

Lukas Graf

**Applying the Varieties of Capitalism
Approach to Higher Education:
A Case Study of the Internationalisation
Strategies of German and
British Universities**

Discussion Paper SP I 2008-507

November 2008

Social Science Research Center Berlin (WZB)

Research Area:
Education, Work, and Life Chances

Research Unit:
Skill Formation and Labor Markets

<http://www.wzb.eu/bal/aam>

E-mail: graf@wzb.eu

Suggested Citation/Zitierweise:

Lukas Graf

Applying the Varieties of Capitalism Approach to Higher Education: A Case Study of the Internationalisation Strategies of German and British Universities

Discussion Paper SP I 2008-507

Wissenschaftszentrum Berlin für Sozialforschung (2008)

**Social Science Research Center Berlin
(WZB)**

**Wissenschaftszentrum Berlin für
Sozialforschung gGmbH (WZB)**

Research Area:

Education, Work, and Life Chances

Research Unit:

Skill Formation and Labor Markets

Abteilung:

Ausbildung und Arbeitsmarkt

Reichpietschufer 50, D-10785 Berlin

Telefon: +49 30 25491-0, Fax: +49 30 25492-684

www.wzb.eu

Abstract

In recent years the global market for higher education has expanded rapidly while internationalisation strategies have been developed at university, national, as well as European levels, all with the aim to increase the competitiveness of higher education institutions. This paper asks how different institutional settings explain distinct national patterns found in the internationalisation of universities, observed to be based largely on either market coordination or strategic interaction of the involved actors. Existing concepts from the Varieties of Capitalism literature, such as *institutional complementarity* and *comparative institutional advantage*, are introduced to the comparative study of higher education systems and applied to develop a theoretical framework for an institutional analysis of university strategies in the global market for higher education. In a case study, the analytical framework is then deployed to contrast the internationalisation of universities in Germany and the United Kingdom. The internationalisation processes reflect the mode of coordination in the respective higher education systems and national models of capitalism. Further insights are that the conceptual toolbox of the Varieties of Capitalism approach can be fruitfully applied to higher education, and that it is possible to enhance the framework by adding the state as a significant factor in differentiation.

Zusammenfassung

Der globale Markt für Hochschulbildung ist in den letzten Jahren rasant gewachsen. Gleichzeitig wird die Internationalisierung von Universitäten auf verschiedensten Governance-Ebenen (z.B. Europäische Union, Bund und Länder, Hochschulverwaltung) stark forciert. In diesem Arbeitspapier wird der Frage nachgegangen, inwiefern die unterschiedlichen Muster in der Internationalisierung deutscher und britischer Universitäten durch nationale institutionelle Rahmenbedingungen begründet sind. Mit dem „komparativen institutionellen Vorteil“ und der „institutionellen Komplementarität“ werden konzeptionelle Bausteine aus der *Varieties-of-Capitalism*-Debatte aufgegriffen, um die Internationalisierungsprozesse deutscher und britischer Universitäten zu analysieren. Wie aus den Analysen hervorgeht, beruhen die internationalen Aktivitäten britischer Universitäten vorwiegend auf wettbewerbsbasierten Koordinationsmechanismen, wohingegen sie im deutschen Fall eher mit dem Konzept der strategischen Interaktion in Verbindung zu bringen sind. Dabei lässt sich feststellen, dass die Internationalisierungsprozesse maßgeblich vom Koordinierungsmodus im jeweiligen Hochschulsystem sowie dem nationalen Kapitalismusmodell beeinflusst werden. Weiterhin wird deutlich, dass das Forschungsfeld der Hochschulbildung von einer Anwendung des *Varieties-of-Capitalism*-Ansatzes profitieren kann, insbesondere, wenn dies unter einer stärkeren Berücksichtigung des Staates, dessen Regulierungsfunktion entscheidend zur Differenzierung der Internationalisierungsstrategien beiträgt, geschieht.

Contents

1. Introduction	1
2. Internationalisation of Universities	4
2.1 Research on the Internationalisation of Universities	4
2.2 Structural Incentives in the Global Market for Higher Education	6
3. Varieties of Capitalism Approach and Applicability to Internationalisation of Universities	9
3.1 Research on National Economic Models and Skill Formation Systems ...	9
3.2 Basic Elements of the Varieties of Capitalism Approach	10
3.3 Applying Varieties of Capitalism to the Internationalisation of Universities	13
4. Crafting a Comparative-Institutional Framework of Analysis	17
4.1 Relational View of the University and Institutional Spheres in the Higher Education System	17
4.2 Higher Education Systems and the Institutional Foundations of Comparative Advantage	19
4.3 The Analytical Framework	23
5. Comparing the German and the British Cases: Institutional Complementarities and the Internationalisation of Universities	26
5.1 The Methodological Advantages of Comparing the Cases	26
5.2 Institutional Complementarities in Regard to Internationalisation	29
5.2.1 <i>University-State Relations</i>	29
5.2.2 <i>Corporate Governance, Public-Private Partnerships, & University-Student Relations</i>	32
5.2.3 <i>University – Labour Market – Firm Nexus</i>	36
5.2.4 <i>Inter-University Relations and the Role of Coordinating Bodies</i>	38
5.3 Specialisations in the Global Market for Higher Education	41
5.3.1 <i>Competitive versus Collaborative Strategies</i>	43
5.3.2 <i>Differing Capacities for Innovation</i>	48
6. Conclusion	52
References	55
List of Tables	64
Abbreviations	65

1. Introduction*

"There is no doubt that globalisation and the arrival of the knowledge economy have intensified the competitive pressures on higher education institutions. Learning has become big business."

- David Blunkett, 15 February 2001, Greenwich -
British Secretary of State for Education and Employment from 1997 to 2001

"We are not yet big players, as we have discovered later than others how important the export of higher education is." (translation LG)

- Andreas Storm, 29 November 2006, Berlin -
State Secretary in the German Federal Ministry for Education and Research

The global market for higher education, which began growing rapidly in the 1990s, is putting strong pressures on universities to converge toward similar internationalisation strategies. However, despite such isomorphic pressure, the internationalisation processes of universities exhibit distinct national patterns. The comparison of Germany and Britain shows that British universities, along with those of other liberal market economies such as the US and Australia, are 'first movers', whereas the systematic positioning of German universities in the global market is a relatively new phenomenon. Furthermore, in Britain internationalisation is strongly linked to the commodification and export of higher education services on a commercial basis, while the internationalisation of German universities focuses on non-profit projects and largely builds on collaboration with partners both at home and abroad. Another finding is that in Germany the state 'pushes' universities to catch-up with the first movers, whereas internationalisation of British universities is 'pulled' rather directly by the market.

To describe these striking differences in the internationalisation of German and British universities and to analyse the factors behind them, I craft an analytical framework which builds on the approach of Hall and Soskice (Hall and Soskice, 2001) to varieties of capitalism (VoC), but augmented by recent literature on path dependence and institutional change.¹ From their analysis of institutional complementarities, Hall and Soskice derive the hypothesis of comparative institutional advantage, which is adapted in this paper to analyse the internationalisation processes of universities. With reference to the VoC typology, the question this paper traces is whether the distinct institutional features associated with varieties of capitalism are apparent in the internationalisation of

* For helpful comments and advices, I thank Justin Powell, Heike Solga, Stefan Beck, and Christoph Scherrer as well as the participants of meetings held at the WZB, the University of Kassel, and INFER's Sofia workshop.

1 In this paper, the term 'university' is frequently used to refer to all institutes of higher education, i.e. also to universities of applied sciences, technical universities, and colleges of music and art.

universities. More precisely, the research question is whether the responses of German and British universities to the structural incentives for internationalisation provided in the global market for higher are influenced by and reflect the mode of coordination in the respective national model of capitalism.

This ultimately is a question about how far the embeddedness of universities in national institutional settings contributes to divergence in innovative capacities for internationalisation. In this context I begin first by conceptualising the national higher education system as an integral part of the national model of capitalism, and secondly, the university as an organisational actor within the national higher education system. I expect that the structural incentives offered in the global market for higher education 'motivate' the internationalisation of universities while, however, being 'transmitted' via the particular institutional configuration of the national higher education system. Thereby, the structural incentives that the global market for higher education provides for internationalisation constitute an independent variable while the internationalisation processes of universities form the dependent variable.

In organisational parlance, the rapid emergence of the global market for higher education might be expected to lead towards convergence towards 'one best way' of internationalisation. In this paper, to the contrary, the following hypothesis is put forward: While the internationalisation of universities in Germany and in the UK is motivated by the same structural incentives in the global market for higher education, the internationalisation processes of German and British universities show distinctly national patterns, since those of German universities are influenced by the strategic interaction mode of a coordinated market economy (CME), allowing for joint gains through non-market forms of coordination, whereas those of British universities are influenced by the competitive market mode of a liberal market economy (LME).

This reference to VoC theory is particularly appealing as one of its major concerns is whether national institutional settings (or major parts of them) remain stable, and the related modes of coordination intact, in the face of globalisation pressures (cf. e.g. Hall and Soskice, 2001). Moreover, for VoC proponents, skill specificity lies at the core of divergent institutional outcomes of modern political economies (cf. Culpepper, 2007: 630). VoC analysis of skill formation have given relatively little attention to higher education systems however, with the focal point up to now resting on vocational training (cf. e.g. Crouch et al., 2004). This can be problematic, especially given that the knowledge workers acquire in higher education is gradually becoming a larger share in the overall productive capacities of firms (cf. e.g. Barrow et al., 2003, Coulby, 2005). Higher education research, on the other hand, has not yet been concerned with the relation between universities, their internationalisation, and the institutional configuration of higher education systems in respect to national models of capitalism. Thus, in applying the VoC approach to the study of higher education systems and the internationalisation of universities, this paper aims to con-

tribute to a better understanding of current developments in higher education as well as its 'place' in national models of capitalism.

In order to accommodate the gathering of a broad set of observations and to bring to life the interplay between the university and its institutional environment, the number of the in-depth case studies is limited to one university from Germany and the UK each. Thereby, the appeal of comparing the selected universities, namely the University of Kassel and the University of East Anglia, is pre-eminently methodological (see section 5.1). The empirical base for the case studies builds heavily on primary sources, such as universities' strategy papers and mission statements on internationalisation. In addition, at each university I conducted interviews with top-level university administrators in charge of advancing internationalisation. Furthermore, following this introduction, in chapter 2 I draw on the relatively new strand of higher education research which focuses on internationalisation, so as to classify the different rationales for the internationalisation of universities and to depict the isomorphic pressure in the global market for higher education. Chapter 3 then introduces the relevant conceptual tools of the VoC approach and discusses their applicability to the research field. Subsequently, in chapter 4, the conceptual tools of VoC are used to operationalise the institutional spheres within a higher education system and to build up theoretical expectations in regard to this paper's hypothesis. In chapter 5 these expectations are empirically tested on the cases of Germany and the UK.² Finally, the findings are reflected upon in chapter 6.

2 In chapter 4 the VoC approach is applied in two steps. In the preliminary step, the conceptual tools of VoC are used to conceptualise the university as the central unit of analysis within the higher education system. Here, the university is analysed from a relational point of view in order to describe the institutional spheres in the higher education system (section 4.1). Next, the VoC approach is used to raise theoretical expectations in regard to the internationalisation paths of universities (section 4.2).

