higher education system moved towards academic capitalism rather late with respect to the United States (see Slaughter and Rhoades, 2004), but the transformation was relatively quick.

It could be argued that the theory of academic capitalism does not apply to the Finnish higher education system as in Finland there is no possibility for charging tuition fees on a large scale. However, we suggest that, given the large variety of activities and practices related to academic capitalism as described by Slaughter and Rhoades (2004), tuition fees are just one aspect of this complex phenomenon. This means that a particular system of higher education may well take a significant shift towards the academic capitalist knowledge/learning regime without the introduction of large-scale tuition fees. Furthermore, even if tuition fees were abolished in the United States (perhaps a highly unlikely, but nevertheless possible, scenario), there would still be many empirically identifiable aspects of higher education, as well as interactions between universities and private companies, that would be characterised as elements of academic capitalism. Free-of-charge higher education (i.e. absence of tuition fees) would not imply that those activities, practices and networks that have made it possible for the US universities to diversify their external funding sources in competitive settings, both in terms of market and market-like activities, would vanish.<sup>6</sup>

Overall, the differences between the Finnish and the US case reveal why it is important to pay attention to contextual issues when one is studying academic capitalism. This is important not only because the contexts are, of course, different, and because it affects the implementation of those practices and networks that characterise academic capitalism, but also because in this way it is possible to realise that even if some elements of academic capitalism (as found in the United States) are not present in some different national context, it does not necessarily imply that the concept and theory of academic capitalism would be irrelevant in that other context. Of course, a lot depends on which level of abstraction one is studying the phenomena related to academic capitalism in some particular institutional, national or regional context. Thus, in relatively abstract terms, the current situation in Finland is not much different from, for instance, the recent developments in Canada where ‘policy initiatives have contributed to academic capitalism ... by creating new circuits of knowledge, intermediating organizations and expanded managerial capacity as well as increased private revenue streams’ (Metcalf, 2010, 509).

### **From Public Good Regime towards Academic Capitalist Regime**

When considering our main argument regarding the shift toward academic capitalism in Finland, at least two issues should be kept in mind. First, we do



not suggest that there has been an absolute erosion of a public good regime. As Slaughter and Rhoades (2004) have argued with respect to the United States, we also maintain that the academic capitalist regime has not replaced the public good regime in Finland. In a heuristic sense, it is useful to draw a parallel between this idea and literature on the co-existence of capitalist mode of production and other modes of production in a given society. Just as the existence of capitalist mode of production in a particular society and/or nation-state does not necessarily imply the absence of other modes of production (e.g. Wolpe, 1980; Harrison, 1988), in a similar vein it can be argued that the academic capitalist regime does not imply that previous regime(s) would have vanished. Rather, they can co-exist.

On the basis of recent empirical research, as well as our experiences as academic workers in Finnish universities, it can be contended that the co-existence of these two regimes tends to produce certain tensions within and between academic workers. A recent survey study that was conducted in two Finnish universities suggests that though some university workers — especially those working in the administration — promote current science policy, a remarkable number of researchers are very critical towards the current trends in Finnish science policy (Jauhiainen *et al.*, 2011). For example, nearly 70% of respondents agreed that current science policy forms a threat to the freedom of research and that new funding models are unequal with respect to different disciplines (*ibid.*, 200–201). Other studies indicate that, even though the pressure to commercialise research results has been largely acknowledged among academic workers in Finnish universities, there nevertheless exist huge differences between disciplines in their commercial potential (e.g. Ylijoki, 2003; Ylijoki *et al.*, 2011). Moreover, there appear to be significant countertendencies to ‘academic capitalization’ of research and higher education at the grass-root level as many researchers and research groups still seek to promote more traditional academic values, as well as values that emphasise non-market oriented societal relevance of scientific research and education (see, e.g. Ylijoki, 2003; Nieminen, 2005; Tuunainen, 2005; Tuunainen and Knuuttila, 2009; Ylijoki *et al.*, 2011; Räsänen, 2012). On the basis of our previous argument and these recent empirical studies, we think it is reasonable to say that the demands experienced by academic workers have become increasingly contradictory because of the numerous university reforms that produced the partial shift towards academic capitalism in Finnish universities. Thus, a shift towards academic capitalist regime has not meant the beginning of a completely new era. Furthermore, there appear to be significant differences in how this shift has affected (and most likely will affect) universities, departments, disciplines, research groups and individual scholars.<sup>7</sup>

In historical terms, the rise of academic capitalism in Finland can be briefly contextualised by noting that already in the 1980s the science policy started to



become subordinated to technology policy in contrast to 1960s and 1970s when the former was subordinated to social policy (e.g. Nieminen, 2005, 43–45; Ylijoki *et al.*, 2011). This turnaround meant that the universities' role in society was construed in a new way in science policy: they were no longer seen mostly as promoters of democracy, welfare state and systematic social planning, but rather as sources of new technologies. This trend has since intensified and gained new meanings, such as subordination of science policy to innovation policy. Simultaneously, there has been a strong emphasis on internationalisation of the Finnish innovation system and consequently, the Finnish university system. Finally, the conceptualisation of science as a part of innovation policy has pointed towards deeper integration of the Finnish university system and the knowledge-based economy (see, e.g., Kauppinen and Moisio, 2008).