2. Internationalisation of Universities

2.1 Research on the Internationalisation of Universities

This study focuses mostly on the time period from the mid-1990s to 2008. In these years, trade in higher education services has become a 'billion dollar industry' and integral part of the 'cross-border matching of supply and demand' (cf. Knight, 2002: 2, Qiang, 2003: 249). In the UK alone, the annual contribution of international students to gross domestic product is 2.6 Billion € (Bekhradnia and Vickers, 2007). In Europe marked by the signature of the Bologna declaration in 1999, the internationalisation of universities has accelerated dramatically, with an expected fourfold increase in the number of international students between 2000 and 2025 up to 7.2 Million world-wide (Böhm et al., 2002: 3).³ Internationalisation matters to universities as knowledge transfers become more and more global in nature, academic reputation is increasingly determined by international standing, and funding is ever more reliant on international parameters, such as access to cross-national research funds or tuition fees paid by international students. Moreover, the competitiveness of universities in the global market for higher education is of growing importance for the quality of human capital in the knowledge-based economy.⁴

Nevertheless, the internationalisation of higher education is, to date, a phenomenon that has only received limited attention in higher education research or social sciences (Hahn, 2004a: 123). Recent interest in this area of research has been sparked by factors such as the broadening of the geographical perspective of the internationalisation of higher education, so that it now encompasses all regions of the world, as well as the increased mobility of study programmes and, indeed, of whole institutes next to the 'traditional' mobility of people (cf. e.g. Kehm and Teichler, 2007: 269). Thereby, 'mobility of persons', 'programme mobility' and 'institution mobility' refer to the import of students, the export of study programmes, and the development of offshore institutions respectively.

3 Just two more examples for the magnitude of the global market for higher education are that education services rank 5th in US service exports and that Australian universities alone offer more than 750 study programmes abroad (Coate et al., 2005: 222, Coate and Williams, 2004: 124). It is possible to speak of a global market for higher education as "There is a defined field of production (higher education) with identifiable products (degrees and diplomas) that increasingly conform to a Bachelor/Masters/Doctoral structure along American lines" (Marginson, 2004: 16) and as there are nations and universities competing for students, which, in turn, seek to maximise individual outcomes when selecting between the different offerings (ibid).

4 The growing importance of technology and knowledge based industries implies that the performance of the national higher education systems, in which workers enhance their human capital, is increasingly central to the performance of the national economy (Barrow et al., 2003: 3, Coulby, 2005: 24).

Table 1: The three major forms of cross-border higher education

	<i>Description</i>	<i>Examples</i>
Person mobility	'Import' of students and researchers	Full programme (e.g. international MA programme), exchanges and semester abroad, field research, sabbaticals
Programme mobility	'Export' of study programs	Distance education provision, franchise, joint/ double degree
Institution mobility	Development of off-shore higher education institutions	International branch campuses, ⁵ independent institutions, mergers, teaching/ testing centres

Source: derived from Hahn (2005b: 17), Knight (2005: 17), and OECD (2004: 19)

In this paper I am concerned with all of the three major forms of cross-border higher education displayed in table 1. In this regard, it is important to draw a distinction between *internationalisation* and *globalisation* of higher education. In higher education research, internationalisation refers to cross-border activities which tend to be steerable and within which these borders are not questioned, whereas globalisation rather implies an external process of transformation of spatial relations that cannot easily be influenced (cf. Huisman and Wende, 2004: 250). Here, globalisation refers to economic competition, that is, to worldwide competition for student fees, and for research or consultancy contracts: "... globalisation can be seen as primarily related to an economic trend towards the liberalisation and commodification of education, involving privatisation and export, and import of education services, new managerialism and increased competitiveness" (ibid: 250). Internationalisation, on the other hand, refers to academic cooperation, that is, to student or staff exchange as well as international research collaboration and academic networking (Huisman and Wende, 2005: 202-204).⁶ A further established category is the *Europeanisation* of higher education, which refers to internationalisation on a 'regional' European scale, examples being the Bologna process, the European Common Research Area, and the European Union's Lifelong Learning Programme. However, for operational convenience, I will from now on follow Huisman and Wende (2005) in using *internationalisation* as an umbrella term to depict "... all the policies and activities of governments and higher education institutions aimed at making

5 An international branch campus is an off-shore operation of a higher education institution operated by that institution or through a joint venture. Thereby, graduates are usually awarded a degree from the operating institution (Merkley and Verbik, 2006-4).

6 A subcategory of internationalisation is called internationalisation at home, which refers to universities' curriculum development and the integration of an international dimension into teaching, research, and services. However, the focus of this paper is on cross-border higher education rather than aspects related to internationalisation at home.

higher education (more) responsive to the challenges of Europeanisation, internationalisation, and globalisation” (ibid: 12, cf. Stromquist, 2007: 81).⁷

Systematic information on topic of internationalisation has been a key theme in the field of higher education research only for about ten years. The majority of publications that exist are policy-driven with sometimes strong normative and political undercurrents, and, thus, should be placed somewhere between research and politics (Kehm and Teichler, 2007: 261-262, cf. Powell and Solga, 2008: 6).⁸ So far, only a minority of studies have been of a comparative nature, or have analysed national similarities and differences in the conditions for internationalisation (ibid: 267). From this point of view, a VoC-oriented analysis of international higher education seems highly promising.

2.2 Structural Incentives in the Global Market for Higher Education

On first sight it is puzzling why universities become ever more engaged in activities such as the export of study programmes, as this also implies some form of ‘selling-out’ of know-how and thereby could run counter to national interests. In the following, the incentives that the global market for higher education offers are described as a set of overlapping rationales:⁹

Economic rationale: Internationalisation serves to improve economic competitiveness at the university level, the level of the higher education system, as well as the level of the national economy. From a macroeconomic perspective, internationalisation is aimed at the ‘import’ of knowledge into the economy. One way in which this is achieved is through ‘skilled migration’, i.e. the migration of highly qualified workers through the international recruitment of talented students, young researchers, and qualified teaching staff. In addition, the economic rationale relates to direct economic benefits, e.g. by way of tuition fees charged.

7 However, this is not meant to imply that Europeanisation, globalisation, and internationalisation of higher education are the same concepts. For a useful cross-conceptual operationalisation of the Europeanisation, globalisation, and internationalisation of higher education, see, for example, Walkenhorst (2007).

8 The research agenda clearly is affected by political events such as the negotiations of the General Agreement on Trade in Services (GATS) or the Bologna declaration that trigger a variety of externally funded studies (Kehm and Teichler, 2007: 264). At this point it should be noted that GATS is not a major variable in this paper’s research design, as up to now national jurisdiction ultimately still applies in regard to higher education (cf. Hoffrogge, 2005: 17) and as the potential developments resulting from GATS have not yet fully been perceived as threats at the institutional level (Huisman and Wende, 2005: 227, cf. Altbach and Knight, 2007: 291-292).

9 By inversion, the same incentives can also be considered as challenges, or as sanctions for those universities that fail to respond through internationalisation. The clustering in four different rationales for internationalisation is inspired by Knight (1997) and De Wit and Knight (1995).

Here, internationalisation is seen as a lucrative source of revenue. Furthermore, internationalisation allows sharing investments in cost-intensive research fields.

Academic rationale: The quality of a higher education system is highly dependent on the ways in which universities are integrated into the increasingly global process of knowledge creation and knowledge transfer. This global interdependence implies an incentive to enhance research and teaching through internationalisation. Furthermore, the factor of 'reputation' comes into play, as it is ever more conditioned by the *international* standing of research and teaching. Thereby, international recognition serves to build an institutional profile and increases a university's attractiveness to students and researchers from abroad.

Political rationale: This can for instance relate to a nation's interest in advancing ideological influence, or in promoting security, stability and peace. "Education, especially higher education, is often considered as a form of diplomatic investment for future political and economic relations" (Knight, 1997: 9). An example would be that internationalisation is often advanced under the flag of development aid by way of partnerships that serve the enlargement of higher education systems in developing countries.

Cultural rationale: Internationalisation is a way to enhance mutual understanding between cultures. "The acknowledgement of cultural and ethnic diversity within and between countries is considered a strong rationale for the internationalisation of a nation's higher education system." (Knight, 1997: 11). However, internationalisation can also serve neo-colonialism, for example by imposing Western culture or by educating local elites (i.e. those who can afford an international education in the first place).

I consider these economic, academic, political, and cultural rationales as structural incentives that 'motivate' the internationalisation of universities.¹⁰ Thereby, the structural incentives that the global market for higher education offers describe initial conditions.¹¹ By talking of *structural* incentives it is implied that they represent 'foundational' or 'basic' incentives that can be seen as 'overarching' in applying to both German and British universities. This is supported by a number of framing conditions for universities in Germany and the UK. For instance, the higher education systems of Germany and the UK are both highly developed and of roughly similar sizes, which on a certain level of abstraction indicates that their potential capacities for internationalisation are also roughly equal (see section 5.1 for details). Another example for such framing conditions is the Europeanisation of higher education in which both countries are involved, referring, for example, to the creation of a European Research

10 This operationalisation of incentives for internationalisation extends beyond the one Hall and Soskice (2001) develop when they refer to the "challenge of globalisation" simply as the "... developments that have made it easier for companies to locate their operations abroad" (ibid: 55).

11 Although these initial conditions do not strictly determine any particular outcome, the outcome is considered as contingent upon these conditions.

Area, the European framework programmes for research and technological development, the Bologna process, and also the Erasmus programme for student exchange in Europe.

However, despite such similar framing conditions, the structural incentives that global market for higher education provides for internationalisation are transmitted in particular ways depending on a variety of factors. In the following I sketch three examples for such factors. Firstly, the transmission and processing of the isomorphic pressures these structural incentives represent crucially relies on the way in which they are translated. Referring to the 'cultural-cognitive' dimension, the way in which global pressures filter through the national level (the higher education system) to the organisational level (the universities) depends, for instance, on the prevalence of particular ideas and discourses.¹² In this context, it will, for example, be shown that internationalisation strategies of universities are inclined to be more market-oriented in the case of Britain than in the case of Germany. Secondly, the way in which the structural incentives are transmitted depends on the initial level of embeddedness of a system in the international dimension to higher education. In this regard, the argument will be made that British universities have been 'historically' more open towards developments in the global market for higher education. Thirdly, in line with Hall and Soskice (2001), the transmission mechanism on which this paper focuses relates to the mode of coordination in the higher education system. Here, the point is that the translation of structural incentives depends on the configuration of a higher education system on a particular mode of coordination. In the case of the UK the structural incentives are, for example, transmitted through the need to compete with other British universities for international students in order to secure additional income. In contrast, in the German case the structural incentives are rather transmitted through programmes that organisations like the German Academic Exchange Service (DAAD) initiate, with public funds, to enhance a concerted form of internationalisation.

To sum up, it can be said that the internationalisation of universities in Germany and in the UK is crucially motivated by a number of *structural* incentives that the global market for higher education offers, whereby the transmission of these incentives to levels of organisational action significantly depends on the particular institutional configuration of the national higher education system. To analyse the way in which these configurations are linked to different national models of capitalism, the next chapter begins with a brief overview on the literature on varieties of capitalism.

12 Viara (2004), in an attempt to convey the essence of translation theory with reference to higher education, states that content, reach, and pervasiveness of isomorphic pressures are "... heavily conditioned by the way organisations and organisational actors receive, select, make sense of, interpret, combine, re-construct, use, in a word, translate them in the face of their organisational culture and knowledge context of action and purposes" (ibid: 495).

3. Varieties of Capitalism Approach and Applicability to Internationalisation of Universities

3.1 Research on National Economic Models and Skill Formation Systems

The literature on national models of capitalism is multi-faceted.¹³ Many of the recent contributions to the research on the variation of national models of capitalism have roots in the study of markets, hierarchies, states, networks, and associations as representing distinctive modes of governance in capitalist economies (e.g. Campbell et al., 1991, Hollingsworth et al., 1994), or are concerned with the question of how complementary institutions constitute a social system of production (e.g. Boyer and Hollingsworth, 1997). The debate on national models of capitalism has not been settled, and there exists no uniform typology.¹⁴ Yet, what most of the works in the field share in common is a view of national models of capitalism as more or less integrated wholes characterised by distinctive institutional arrangements in which the different parts work together in ways that are mutually reinforcing (cf. e.g. Thelen, 2004: 3, Culpepper and Thelen, 2008: 25).

While others had already elaborated on the relevance of institutional complementarities (e.g. Amable, 1999), Hall and Soskice (2001) still were amongst the first to emphasise the complementarity of constituent partial systems (i.e. inter-firm relations, finance, industrial relations, and training systems) for the performance of firms and the economic system as a whole. For them, the political economy is constituted by a set of highly-interdependent spheres, whereby in the ideal case the mode of coordination stretches across these spheres, including the vocational education and training system (cf. Hall and Soskice, 2001, Gingerich and Hall, 2001).¹⁵

13 For example, already in 1965, Shonfield identified “big differences” in the institutional features of economic order which have emerged in post-war capitalism in countries such as Germany, France, Britain and the US (Shonfield, 1965: 65).

14 For instance, Albert (1993) distinguishes between a “Rhenish” and a “neo-American” model of the market economy. In a similar vein, Moerland (1995) describes a “market oriented” (i.e. Anglo-Saxon) and a “network oriented” type of capitalism. Resonating with this work, Streeck (2001) draws a distinction between “socially embedded” political economies such as Germany and Japan, and “liberal” market economies such as Britain and the US. Schmidt, on the other hand, focuses on Europe in developing a theory that connects economic processes with political institutions in order to analyse how challenges of Europeanisation and globalisation affect “three main varieties”, namely “Britain’s market capitalism”, “Germany’s managed capitalism”, and “France’s state capitalism” (Schmidt, 2002: 306).

15 Hall and Soskice (2001) build on neo-corporatism and the ‘regulation school’ in applying the new economics of organisation to the macroeconomy (Hall and Thelen, 2008: 2). Another way of looking at it is that the Hall-Soskice approach to VoC theory is rooted in a

Within the VoC paradigm, it is often argued that vocational education and training systems provide the basis for divergent institutional outcomes of modern political economies (cf. e.g. Culpepper and Thelen, 2008: 23, Thelen, 2004: 8). The three “classical” training systems are considered to be the German corporatist dual vocational training system, the state bureaucratic model in France, and the liberal market economy training model in England (cf. Greinert, 2005). Pioneering work in this field was done by Streeck (1991), who drew attention to the link between a standardised and uniform national system for vocational training and what he called “diversified quality production” (as in the case of Germany). While the work of Streeck emphasises the issue of labour power, Hall and Soskice (2001) focus somewhat more on the rationality of employers (cf. Hall and Thelen, 2008: 5). The Hall and Soskice approach can be considered especially useful for an analysis of institutional variations underlying skill systems due to the distinction it draws between (1) coordinated market economies with institutions that provide incentives for employers to collaborate in the provision of training and for workers to acquire industry and firm specific skills, and (2) liberal market economies with institutions that discourage firms to invest in skill formation and in which workers tend to acquire general skills portable across industries and firms (cf. e.g. Estevez-Abe et al., 2001, Culpepper, 2007: 632).

3.2 Basic Elements of the Varieties of Capitalism Approach

Within the VoC framework, skill specificity plays a central role in the explanation of divergent national models of capitalism. In this section, those conceptual tools of the VoC approach deemed essential for an application of this approach to higher education systems are introduced.

At the heart of the theoretical framework of VoC stand institutions, defined “... as a set of rules, formal or informal, that actors generally follow, whether for normative, cognitive, or material reasons ...” (Hall and Soskice, 2001: 9, cf. Scott, 1995: 33).¹⁶ Institutions are considered especially important due to the support they provide for the relationships developed to handle coordination problems¹⁷ (cf. Hall and Soskice, 2001: 9): Firms face a set of coordinating institutions whose character they cannot define, and consequently gravitate towards

combination of Porter’s work on the competitive advantage of nations (Porter, 1991) and that of Aoki on the institutional complementarities within a national economy (e.g. Aoki, 1994).

16 An example of an institution would be the market, whereby markets support particular types of relationships that are characterized by transparent balance-sheet criteria, ‘arm’s-length relations’, and high levels of competition, with a concomitant legal system supporting formal contracts and their completion (Hall and Soskice, 2001: 9).

17 Coordination problems are related to, for example, transaction costs, principle-agent relationships, moral hazard, adverse selection, shirking, implicit contracts, and incomplete contracting (cf. Hall and Soskice, 2001: 6).

strategies that best take advantage of the given institutional conditions. Important aspects of the institutional environment are that it provides incentives and constraints, which influence strategic behaviour, and, thus, are likely to lead to path dependence (cf. *ibid*: 15), which in turn can be referred to as "... historical patterns in which contingent events set into motion institutional patterns or event chains that have deterministic properties" (Mahoney, 2000: 507).¹⁸

The assumption is that the firm has to engage with other economic actors in multiple *institutional spheres* to resolve coordination problems (cf. Gingerich and Hall, 2001: 3, Gingerich and Hall, 2004: 7). According to such a *relational view*, the capabilities of the firm depend on its ability to coordinate with internal actors (employees) and external actors (e.g. suppliers, clients, stakeholders, trade unions, business associations, governments) in the spheres of industrial relations, training, corporate governance, and inter firm relations (cf. Hall and Soskice, 2001: 6-7).

Analysing the way coordination problems are solved in these different institutional spheres, VoC defines two distinct *modes of coordination*, namely market coordination and strategic coordination (cf. Hall and Soskice, 2001: 8).¹⁹ Most importantly, the UK is considered an ideal type of a liberal market economy (LME), largely based on coordination through competitive markets, and Germany of a coordinated market economy (CME), relying more on strategic interactions. Thereby, institutions secure a particular mode of coordination. That is, a mode of coordination relies on the presence of supportive institutions (*ibid*: 22), and nations cluster into categories depending on the reliance on one mode or the other. For example, where markets are imperfect [fluid] and the institutional setting supports [does not support] the formation of credible commitments, firms rely more intensively on strategic [market] coordination (cf. Gingerich and Hall, 2001: 4).²⁰

Institutional complementarities provide the foundation for the distinction between the modes of coordination in CMEs and LMEs. VoC identifies and analyses the nature of institutional complementarities in order to capture the interaction effects among the institutions in the macroeconomy. Two institutions are considered complementary "... if the presence (or efficiency) of one increases the returns (or efficiency of) the other" (Hall and Soskice, 2001: 17). According to Hall and Soskice (2001), three of the most important complementarities across spheres of the political economy are between corporate governance and

18 The concept of path dependence is introduced in more detail in section 4.2.

19 In chapter 4 this distinction will serve to differentiate between two types of higher education systems configured on market coordination and strategic coordination respectively.

20 Clearly, there are variations within these clusters. Competitive markets are a feature of CMEs as well, whereas elements of strategic interaction can be detected in LMEs. However, the crucial differentiating parameter is the balance between the two modes. Keeping this in mind, the US, the United Kingdom, Ireland, Canada, Australia, and New Zealand can be considered LMEs, and Germany, Austria, Japan, South Korea, Sweden, Norway, Finland, Denmark, Belgium, the Netherlands, and Switzerland as CMEs (cf. Gingerich and Hall, 2001: 5).

inter-firm relations, between labour relations and corporate governance, and between labour relations and training systems.

In LMEs, actors primarily coordinate through demand and supply conditions in competitive markets (Gingerich and Hall, 2001: 3, Hall and Soskice, 2001: 8).²¹ Taking the vocational education and training system as an example, weak employment protections and short-term financing agreements encourage employers to lay off workers in economic downturns. This, in turn, encourages people to acquire skills that are generally marketable (Culpepper and Thelen, 2008: 24). In CMEs, on the other hand, there is more institutional support for non-market forms of coordination. Such support is for example provided through business or employer associations, trade unions, networks of cross-shareholding, and legal or regulatory systems facilitating information-sharing and collaboration (Hall and Soskice, 2001: 10). These 'institutions' implicate that firms can coordinate with other actors through processes of strategic interaction (cf. Gingerich and Hall, 2001: 4), as uncertainty about the behaviour of actors is reduced and the formation of credible commitments supported.²² For example, institutions exist that make it relatively safe for firms to invest in the training of workers. Due to strategic interactions between employers and trade unions, as well as in between employers, there exist labour market imperfections that allow the 'standardisation' of wages, and, thus, reduce the risk of poaching (Culpepper and Thelen, 2008: 24-25).

Table 2 provides a stylized overview over the characteristics of each of the two models of capitalism. The distinctions between CMEs and LMEs outlined in table 2 are crucial for an understanding of *comparative institutional advantage*. Due to the particular institutional support in the political economy, firms in one country produce some products and perform some services better than firms from others. In the presence of trade, these advantages then give rise to cross-national patterns of specialisation (cf. Hall and Soskice, 2001: 38). That is, firms exploit the given institutional support "... to derive competitive advantages that cumulate into comparative institutional advantages at the national level" (Gingerich and Hall, 2001: 17). For example, in regard to the character of the national innovation system, VoC finds that LMEs are better at radical innovation, whereas CMEs are more attuned to incremental innovation (see also section 5.3.2).

21 In LMEs, equilibrium outcomes are primarily determined by relative prices, market signals, and familiar marginal considerations (Gingerich and Hall, 2001: 3-4). This implies that the exchange of goods and services is based on extensive formal contracting, that technology transfer occurs through licensing agreements rather than inter-firm collaboration, and that industry standards are set by market mechanisms.

22 Whereas game-theoretic analysis usually assumes limited common knowledge, VoC is attentive to deliberative proceedings that facilitate coordination, as they can thicken common knowledge, improve confidence in the choices of other actors, and offer opportunities to handle the risks and gains of cooperation (Heap et al., 1992). In the case of CMEs this relates, for instance, to monitoring and sanctioning of uncooperative behaviour (cf. Gingerich and Hall, 2001: 4, 10).

Table 2: Stylized characterization of liberal and coordinated market economies

Coordinated Market Economy (e.g. Germany)	Liberal Market Economy (e.g. the UK)
Coordination through processes of strategic interaction (e.g.: technology transfer through inter-firm collaboration)	Coordination with other actors through competitive markets (e.g.: technology transfer through licensing or take-over)
Institutional support for formation of credible commitments	Institutional support for formal contracting and arm's-length relations
Access to capital depends on reputation, availability of internal information, and building of confidence	Access to capital depends on shareholder value and the publication of it
Sensitive to long-term profitability	Sensitive to current profitability
Imperfect markets (e.g. wage determination)	Fluid markets (e.g. investor markets)
Relatively strong industry associations, work councils, and trade unions	Relatively weak industry associations, work councils, and trade unions

Source: Author; derived from Gingerich and Hall (2004) and Hall and Soskice (2001)

Referring to the concept of comparative institutional advantage, proponents of VoC predict that LMEs and CMEs respond differently to the isomorphic pressures of globalisation. That is, VoC expects continued institutional divergence between LMEs and CMEs (cf. Gingerich and Hall, 2001: 31). If these propositions also hold in regard to universities, then the challenges the emerging global market for higher education poses should be expected to lead to divergent adjustment processes in the national higher education systems. To test this and, with that, to extend Hall and Soskice beyond vocational training to higher education, the concepts I rely on and adapt are 'institutional complementarity', 'comparative institutional advantage', 'institutional sphere', and 'mode of coordination'.