Previously, Finnish science policy has been periodised in a following way: (1) 'A period of national culture (1950s to early 1960s)'; (2) 'A period of system expansion and social relevance (1960s–1970s)'; (3) 'A period of technological policy (1980s)'; and (4) 'A period of innovation policy (1990s–)'. (e.g. Ylijoki *et al.*, 2011, 724; also Nieminen, 2005, Chapter 1) We find this periodisation plausible, but would like to suggest that given the recent changes described in this paper, it would be reasonable to add a fifth period: (5) A period of partial normalisation of academic capitalism (2000s–). Of course, this idea of a fifth period of Finnish science policy would require an in-depth comparison with especially the fourth period, but further explication of this goes beyond the scope of this paper.

## Conclusions

Our analysis shows that the first decade of the 2000s represents a qualitative turn towards academic capitalism in Finland because it was during this decade when networks, activities and organisations that characterise academic capitalism were institutionalised and partially normalised. The 1990s can be conceptualised as a period in which the first steps towards academic capitalism were taken and the preparation of later steps began. Moreover, it was not until the first decade of the 2000s that the Finnish research universities were not just able to interact with private business corporations, but also given the possibility of acting as if they were economic actors in markets selling their products such as patented research results or investing their economic capital to various assets. Thus, previous discussion and empirical studies support the argument that there has been a significant shift towards academic capitalism in Finland. We want to emphasise that this shift is visible especially in the form of institutional conditions and at the level of discourse. It is another fundamentally empirical question what is the substantial number of those activities that characterise academic capitalism. In this respect, there remains more



research to be done if we want to gain more detailed and nuanced understanding regarding the nature, and extent, of academic capitalism in Finland.

More broadly, the simultaneous emergence of the ‘knowledge-based economy’ and academic capitalism in Finland certainly raises the question of what might have been the role of academic capitalism in this rapid structural transformation, or success story, as it is often referred to. While our research setting does not make it possible to provide an answer for this, for instance, the World Bank (2006, xiii) strongly supports the idea that the transformation of higher education system in Finland contributed significantly to this success story: ‘A key lesson is the importance of flexibility in responding to change, and the critical role of a responsive education system. Finland’s experience also highlights the importance of developing a vision and a process for consensus-building’.

Given the absence of tuition fees for all higher education students, it is plausible to say that ‘Finnish academic capitalism’ does not mirror academic capitalism in the United States. Nevertheless, there are many other features that warrant the application of the theory of academic capitalism to describe the developments in Finnish universities. In both cases, it is commonly assumed that softening boundaries between private and public sector would increase the competitiveness of respective countries in the globalising knowledge economy. Consequently, they also share certain common patterns such as technology transfer and systematised research collaboration between universities and corporations. Even though the theory of academic capitalism can be used to characterise many aspects of Finnish higher education system and how it is integrating with the corporate world, we want to emphasise that the development of this system is an on-going process. Hence, it is not pre-determined that academic capitalism would become an equally full-blown phenomenon in Finland, as in the United States, for instance, with respect to tuitions fees.

Moreover, we readily admit that it requires further empirical studies to find out how these institutional changes that were identified above have affected the academic work (including the quality of scientific research) and education in Finnish universities. Given that the academic capitalist regime has not replaced the public good regime, it would also be interesting to analyse in more detail what sort of conflicts of interests and tensions these changes have brought about to the everyday life in the universities. It is also possible to ask how the shift towards academic capitalism in Finland can be explained. It is our next task to address these latter questions.

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## Notes

- 1 We recognise the discussion would have benefited from engaging with other theoretical ideas as presented, for instance, by Latour and Woolgar (1986; see also, Hessels *et al.*, 2009). Their ideas on the 'crebility cycle', that is, how researchers are conversing different types of credibility (e.g. money and reputation) into some other type of credibility (e.g. articles), could have been beneficial. We think, however, that an analysis on the basis of the notion of academic capitalism is sufficiently robust.
- 2 It is worth specifying that the amount of students in higher education (including both universities and polytechnics) increased about 200% between years 1980 and 2000, resulting in the total amount of 248,000 higher education students (Rinne, 2004, 100). This means that growth of Finnish universities was rapid.
- 3 Rinne (2004, 124) nevertheless notes that 'while the Finnish Ministry of Education has been proud to state that higher education resources almost steadily increased during the 1980s and 1990s and that Finland is at the top in funding of higher education, the story is not that simple. The fact is that university funding has increased in 20 years from approximately 1.2 billion FMK to 8.9 billion FMK. However, this is mostly due to changes in budget categories and the increase of external funding. The Ministry of Education itself is currently obliged to note that "real development of university funding" decreased quite sharply after the cuts of the depression of the 1990s'. However, it should also be noted that during the 1990s, both the governmental budget funding and, especially, the competitive external funding increased in absolute terms: the former 23% and the latter 152% between the years 1991 and 2000 (Nieminen 2005, 92). All in all, the external and competitive funding has increased much more rapidly with respect to governmental budget funding.
- 4 The composition of Finnish universities' boards has not been studied systematically, and this is one issue that should be studied in the future. However, tentative study suggests that the relative amount of board members of private companies in university boards in Finland is significantly smaller than in the case of the US private universities (regarding the latter, see, Slaughter and Rhoades, 2004).
- 5 Except in experimental sense, over 100 English-language Master Programmes are allowed, by the New University Act, to choose to charge tuition fees if their students are non-EU or non-European Economic Area citizens. (see, e.g., Weimer, 2012).
- 6 It can be also added that tuition fees in itself do not imply by any necessity that universities are integrating with knowledge capitalism for instance through institutionalised technology transfer, higher education export or other forms of commodification of knowledge/higher education. Note that in Finland, there were (low) tuition fees until early 1970s, but it would make no sense to claim that Finnish university system was closer to academic capitalist regime before abolishing tuition fees.
- 7 To make another useful parallel, the emergence of modern societies did not mean absolute erosion of traditional societies.

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