3.3 Applying Varieties of Capitalism to the Internationalisation of Universities

In the following I pick up and address those criticisms of the VoC approach most relevant in regard to the scope of this paper.²³

However, first of all, and crucially for the purpose of this research, there has not been much criticism of the approach VoC has towards education and training systems. In fact, the perspective VoC opens up on skill formation systems in

23 See Hancké, Rhodes, and Thatcher (2007) for a comprehensive overview on points of contention amongst the different critics.

advanced political economies is considered one of the major strengths of VoC theory.²⁴

A criticism of the approach of Hall and Soskice to VoC is that it builds on a bifurcation in LME and CME archetypes, and considers large industrial countries alone.²⁵ However, given that the analytical focus of this paper is on Germany and the UK (both high-income OECD countries and most different cases within the VoC framework) should allow the drawing of meaningful inferences about divergence and convergence between and among the two cases.

The VoC approach is also criticised for treating nation-states as somewhat 'sealed' despite the strong forces of globalisation. However, this is less of an inadequacy when it comes to the particular topic of this study (namely higher education systems) because "[i]n contrast to many other capitalist institutions, the education and training systems are much less affected by comprehensive global regulation" (Nölke and Taylor, 2007: 39). The literature on international higher education emphasises that national policies, and the national context more generally, continue to play the most dominant role in regard to higher education, in spite of the pressures of globalisation (associated, for example, with the erosion of national borders as well as the role of the nation state) (cf. Kehm and Teichler, 2007: 266).²⁶

The next criticism I address is that VoC does not consider hierarchies in regard to the influence of different institutions and underestimates the role of the state. This criticism is somewhat deflected in this paper, as I assign a more central role to the university-state relations.²⁷ At first sight, this might appear to mismatch with Hall and Soskice (2001), who put a focus on the 'meso' relationships amongst organisational actors rather than on the 'macro' relationship between these actors and the state. However, as my main intention is to analyse institutional complementarities existing in the higher education system, it can be argued that what is most important is the rationale of the higher education system, and not so much how far state regulation explains this rationale. Be-

24 It should be noted that some sociologists who approach the measurement of skill in a different way have critiques of VOC. For example, based on an empirical study, Tahlin (2007) finds that firm-based skill formation systems are more widespread in Britain than expected by VoC theory (ibid: 73).

25 For example Amable (2003) criticises the binary system developed by Hall and Soskice. Building on a factor and cluster analysis of 21 countries he arrives at five types of economic systems labelled "market based", "continental European", "Social Democratic", "Mediterranean", and "Asian".

26 As Huisman and Wende (2005) put it, "Despite all the research demonstrating the growing importance of internationalisation, and even more the rhetoric in this respect, higher education institutions' behaviour (including their internationalisation strategies) are (still) mostly guided by national regulatory and funding frameworks" (ibid: 238).

27 While I assign a central role to the state, in later parts of the discussion paper it is also pointed out that, as Hahn (2004b) observes, "The influence of the higher education institutions, individual scholars and higher education leaders and their coordinating bodies on shaping the entire national higher education policy should not be underestimated" (ibid: 19).

yond that, I take the position that state activity, while not determined, is still frequently biased towards mainly pursuing such policies which are compatible with the incentives the institutional environment provides. The proposition is that government policies, broadly speaking, should work best “... if they are incentive compatible, that is if they reflect the underlying mode of competitive or cooperative [...] coordination” (Hancké et al., 2007: 24). This suggests that the state’s higher education policies should be complementary to the coordination capacities embedded in the political economy. By implication, it can be expected that the mode of coordination in the national model of capitalism is also expressed in the relation between universities and the state (see also section 4.2).

A criticism I address in more detail is that the Hall-Soskice approach to VoC theory is biased towards emphasising equilibria and in turn adopts a rather static perspective.²⁸ Hall and Soskice (2001) arguably ignore diversity within the national system, and with that downplay the possibility of endogenous system transformation (cf. e.g. Streeck and Thelen, 2005, and Hancké et al., 2007).²⁹ Regarding this criticism, it is notable that for the last few years higher education systems have seen a number of liberalising reforms, which raises interesting questions about the future stability of the traditional modes of coordination in the respective systems.³⁰ Arguably, such reforms may lower the differences between a ‘CME’ higher education system like the German one and ‘LME’ higher education system like the British one. However, two things should be mentioned here. Firstly, cross-national research has shown that universities and higher education systems display remarkable stability (Krücken, 2003: 23), which relates to them being “... historical, time dependent systems that are strongly embedded in their own national and organizational histories” (Kosmützky et al., 2006: 8). Universities customarily cope with rapidly changing expectations in their environment, “... without transforming these expectations directly into institutional change” (Krücken, 2003: 20). This, in turn, explains why the focus of this paper is on the substantive elements of the national institutional configuration that still give rise to unique developmental trajectories for the internationalisation of universities.³¹ Secondly, even if

28 Critics also argue that VoC is ‘too functionalist’, amongst other things in relation to its view of actors making rational and strategic choices (cf. Crouch, 2005). The argument is that the VoC approach sometimes does not differentiate adequately between the functionality of a certain institution, and the fact that the institution might aim at another goal. Yet, in regard to this criticism it should be remembered that it is exactly one of the strengths of the VoC approach that it focuses on an explanation of institutions by reference to their functionality in terms of complementarities.

29 This is partly due to the issue that institutional theory in general has problems with the explanation of institutional change.

30 For an overview on institutional reforms in German higher education in recent years, see, for example, Bultmann (2008: 10-11) and Spiewak and Wiarda (2008: 62).

31 In this context it is worth noting that, according to Hall and Thelen (2008), “... even after two decades of liberalisation, substantive gaps remain between the coordinated and liberal market economies” (ibid: 18).

market mechanisms are introduced into higher education systems, this does not necessitate that universities from CMEs abandon their reliance on strategic interactions. For example, Kamm (2008) shows that universities from Bavaria that recently were granted increased managerial autonomy became very proactive in developing inter-university collaborations to cope with the more competitive environment (ibid: 26).

4. Crafting a Comparative-Institutional Framework of Analysis

After having argued for the applicability of the VoC approach to issues of higher education and the internationalisation of universities, the aim of the next section is to use the conceptual tools of VoC to arrive at an operationalisation of the institutional environment of universities. Thereby, my comparative-institutional framework is underpinned by reference to neo-institutional analysis of organisations (e.g. Krücken and Meier, 2006), and informed by recent literature on institutional change (e.g. Streeck and Thelen, 2005, Hall and Thelen, 2008) and on path dependence (e.g. Djelic and Quack, 2007). In this way, it is possible to focus on internationalisation as a process in time. In section 4.1, the institutional spheres in a higher education system are established. In sections 4.2 and 4.3, the ground is provided for a discussion of the institutional complementarities underlying the internationalisation processes of universities.

4.1 Relational View of the University and Institutional Spheres in the Higher Education System

I regard the university as an organisational actor, and, also, as the central unit of organisation within a national higher education system. In this context, organisational actorhood refers here to an integrated, goal oriented entity that makes various significant decisions in its own right (cf. Krücken and Meier, 2006: 1-2).³² Following neo-institutional research in organisational analysis, such as DiMaggio and Powell (1991), organisational actors can be seen as embedded in their broader institutional environment, only through the interaction with which their organisational decision-making can be understood. Based on this conception and inspired by the conceptual tools of the VoC approach, I consider the capabilities of the university as relational in the sense that its performance depends on its ability to handle coordination problems with a wide range of actors. In other words, I consider a university's core competencies as significantly dependent on the quality of the relationships university leadership is able to establish with the actors in its institutional environment.

32 According to Krücken and Meier (2006), the four main elements increasingly underpinning an organisational conception of the university are "... organisational accountability, mainly through the establishment of evaluation procedures; the tendency towards defining 'own' organisational goals through mission statements [...]; the ongoing elaboration and expansion of formal technical structures around these goals; and the transformation of university management into a profession" (ibid: 4).

Such a *relational view* does not presuppose that higher education systems operate like markets or universities like firms.³³ In other words, the approach to higher education systems outlined in this paper does not necessitate an entrepreneurial conceptualisation of the university, or prescribe an understanding of education limited to economic utilization. I argue that for an application of the conceptual tools of the VoC approach, the institutional embedding of the object is more relevant than its particular organisational character. (This is in line with Hall and Soskice (2001), who see firms largely as ‘institution-takers’, rather than as creative or disruptive actors (cf. e.g. Crouch and Farrell, 2002).) Thereby, trends such as the introduction of market elements into higher education systems or the granting of more managerial autonomy can be seen as *additional* (but not central) points speaking in favour of the relational view of the university proposed in this paper.

In this context, it might be helpful to distinguish between two levels of analysis. At the macro level, I am mostly concerned with higher education as a complementary subsystem in the national model of capitalism. However, at the meso or organisational level, and when depicting the respective modes of coordination, I sometimes look at higher education systems also *as if* they were markets – which allows to analyse them in a fashion similar to that in which other markets have been examined using the VoC approach (cf. e.g. Lehrer, 2001). Nevertheless, the macro level of analysis is the one that underpins my overall analytical framework, and, thus, takes priority over the meso level.

Aiming to establish the abovementioned relational view of the university, I next sketch the institutional spheres which define the interaction of a university with the actors in its broader institutional environment. In this way, the ground is provided for a description of the institutional complementarities and the mode of coordination in a higher education system.

Next to universities higher education systems are populated by multiple other actors, such as governments, professional associations, students, and firms. The character of coordination between these actors is determined by a set of highly interdependent institutional spheres. These spheres are considered especially important due to the support they provide to university managers to solve the coordination problems that arise from the interactions with the other actors in the system. In their description of the institutional environment of the firm, Hall and Soskice (2001) consider four spheres, namely industrial relations, corporate governance, inter-firm relations, and vocational training (ibid, 2001: 7). Out of these, I consider *industrial relations* and *corporate governance* as also relevant in the case of universities, next to their approach to the sphere of *vocational education and training* more generally. The sphere of inter-firm relations I ‘translate’ into *inter-university relations* and *university-firm relations*. Given that students are most crucial participants in higher education, I also consider the

33 Universities clearly do not face the same coordination problems as firms. Whereas a major function of the firm is the production of commodities for the market, the core task of universities is to produce a systemic outcome for society through research and teaching.

sphere of *university-student relations*. Finally, as control and supervision of educational systems is usually (at least partly) governmental (e.g. Archer, 1989: 242), I add the sphere of *university-state relations*.

University-state relations are especially important given that the regulations governments promulgate have significant influence on the other spheres in the higher education system. This influence can be of direct or indirect nature. An example for a direct (and rather causal) influence is the impact the state has on universities' corporate governance given the kind of financial support it grants to them. An example for an indirect (and rather complementary) influence is its impact on university-student relations via the previously mentioned impact on universities' corporate governance.³⁴ In the sphere of *corporate governance* the major challenge of coordination for university management is to gain access to finance, and for investors to assure returns on their investments. An example for a central coordination problem in the sphere of *university-student relations* is to secure sufficient numbers of (talented) students. In the sphere of *university-firm relations* a major coordination problem for universities is to deal with firms' demands for qualified workers as well as state-of-the-art technologies. The major actors in the sphere of *industrial relations* are the employees of a university, whereby successful coordination depends on the capability to secure the cooperation of workers as well as to regulate working conditions and wages. In the sphere of *inter-university relations* the university deals with other institutes of post-secondary education. Here the quality of coordination between universities has for instance a crucial impact on collaborative research, technology transfer, and standard setting.

4.2 Higher Education Systems and the Institutional Foundations of Comparative Advantage

Within this paper's research design, the potential of a comparison of the cases crucially relies on the validity of the following two premises:

- *Premise A*: The internationalisation of universities in Germany and the UK is motivated by the same *structural incentives* presented in the global market for higher education.
- *Premise B*: The *mode of coordination* in the national models of capitalism of Germany and the UK is different.

With regard to premise A, the similarity of the structural incentives was discussed in section 2.2. With regard to premise B, Germany and Britain were identified as examples of coordinated and liberal market economies respectively in

34 To give an illustration, after the UK government had ceased to subsidise non-EU international students and also abandoned the ceiling on tuition fees these students can be charged, university managers began to perceive them as customers (with customer demands) to be competed for in the global market for higher education.

section 3.2. Against the background of the framework developed the previous section, theoretical expectations can now be raised as to why the internationalisation of universities is likely to be linked to the mode of coordination in the national model of capitalism:

- *Premise C.1:* The mode of coordination in the national higher education system is both influenced by and reflects the mode of coordination in the national model of capitalism.
- *Premise C.2:* The internationalisation processes of universities are both influenced by and reflect the mode of coordination in the respective national higher education system.
- *Premise C.3 ('derived' from premises C.1 and C.2):* The internationalisation processes of universities are both influenced by and reflect the mode of coordination in the national model of capitalism.

Given this line of argument, the validity of premise C.3 can be tested by checking the validity of the premises C.1 and C.2. In the remainder of this section, firstly, an explanation is given for why the mode of coordination in the national higher education system can plausibly be assumed to correspond to the mode of coordination in the national model of capitalism (premise C.1). Secondly, it is elaborated why the internationalisation of universities can be expected to be both influenced by and reflect the mode of coordination in the national higher education system (premise C.2).

For this purpose, the higher education system is described as a part of the national economic system while at the same time as a system in itself. Higher education systems are deeply embedded into national systems of innovation and production and, hence, are part of the institutional framework of a national model of capitalism. Universities as *national institutions* have always been tightly bound up with the development of the national economic system. Higher education systems from the beginning have been shaped by collective national goals: "The education system is strongly linked to the development of the modern nation state and represents one of the core facets of state activity" (Sackmann, 2007: 155). To give an example, the origins of the German higher education system lie in the Humboldtian model, the creation of which was labelled with a sense of nationhood in the 'new' Germany (King, 2004: 8). When this model was developed by Wilhelm von Humboldt in Prussia in the early 19th century, an underlying rationale was to delineate the Prussian higher education system from the French model. The intention was to maximise the political value-added of the higher education system by increasing its competitiveness and establishing its recognition by other nations (Nullmeier, 2000: 233). Given that the regulatory framework till now has been shaped mostly on the national level (Huisman and Wende, 2004: 9, cf. Clark, 1983: 120), the national economic system still crucially provides wider institutional framing conditions for the national higher education system. To sum up, the institutional configu-

rations of the German and British higher education systems are historically closely linked to the respective national model of capitalism.

According to the rationale of the VoC approach, complementarities can be found with regard to all institutional spheres of a national model of capitalism, and, thus, should also be detectable with regard to the higher education system.³⁵ More generally, VoC proponents assume that it is advantageous to develop similar forms of coordination across spheres (Gingerich and Hall, 2001: 6). This premise is based on a particular understanding of the relation between *institutional complementarity* and *mode of coordination*. On this understanding, market [strategic] coordination in one sphere is assumed to be complementary with market [strategic] coordination in other spheres (cf. *ibid.*: 2, Hall and Soskice, 2001: 18). The assumption is that in this way the highest general efficiencies are generated: “Rates of economic growth should be higher in nations where levels of market coordination or levels of strategic coordination are high across spheres of the political economy but lower in nations where neither type of coordination is well-developed or market and strategic coordination are combined” (Gingerich and Hall, 2001: 20). That is, institutional complementarities are assumed to be most efficient when the modes of coordination in the different spheres are analogous.³⁶

Taking this logic a step further, the different spheres in a national higher education system, established in the previous section, should optimally also each be configured on the same mode of coordination. More precisely, in the most efficient case, in a political economy in which the relationship between firms and universities is configured on a particular mode of coordination, this mode should also be detectable in the other institutional spheres of the higher education system. If this logic of VoC holds, then, by implication, the mode of coordination in the national higher education system is both influenced by and reflects the mode of coordination in the national model of capitalism (premise C.1). That is, higher education system in a LME should operate more on the basis of competitive markets and that in a CME rather on the basis of strategic interactions.

However, at this point it should be noted that several more logics may be operative that explain why nations with a particular type of coordination in one sphere can be expected to develop similar institutional practices in other spheres, and, thus, converge on institutional practices across different spheres (cf. Hall and Soskice, 2001: 18). One of these logics is that “... institutions sustaining coordination in one sphere can be used to support analogous forms of

35 The role the German higher education system plays in the ‘German LME’ and that which the British higher education system plays in the ‘British LME’ is sketched in the beginning of section 5.2.3 with reference to Leuze (2007).

36 For a discussion of the possibility of hybrid success, referring to the potential general efficiency of institutional complementarities between spheres that operate on the basis of different rationales, see for example Campbell and Pedersen (2005), Boyer (2005: 368), or Amable (2005: 372).

coordination in others" (ibid). For example, dense networks of business coordination that secure a collaborative system of vocational training can also be used to operate collective standard setting. Another logic is that firms, for the sake of efficiency gains, may pressure governments to develop institutions similar to those already prevalent in the political economy (ibid). Also, some form of co-evolution may have taken place between the national model of capitalism and the higher education system, or some form of 'cultural pressure' may have rendered it unfeasible to sustain a mode of coordination different to that in the overall national model of capitalism in just one singular subsystem (like the higher education system).

Now moving on to the internationalisation of universities, an application of the VoC approach leads to the expectation that the distinction between higher education systems based on different modes of coordination should correspond to cross-national differences in internationalisation strategy. This is because the availability of a certain mode of coordination in a higher education system conditions the efficiency with which universities can perform particular strategies in the global market for higher education. The institutional features that underwrite the mode of coordination in a higher education system provide universities with competitive advantages in particular activities. An internationalising university is expected to make use of such 'institutional support' to derive competitive advantages which cumulate into comparative institutional advantages at the national level. In the presence of trade in the global market for higher education, these advantages then, over time, give rise to cross-national patterns of specialization.

To put it differently, given that universities face a set of coordinating institutional spheres whose character they can only define to a limited extent, they should gravitate in their internationalisation strategy towards the comparative institutional advantages that their higher education system provides. (Any other strategy would typically require adjustments in neighbouring institutional realms and thus increase the cost of change (cf. Thelen, 2004: 3, Hall and Thelen, 2008: 6).) These comparative institutional advantages, in turn, rest on the institutional complementarities in the higher education system and vary systematically with the institutional support there is for different types of coordination. Thus, the mode of coordination in a higher education system should become apparent also in the internationalisation strategies of universities (premise C.2).

This latter premise can be supported by reference to the literature on path dependence. The basic idea of path dependence is that established institutions, or the 'interdependent web of an institutional matrix', typically generate powerful inducements that reinforce stability in further development. In this context, institutional complementarities are expected to work towards stability (cf. Djelic and Quack, 2007: 167).³⁷ More specially, this implies that the network of institu-

³⁷ Methodologically, path dependence suggests a middle way somewhere between 'random' and 'pre-determined' historical evolution (Leipold, 1996: 95). However, the concept goes

tionalised relationships around the university favour a distinctive adjustment path to the structural incentives in the global market for higher education. That is, the complementarity or coherence of the various institutional spheres in a higher education system should give rise to systematic reproduction mechanisms in regard to universities' internationalisation strategies *despite* the isomorphic pressure exerted by global market for higher education.

4.3 The Analytical Framework

Before testing the theoretical expectations raised in the previous section, I discuss a number of critical issues in regard to my analytical framework.

The first point is that, based on the insights of the VoC approach, it is assumed that the global market for higher education and the structural incentives and constraints therein allow for diversification, i.e. for the pursuance of a range of different approaches to internationalisation. The international higher education arena is complex in terms of national educational conventions, national cultures, finance and politics, as well as labour markets and legal prescriptions, amongst other things. Therefore, "Inevitably, an institution will reconcile itself to the fact that it will have to segment its international arena or market and focus on particular opportunities" (Davies, 1995: 13). This also suggests that there is no one best practice in the global market for higher education but possibly a number of good practices, and, consequently, that existing differences in the internationalisation of universities most likely are not merely the result of ignorance of 'one-best way'. Rather, the scope of the global market for higher education is such that there is room for specialisation into a particular path of internationalisation.

Another aspect is that there are a number of (complementary) explanations for the existence of national patterns in the internationalisation of universities, not all of which relate to the institutional configurations of national institutional

far beyond the statement that 'history matters'. It basically describes a dynamic process involving positive feedback and increasing returns (Pierson, 2004: 20). Self-reinforcing mechanisms imply that the possibility of another step down the same path increases with each move down the path. In this way, once-possible outcomes become more difficult to reach over time. Hence, it can even be rational to stick to a sub-optimal path if the efficiency losses are not expected to be higher than the creation of a new institution (cf. Scherer, 2001: 5). This kind of lock-in can also be understood as monopolization despite multiple possible equilibria, whereby early events can have a significant long-term impact (even if they seemed small initially). Arthur established the following characteristics for path dependence: (1) large set-up costs that result in lower costs per unit as output increases; (2) learning effects that lead to increased know-how and routine, and (3) positive network externalities that refer to coordination effects as well as adaptive expectations and imply increasing utility as the number of incidences increases (Arthur, 1994, cf. Leipold, 1996: 97). North (1990) then extended Arthur's conception of path dependence, initially predicated on technological development, to the study of institutional development.

frameworks on which this discussion paper focuses. For instance, one might argue that one of the reasons why British universities can successfully pursue a more commercial approach to internationalisation is that they offer a higher-quality educational service for which students are willing to pay. Also, to some extent, the ties remaining from the British Empire play in favour of the approach that British universities have towards internationalisation.³⁸ Another explanatory factor is the comparative advantage UK universities derive from English being the lingua franca in the world of academia.³⁹ The potential influence of alternative explanatory factors such as these is not denied. I do not argue that the role institutional complementarities and modes of coordination play in the context of the internationalization of universities is exclusive, but rather that they have a most significant impact.

38 Britain already was engaged in the internationalisation of higher education in the nineteenth and first half of the twentieth century. At that time, internationalisation was linked to the country's imperial mission (Coate and Williams, 2004: 115). Today, British universities still profit from historical ties that remain from this time. As the Head of Admissions of UEA admits, it often has played in his favour that their business partners in the former British colonies have a mind-set along the lines of "at least we know the Brits" (Head of Admissions UEA, Norwich, 16.11.2007 [see chapter 5 for methodology of interviews]). At the same time, there are a number of aspects questioning that colonial ties are the most relevant. For example, some countries that never had colonies (e.g. Canada, a former colony itself) are strong competitors to UK universities, while some other countries that had colonies (e.g. France) are not. Another issue is that student mobility to Germany also has a long history (Kontigiannopoulou-Polydorides et al., 2004: 260), and that Germany also profits from regional links, especially to countries in Central and Eastern Europe (ibid: 254). Export of higher education services into these countries is rapidly expanding, whereby German universities are considered serious competitors by British universities. (Head of Admissions of UEA, Norwich, 16.11.2007). Indeed, in the case of German universities the top sending countries are Bulgaria (5.1%), Poland (5.0%), and the Russian Federation (4.0%), right after China (10.5%) (IIE, 2008).

39 A competitive advantage of the UK, the US, Canada, Australia, and New Zealand clearly is English being the lingua franca for academia as well as in the world of business (c.f. e.g. Hughes, 2008). However, while the language factor increases the attractiveness of these countries as a destination for students and researchers, it at the same time hinders outward mobility (Hahn, 2004b: 70). The lack of knowledge on the part of English native speakers of languages other than their mother tongue "... places a barrier against the internationalisation of education" (De Wit and Callan, 1995: 71). Beyond that, English as lingua franca is no "insurmountable obstacle" for universities from non-English speaking countries (Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel, Kassel, 24.01.2008 [see chapter 5 for methodology of interviews]). For example, as English is increasingly used by academics, it becomes more and more common to offer English-taught programmes at German universities. Moreover, the language factor also plays in favour of German universities. First of all, German is spoken by approximately 20 million native-speakers outside Germany (De Blij and Downs, 2006). Secondly, while estimates about the total number of non-native speakers of German vary significantly, it is notable that around 16.7 million people worldwide are currently learning German (StADaf, 2006: 5).

A last point discussed in this context is that the internationalisation of German universities is at least partly driven by the diffusion of the strategies of the first movers in the global market for higher education. To a certain extent, a strategy for German universities might simply be to imitate the British first-mover strategies. This could be considered a case of institutional isomorphism through mimesis, facilitated by the uncertainties in a dynamically evolving global market for higher education (cf. DiMaggio and Powell, 1983). However, given the premises of the adopted analytical framework, imitation alone would be suboptimal for German universities. If German universities were to follow the internationalisation paths of British universities all the way, they would fail to optimise on the institutional complementarities that the national institutional environment provides in regard to their internationalisation.

5. Comparing the German and the British Cases: Institutional Complementarities and the Internationalisation of Universities

In this chapter, I analyse the internationalisation processes of German and British universities in order to test my hypothesis. As mentioned before, I have a closer look at the cases of the University of Kassel and the University of East Anglia in particular. In section 5.1, I provide a first general overview on the two cases to show that they are comparable as well as interesting to compare. Subsequently, in section 5.2, I discuss the relevance of the different institutional spheres (established in section 4.1) in the context of internationalisation. Finally, in section 5.3, I explore the specialisations in internationalisation.

As there is no literature that links the internationalisation of universities to varieties of capitalism, the empirical material for the case studies often derives from sources other than the literature on the internationalisation of higher education. For instance, some data is gathered from academic staff at the International Centre for Higher Education Research in Kassel. Also, I draw on primary sources, such as action scheme papers by the German Academic Exchange Service (DAAD). Beyond that, I carried out interviews in both Germany and the UK with top-level university administrators in charge of advancing internationalisation.⁴⁰

5.1 The Methodological Advantages of Comparing the Cases

This section begins with a short overview on the German and British higher education systems that shows similarities and differences in the constitutions of the respective systems. The German higher education system has a binary structure, whereby the main responsibility lies with the Federal States (Länder). The system is made up of 117 universities and 157 universities of applied science (as well as 56 colleges of music or art). In Germany, the private sector and the for-

40 Most of the interviews were conducted in the UK, as here I did not have the same access to insider information. The interviewees were the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007); the Head of Admissions of UEA (Norwich, 16.11.2007); the Internationalisation Coordinator of UEA's Faculty of Arts and Humanities (Norwich, 16.11.2007); the Exchange Programme Coordinator of UEA's Faculty of Arts and Humanities (Norwich, 16.11.2007); the Erasmus Coordinator of UEA's Faculty of Arts and Humanities (Norwich, 16.11.2007); and, finally, the Head of the Department for Internationalisation, International Relations and Public Relations of the University of Kassel (Kassel, 24.01.2008). As well as these interviews, I had informative talks with the director of the International Centre for Higher Education Research Kassel (Kassel, 06.02.2008) and with the Head of International Relations of the University of Salford (Salford, 01.07.2008).

profit sector have, to date, remained a *quantité négligeable* (Hahn, 2005a: 20).⁴¹ This is also the case for the UK (at least if ‘official status’ rather than ‘organisational character’ is taken into account). The British higher education system consists of four regional subsystems (England, Wales, Scotland and Northern Ireland). These subsystems are historically linked, but since 1992 subject to different administrations (Huisman and Wende, 2004). The following case study is mostly concerned with the English system, as 86% of the 168 British higher education institutions are located in England (cf. De Boer et al., 2006: 22).

As table 3 confirms, the German and the British higher education systems are of roughly the same size in terms of total number of students. While both Germany and the UK are key players in the global market for higher education, the UK nevertheless is ahead in its share of international students in the global market for higher education. In 2005 there were 246,334 foreign students enrolled at German universities. With this, Germany is the third largest host country for foreign students. With 344,335 foreign students the UK holds 21% of the world’s share and is the second largest host after the US. Between 1995 and 2001, the number of foreign students increased by 43.8% in the UK as compared to 28.9% in Germany (Kontigiannopoulou-Polydorides et al., 2004: 259). A major difference in the scale of internationalisation also arises in regard to the number of international students enrolled in offshore programmes. The expected total for international students enrolled in such programmes in 2010 is 13,000 for Germany but 350,000 for the UK.⁴²

Table 3: Key data on the internationalisation of German and British higher education

	Germany	United Kingdom
<i>Population</i>	82.5 Million (2004)	59.9 Million (2004)
<i>Total for all higher education students</i>	1,963,108 (2005)	2,313,475 (2005)
<i>Total for international students</i>	246,334 (2005)	344,335 (2005)

Source: Data retrieved from Institute of International Education (IIE, 2008) and Hahn and Lanzendorf (2007: 8, 10).

The number of the in-depth case studies is limited to one university from each country in order to accommodate the gathering of a broad set of observations for each (cf. Hall, 2008: 315). Thus, it is better possible to bring to life the interplay between the university and its institutional environment (cf. Stromquist, 2007: 85). The appeal of comparing the selected universities, namely the Univer-

41 For instance, in Germany 96.9% of all students are enrolled in state-owned universities (Hahn, 2004b: 51).

42 The term offshore programme refers to programmes where the students are based in a different country than the institution that awards the degree (Knight, 2005: 6).

sity of Kassel and the University of East Anglia, is pre-eminently methodological. No two universities are identical. However, it is methodologically useful to compare universities which share numerous characteristics that condition their initial position in the global market for higher education. For instance, the University of Kassel and the University of East Anglia are both full-range campus universities of approximately the same (medium) size in terms of student population and annual budget (see table 4).

Table 4: University of Kassel and University of East Anglia – Key Facts

	University of Kassel	University of East Anglia
<i>Foundation</i>	1970	1963
<i>Student population (2007/08)</i>	16,378	ca. 15,000
<i>Annual Budget</i>	ca. 162 Mio. € (2006)	ca. 157 Mio. € (2007)
<i>International Students (2007/08)</i>	1494 (9.1 %)*	over 2500 (ca. 16.7%)

* The number refers to those students who have obtained their certificate of eligibility for admission at a higher education institution in a country other than Germany (Bildungsausländer).

Sources: Data retrieved from Higher Education Statistics Agency (HESA, 2006), Brömer (2006), UEA (2007, 2008), and Uni Kassel (2007)

Both combine teaching and research on a broad range of subjects, and both can be considered reform universities⁴³, offering a number of innovative degrees and degree structures, with a special focus on interdisciplinary as well as niche programmes in cutting edge-fields, for example in environmental science (cf. Armbruster, 2007b, on the University of Kassel, and Sanderson, 2002, on the University of East Anglia). Moreover, both universities are relatively young, founded in a period characterized by a rapid expansion of higher education (cf. e.g. Meyer and Schofer, 2004, on the world-wide expansion of higher education starting around 1960).

What also speaks in favour of a comparison of the University of Kassel and the University of East Anglia is that both ‘play in the same league’, and can be considered exemplars of the respective higher education system in that each of them ranks around mid-field in the national league tables. In this way, their comparison is also likely to show how far internationalisation has ‘trickled down’ and is no longer only a hot topic for ‘elite’ universities with their long-standing international reputation and usually advantageous location in cosmopolitan areas (cf. e.g. Ramirez, 2006). As both universities are not exposed national leaders, but rather located in medium sized cities in regions considered as

43 In fact, the University of Kassel was labelled a comprehensive university (Gesamthochschule) before 2002.

economically disadvantaged and far from economic hotspots, they can be expected to rely heavily on the institutional support the national higher education system offers for their internationalisation.

It is important to note that, despite all the similarities between the University of Kassel and the University of East Anglia, the variation on the dependent variable –the internationalisation process– is stark. As the following sections will show, the two universities clearly reflect the distinct internationalisation patterns of German and British universities respectively.

5.2 Institutional Complementarities in Regard to Internationalisation

In this section the internationalisation profiles of the University of East Anglia and the University of Kassel are compared. Broadly speaking, the internationalisation of the British university is based more on individual, commercial and market-based strategies, whereas that of the German university is based more on collaborative strategies that are not directly profit-oriented but more aimed at generating (macro-)economic benefit in the long-run. In the following it is described in detail how the institutional complementarities between the institutional spheres in the respective higher education system (section 5.2) influence these specific internationalisation profiles (section 5.3). It is notable that, especially in regard to the responses of the UK interviewees, it is at times alluded to the terminology of the New Public Management.⁴⁴

5.2.1 University-State Relations

The sphere of university-state relations plays a significant role in determining the steering mode of the higher education system, and, with that, in differentiating the respective mode of coordination to be found in the German and the British higher education systems. For reasons spelled out in section 3.3, from the VoC perspective, the state can be expected to facilitate that mode of coordination in the higher education system which is complementary (and corresponds) to the mode of coordination in the other institutional spheres of the political economy (like the labour market).

In the case of LMEs, like Great Britain, the state is seen as an agent of market preservation and expected to develop a detailed legal framework within which businesses are relatively free in their operations (Hancké et al., 2007: 26, Wood, 2001: 251). The state is mostly concerned with the monitoring of ownership and

44 Core themes of the New Public Management are, amongst other things, (1) the use of market-like mechanisms in the public sector (e.g. enhanced audit systems and comparative performance indicators), (2) the move to new forms of corporate governance, such as a board of director model, and (3) increased emphasis on provider responsiveness to consumers (Ferlie et al., 1996: 6, 11, Thompson, 1997: 1-2).

market concentration, whereby the regulatory framework precludes many forms of intensive cooperation (Hancké et al., 2007: 27). In regard to the higher education system, the British state fulfils such a role. While UK universities are dependent on public funds, they are legally independent bodies (De Boer et al., 2006: 23). They are chartered corporations responsible for self-management (Clark, 1983: 128), and, hence, are "... neither structurally part of the government nor regarded as part of the public sector" (Shattock, 2006: 1026).⁴⁵ For the Head of Admissions of UEA (Norwich, 16.11.2007), the legal status of British universities corresponds to 'private cooperation limited by guarantee'. He considers universities as part of the private sector, with the difference that universities are bailed out in case of bankruptcy. This status is reflected in the organisational structure of the university. The managerial mode of decision making is represented in the strong position of the Vice-chancellor who often is seen to resemble a chief executive (De Boer et al., 2006: 27). The Board of Directors of the university resembles a business council, and is relatively independent from the government, for example when it comes to entering into contracts with private actors (Pro-Vice Chancellor UEA, Norwich, 15.11.2007, Coate and Williams, 2004: 113, Huisman and Wende, 2004: 113).

In the UK, the flexible regulative framework that the state provides is complementary to the high degree of universities' institutional autonomy (Huisman and Wende, 2005). For example, universities not only control their own curricula and research agendas but also the structure of the degrees and programmes they offer. This holds also in regard to internationalisation. The Head of Admissions of UEA (16.11.2007, Norwich) observes that while the rhetoric of *exploiting* the global market for higher education has been pushed very far by the British government, in the end it is not the government but rather the Vice-chancellor who sets the universities' internationalisation agenda.⁴⁶

This dominance of (academic) self-governance of British universities is historically entrenched. While there have been different phases in the intensity of government interference, British universities have traditionally been legally independent entities with entrepreneurial and corporate characteristics (cf. e.g. Huisman and Wende, 2005). However, the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007) points out that this tendency has in some ways become even more pronounced since the Thatcher years, in which a number of market components were introduced into the education system and which generally brought a move towards an increasingly market-oriented governance configuration (cf. De Boer et al., 2006, Sackmann, 2007: 156). Before the Thatcher era, "Considerable trust was put in the management of universities, but in the last 30 years a quasi-market has developed and higher education became a market discipline" (Head of Admissions UEA, Norwich, 16.11.2007.). Universities ex-

45 For example, the borrowing of universities does not count as part of the government's borrowing (Shattock, 2006: 1026).

46 This is an example for a 'gap' between policy discourse and policy implementation. Compare also quote by the British Secretary of State for Education and Employment on page 1.

perience this development in the shift from block grants to increased checks and auditing standards (Head of Admissions UEA, *ibid*). In the British higher education system, a shift has taken place towards government-interference in the form of an increasingly 'evaluative state'. This relates to the widespread use of *performance management*, i.e. the application of performance indicators and performance related incentive schemes in the UK's public sector (cf. e.g. Naschold, 1993: 32). Rigorous quality assurance builds the institutional foundation for performance-based steering by the state through competition-based allocation of subsidies, and, more generally, through controlling of the market standards rather than the institutions directly (cf. Deem, 2004: 66). All this has "... extended market-like behaviour in institutions and reinforced competition for public and other resources" (King, 2004: 21). In this context, the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007) names as illustrations the strict evaluation of universities through the Quality Assurance Agency (QAA) and the government's Research Assessment Exercise.⁴⁷

The competitive market mode is also reflected in the position university management has towards the state. The contractual nature between state and university leads to a 'customer-producer' relationship (Naschold, 1993: 50), whereby the university is increasingly seen as a service provider (Goldschmidt, 1991: 11). A good illustration is that the Head of Admissions of UEA (Norwich, 16.11.2007) describes the Higher Education Funding Council, responsible for most of the public funds granted to universities, as the most important *customer* of the university, hinting at an arm's-length and market-oriented relationship towards the state. Beyond that, the Head of Admissions of UEA (Norwich, 16.11.2007) makes clear that "We completely ignore the government and fiercely defend our independence".

By contrast, the German higher education system has its roots in the 'Humboldtian model' (e.g. Kehm, 2006: 729, Van der Wende, 2004). One of the features of the Humboldtian model is that the state has a relatively high control over universities combined with the responsibility to finance them (Kehm, 2006: 730). Correspondingly, most of Germany's universities have a double legal status. "On the one hand, they are partially autonomous public corporations (Körperschaft des öffentlichen Rechts) and, as such, their budgetary, economic and staff matters are subject to the rules of state administration. On the other hand, they also are public institutions that have to provide certain services to the public which are defined by the state (Anstalt)" (Kehm and Lanzendorf, 2006: 137). Hence, in Germany the university-state relation is characterized by a legal and regulative framework in which universities enjoy institutional autonomy only in regard to issues of teaching and research, which restricts entrepreneurial activity (cf. Coate et al., 2005: 233). Interestingly, in recent years state control has been somewhat loosened and there has been a tendency to grant

47 The Research Assessment Exercise conducts an examination of the quality of research by rating four publications of each department according to their international significance, and is an important factor determining the resources allocated to the department.

more autonomy to universities. Yet, in its foundations the university-state relationship still retains its 'historical' character.

Another aspect of university-state relations in the German case is the role national intermediary actors play. In coordinated market economies, the state is expected to develop framework legislation that protects the rich networks of coordination, whereby state regulation in many cases is carried out or sanctioned by the associations in the respective policy field (and usually only effective if carried out in this way) (Hancké et al., 2007: 27, Wood, 2001: 251). This is referred to as "voluntary agreements by associations" (Hancké et al., 2007: 27). These agreements also play an important role in German higher education policy. The role associations and national intermediary have in higher education is the topic of section 5.2.4.

5.2.2 Corporate Governance, Public-Private Partnerships, & University-Student Relations

The institutional sphere of university-state relations is complementary to that of the corporate governance of universities. In the UK as well as in Germany, the biggest player in this sphere is the state. Yet, the funding scheme in the UK to a great extent reflects the conception of higher education as a private good.⁴⁸ Moreover, in the last two decades, financial stringency has led to increased financial independence of UK universities and, with that, also to increased autonomy of universities (Huisman et al., 2005a: 235). According to Coate and Williams (2004: 114), since the early 1980s the proportion of state funding in the budget of universities in the UK has dropped approximately from 80% to 40%.⁴⁹ In 2002/03 – 2003/04, the relative shares of private funding were 24.8% in tuition fees and education contracts, 19.6% in charities and other sources, and 1.6% in endowment and investment income (Shattock, 2006).⁵⁰

With regard to internationalisation, the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007) finds that the government provides few financial incentives. The support the state provides for the internationalisation of universities is mostly not of financial but rather of 'rhetorical' nature (Coate and Williams, 2004: 14). Rather, the main driver for internationalisation is the possibility to charge non-EU overseas students fees for which there is no legal ceiling.

This opens up an interesting perspective on the liberal character of the British higher education system. The Higher Education Policy Institute in Oxford shows that the value of international students is such that they would be beneficial to the British economy even if they did not have to pay any fees at all

48 In this context, private good refers to a service that is purchased and paid for by individual consumers (Davies et al., 2000: 420).

49 Interestingly, before the 1940s hardly any substantial funding of universities through the government took place.

50 The shares of public funding were 37.6% from the Higher Education Funding Council and 16.4% from research councils (total: 100%) (Shattock, 2006).

(Bekhradnia and Vickers, 2007). In fact, the economic benefits are such that "... it would be in the national interest to subsidise international students" (ibid: paragraph 57). However, given the current funding scheme for universities, it is often a financial necessity for faculties to generate income through the recruitment of international students (cf. Evans and Williams, 2005: 90).⁵¹ This market-oriented approach to internationalisation can be deemed contradictory in the sense that long-term macroeconomic benefits would in fact be optimised by subsidising international students studying in the UK. Nevertheless, to the contrary, it is quite possible that in the near future the ceiling for EU (and home) students is also removed (Pro-Vice Chancellor UEA, Norwich, 15.11.2007).

This indicates that in the UK the perception of higher education as a global international service and a tradable service is already deeply embedded (Coate and Williams, 2004: 117). Desmond Peston from Oxford University claims that the fast growth of the export of British higher education is facilitated by the strong financial sector in the UK, which according to him has given a 'jump start' to whole range of service exports 'made in UK' (Jungclausen, 2007: 26). Already today, most universities are "... operating effectively as [an] economic enterprise in the international market for services" (Evans and Williams, 2005: 90). It is in this context that the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007) states that the national model of capitalism is broadly articulated in the national higher education system.

In the words of Pro-Vice Chancellor, the University of East Anglia wants to reduce the proportion of the government income stream, in order to increase institutional autonomy and gain more room for manoeuvre in terms of innovations. This is one of the major reasons why university management is very conscious of the significance of internationalisation. The Internationalisation Coordinator of the Faculty of Arts and Humanities of UEA (Norwich, 16.11.2007) states that internationalisation is financially 'incentivised' in a significant way also *within* the university. As the Pro-Vice Chancellor of UEA explains, the money-flow inside UEA is organised like a market, whereby the 23 schools are responsible for their own budgets, and financial incentives are set that reward a school's progress in internationalisation: "Everything is articulated in financial terms rather than academic terms" (Pro-Vice Chancellor UEA, Norwich, 15.11.2007).

In contrast, in Germany the financing model is based more on a conception of higher education as a *public good*.⁵² There is relatively secure public funding for universities, based (at least originally) on the premise that higher education should be accessible to all (Coate et al., 2005: 233). Thus, it is not surprising that

51 An example of the importance of the income stream derived from international students is that events like the Asian financial crisis or the outbreak of the SARS epidemic in China in 2002/03 brought some British universities in severe financial difficulty (Coate and Williams, 2004: 125).

52 Here, *public good* refers to a service provided by the state for all or most of the populace (Davies, 1995: 484).

universities mostly rely on money from the Central Government and the Federal States (Länder) also when it comes to their internationalisation activities (ibid: 227).⁵³

As Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel (Kassel, 24.01.2008) says, finance to some extent is a mechanism of transmission in the internationalisation of German universities as well. However, a difference is that internationalisation in the UK is very directly influenced by the incentive to generate income for the university, whereas in Germany the state sets financial incentives for internationalisation projects. In this way, the structural incentives that the global market for higher education provides are often 'transmitted' via the subsidies the state provides for internationalisation.⁵⁴ For example, the international activities of the University of Kassel are frequently tied up with programmes run by the German Academic Exchange Service (DAAD), the total in DAAD subsidies for the University amounting to about 1.5 Million in 2006 (Armbruster, 2007a). Next to that, internationalisation projects are supplemented by specific allocations of resources out of the university's total budget.

Given this corporate structure, the international projects of German universities are more conducive to long-term investments and with that to long-term relationships.⁵⁵ Offshore projects by British universities are planned to generate profits as soon as possible, whereas those of German universities have to be cost covering or refinanced only after about five years (Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel, Kassel, 24.01.2008).

The corporate governance of universities is complementary to the institutional sphere of university-students relations. British universities have to meet clear-cut contracts with regard to the number of students enrolled each year. UEA accepts around 3500 students each year. This number has to be predicted within a range of 10 students. If the number of students is lower, the university is fined; if it is higher, the university receives no public money for the surplus of students. According to the Head of Admissions of UEA (Norwich, 16.11.2007), the attractiveness of international students is that they lay outside this calculation. Universities can set their own strategic goals with regard to the number of foreign students admitted and fees charged (Coate et al., 2005: 228). In the 1980s, all subsidies for students from outside the EU ceased, which fostered the competition for international students and put universities from the UK in a strong position when in the 1990s the global market international students expanded rapidly (Evans and Williams, 2005: 68). Today, non-EU overseas stu-

53 At the same time, many actors in the internationalisation of German universities complain about the insufficiency of the funds available for internationalisation.

54 This point is further developed in section 5.3.2.

55 It remains unclear whether such long-term investments eventually pay off. There are a number of unknown variables, for example in regard to how far international students later employ their skills in Germany.

dents pay an average of £10,000 per annum, which is considerably more than the fee home students pay. The competition for students as paying customers (ibid: 79) is reflected in the statement of the Internationalisation Coordinator of UEA' Faculty of Arts and Humanities (Norwich, 16.11.2007) that "For fee-paying students the policy is simply to maximise numbers". In practice, the international offices of British universities are selling higher education services to foreigners (Evans and Williams, 2005: 76). Thereby, the major rationale is an economic one, referring to the recruitment of students with sufficient liquidity, and to fill up programme capacities.

For UK universities, the competition for students within the national higher education system seems to lead to advantages when it comes to competition for students on the international level (Head of Admissions UEA, Norwich, 16.11.2007). In contrast, in Germany the competition between universities for students as well as the competition of students for places at universities in the national higher education system is far less pronounced (Nullmeier, 2000: 216). In the case of some study programmes, like medicine, universities can even get students allocated to them (cf. King, 2004: 12). This is reflected in the university-students relations on the international level – in the case of German universities the competitive element in marketing and recruitment of international students is (still) not as apparent. The difference between Germany and the UK is partly explained by German higher education, except for an administrative fee, being mostly free for students (at least before the introduction of tuition fees of 500€ for both German and international students in six out of the sixteen Federal States (Länder) by 2008). That tuition is significantly lower in Germany attracts students who cannot afford more expensive studies.⁵⁶ Beyond that, organisations like the DAAD provide scholarships to international students, targeted at the brightest and most talented students, whereas in the UK, faculties that are not top-rated focus their international recruitment more on students with sufficient monetary means.⁵⁷

The mode of coordination in regard to investor relations can also be illustrated by the example of the character of university-firm relations in the form of public-private partnerships in the area of the internationalisation of universities. In the UK, recruitment is to a great extent outsourced to private counsellors that operate in the target countries. The university's relation to these private agencies is clearly contractual and market-based. Universities fiercely compete with other universities over the commission paid to these agents to secure their compliance (Head of Admissions UEA, 16.11.2007).⁵⁸

An example of a joint venture of UEA with a private company is the 'INTO' project, developed two years ago. 'INTO' offers foundation courses to interna-

56 At the same time, it is interesting to note that international students often express the opinion that a British degree is worth more, as 'surely, quality has to be paid for'.

57 This is not to deny that here many scholarship holders in Britain as well.

58 In the case of UEA, the recruitment agencies currently receive a commission of 10% on the tuition fees paid in the first year (Head of Admissions UEA, Norwich, 16.11.2007).

tional students, preparing them for entry to university. Students are guaranteed admission to UEA after completing their preparatory course, which costs ca. 16,500 € for one year of tuition and accommodation. UEA is a pioneer in this project. According to the Pro-Vice Chancellor (Norwich, 15.11.2007), in the face of fierce recruitment competition, "The future of UEA would look bleak without INTO". Currently, 'INTO' is building a 250-bedroom dormitory, paid for by the private partner. UEA bears the financial risk in case the project fails. However, "UEA is willing to take the risk" (ibid).

According to the Head of the Department for Internationalisation, International Relations and Public Relations (Kassel, 24.01.2008) the University of Kassel is not engaged in a directly profit-generating private-public partnership operating in the field of internationalisation. In Germany cooperation with firms often is based on firms sponsoring internationalisation. Especially, the international outlook of universities can be relevant for small and medium-sized (regionally) based firms that are dependent on the dissemination of state-of-the-art technology through innovation-based research collaboration with universities. Also, the internationalisation of universities can serve to meet the demand of firms for qualified trainees and workers, both at home and abroad. This latter aspect is further discussed in the next section.

5.2.3 University - Labour Market - Firm Nexus

The major parameter through which I capture university-firm relations is the *labour market*, to which I add onto the discussion of the institutional sphere of industrial relations. Following the reasoning of VoC, the kind of degrees offered in the national higher education system can be expected to be complementary to the configuration of the labour market and the demands of firms for certain skills.

In a study comparing the institutional embeddedness of graduate careers in Germany and the UK, Leuze (2007) observes that institutional complementarities between higher education and graduate labour markets correspond to the overall logic of LMEs and CMEs. In Germany the labour market is relatively well regulated while there exists a tight match between higher education credentials and occupational outcomes. Consequently, higher education and the labour market are closely connected. In Britain, on the other hand, overall labour market regulation is low and higher education emphasises more generalist education. Correspondingly, higher education and graduate labour markets are more loosely coupled and much less sheltered from market competition. These findings are supported by Schomburg and Teichler (2006), who carried out a twelve county comparison on issues such as professional mobility during the first years after graduation (ibid: 77-78) or the degree to which higher education studies are linked to the area of work of recent graduates (ibid: 105-106).

The fluid markets in LMEs facilitate the movement of assets in the search for greater returns. This, in turn, encourages investment in *switchable assets*, the

value of which can be realized also when used for other purposes. In regard to higher education, this refers to institutional support for the acquisition of general skills which are transferable across firms, as in fluid labour markets industry specific skills are not secured (cf. Hall and Soskice, 2001: 17, 21 on fluid labour markets). An example is the “generalist MBA-type managerial education” in the UK (which would not be complementary to the demand for less mobile ‘specialist’ managers in Germany) (Lehrer, 2001: 367, 373). The traditionally binary degree structure in Britain fits this picture. That BAs offer multi-purpose skills to the mass of students, whereas more serious specialised study is reserved for MA programmes (cf. Clark, 1993), opening up the way to high-income jobs for a small proportion of BA graduates, is complementary to the kind of qualification British firms require, and, also, to the relatively high wage differential in the UK (cf. Papatheodorou and Pavlopoulos, 2003, for data on income disparity in the UK).

The internationalisation of British universities reflects this configuration. An illustration is that study programmes exported are mostly BA programmes tailored for the mass market and located rather in cheap ‘book sciences’ to maximise profit margins. The Pro-Vice Chancellor of UEA (Norwich, 15.11.2007) confirms this by stating that the best subjects to recruit international students, namely business management, economics, law, and computing, also are the ones marketed most.

The study programmes German universities focus on in their activities in the global market for higher education attempt to incorporate postgraduate studies and research activities. For example, out of the 90 programmes supported under the DAAD scheme ‘German Study Programmes Abroad’, about half are MA programmes (Lanzendorf, 2007b). In this context, Prof. Dr. Peter Frankenberg, Minister for Sciences, Research and Arts in Baden-Württemberg, expresses the view that MA and PhD programmes offer the best returns for German universities (Füller, 2005, cf. BMBF, 2008: 18).

At this point, it can be speculated that the degrees German universities export reflect the institutional support CMEs provide for the investment in *specific and co-specific assets*⁵⁹. Even though most of the programmes exported by German universities are adapted to the international BA and MA standard⁶⁰, most of these programmes in terms of curricula still reflect the traditional German Diplom and Magister. The Diplom and the Magister could be considered complementary to the ‘traditional’ configuration of the German labour market that is more rigid and encourages industry-specific training (cf. Hall and Soskice, 2001, on industry-specific skills). In addition, the German degree structure

59 The value of specific assets cannot readily be diverted to other purposes, whereas the return of co-specific assets depends on the active cooperation of other actors (cf. e.g. Black, 2002).

60 While the BA and MA degree structure is the international standard, the respective durations differ between countries. For example, a BA is typically designed to be completed in four years of study in the US but in only three years in the UK.

might be seen to correspond to wages in Germany being equalized at equivalent skill levels across an industry, which makes poaching of workers more difficult (cf. *ibid*: 27 on poaching). Thus, there are some indications that degrees offered abroad by British and German universities are influenced by the institutional configuration of the domestic labour market.

Another way in which the internationalisation of universities is complementary to the set-up of the domestic labour market is related to subjects the exported programmes are located in. These subjects reflect the respective sectors in which British and German industries are strongest, whereby, according to VoC, these sectors reflect the comparative institutional advantages of the respective national models of capitalism. In particular, on the global market British universities have a strong presence in finance and service oriented courses, business studies (MBAs), accountancy, and computing (e.g. Kemp, 2004). The offshore programmes offered by the German universities, on the other hand, focus on engineering and natural sciences (Loreck, 2005).

Furthermore, the internationalisation of universities is linked to the institutional configuration of the labour market in as far as this configuration affects the industrial relations relevant for universities. This relates to the working conditions and contracts the university has with its employees. The industrial relations of British universities, as compared to those of German universities, offer more room for individualised job contracts and performance-linked payment. Academics and non-academic staff are directly hired by the university, they are not public servants, and the university can terminate their employment (De Boer et al., 2006: 23, cf. King, 2004: 19). While their pay scales are nationally negotiated, only minimal legal requirements in regard to employment law, pension arrangements, and holidays apply.

The argument is that contracts ideally should be variable according to circumstances, to reward and compensate for workload related to international work (Davies, 1995: 9). However, in Germany the state directly employs most of the universities' academic staff. Therefore, German universities sometimes find that they are hampered in their offshore activities due to inflexibility to change personnel and adjust human capital to the requirements of internationalisation projects, especially offshore projects (Hahn, 2005a: 35). A further example for state regulation 'as a constraint' is that inflexible payment scales reduce the competitiveness of German universities in the international market for highly-qualified researchers (cf. Spiewak, 2008).

5.2.4 Inter-University Relations and the Role of Coordinating Bodies

In this section inter-university relations are operationalised by analysing the quantity and significance of national intermediary actors⁶¹ active in the internationalisation of universities. In the German higher education system one finds a

61 By intermediary actors I here refer to bodies involved in the coordination of actors active in the field of internationalisation.

host of cooperative actors and coordinating bodies: "HE [Higher Education] in Germany is marked by the increasing number and growing importance of intermediary actors" (Hahn, 2004b: 53). All of the coordinating bodies listed below are in some way active in the internationalisation of universities. It is notable that the state has a significant influence on inter-university relations given the influence it has on many of the coordinating bodies, for instance, through funding or membership.

The Joint Science Conference (GWK) of the Federal and Länder governments serves to coordinate issues of research funding and policy.⁶² The Standing Conference of the Ministers of Education and Cultural Affairs (KMK) is a political body that coordinates higher education activities between the sixteen Federal States. Together, the GWK and the KMK have a co-ordination and conflict solving function (cf. Kehm and Lanzendorf, 2006: 142). The Science Council (Wissenschaftsrat) is a buffer organisation advising the Federal States (Länder) and central government on issues of research. It comprises representatives from Federal State (Länder) and federal level, the public, and academia. Also, there are numerous research promotion agencies, such as the German Research Foundation (DFG), a non-governmental but state-funded institution representing the main funding agency for research in Germany. Interestingly, in recent years 28% of the DFG's budget has been spent on collaborative research projects carried out between several universities (Hahn, 2004a: 83). The *Stifterverband für die deutsche Wissenschaft* is a privately funded donor association and a joint initiative of industry involving about 3,000 firms. The Alexander von Humboldt Foundation fosters international activities in research. Moreover, there are four large networks of independent research centres, namely the Max-Planck-Society, the Fraunhofer Association, the Leibniz Association, and the Helmholtz Association. The Centre for Higher Education Development is a private foundation of the Bertelsmann AG that lobbies university management and higher education policy makers to opt for a more entrepreneurial approach to internationalisation (cf. e.g. Brandenburg and Federkeil, 2007). Also very active in internationalisation is the German Rector's Conference, an umbrella organisation serving as a coordinating body of 263 member institutions, representing almost all higher education institutions in Germany. The German Rector's Conference promotes internationally oriented reforms like the implementation of the European Credit Transfer System.

These bodies provide a platform for the dissemination of information and the formation of opinion, and offer (informal) channels to steer policy making. Also, they coordinate nationwide collaborative activities with supra- and international institutions (e.g. EU, UNESCO, WTO) (Hahn, 2004a: 82). According to

62 In article 2 of the Agreement on the establishment of the GWK it is stated that its members, "[...] whilst preserving their own competences, shall strive for close coordination on questions of common interest in the field of national, European and international science and research policy with the aim of strengthening Germany's position as a location for science and research in the international competition" (BMBF, 2007: 2).

Hahn (2004a), in Germany "... the intermediary institutions (next to the universities themselves) are the most active carriers of internationalisation processes" [translation LG] (ibid: 82). The high number of intermediary actors shows that "... internationalisation seems to lead to an intensified intra-institutional cooperation and communication culture" (ibid: 34). The emergence of such formal and informal cooperation and communication channels is an indication that, in response to the incentives in the global market for higher education, the strategic interaction mode in Germany is reinforced rather than weakened.

One particular instance is that German universities are engaged in "... recruiting students with help of familiar networks [with] the advantage of greater certainty about the quality of students coming into the programme" (Coate et al., 2005: 213). This is where the coordinating body I discuss in more detail comes into play, namely the German Academic Exchange Service (DAAD). On the intermediary level, the DAAD is the most important actor in internationalisation (Hahn, 2004a: 83). One of its major activities is to grant scholarships to international students, whereby its recruitment policy aims to ensure the quality of the students (and, indirectly, serves to 'buy in' academic elites from abroad). The DAAD is one of the world's largest education agencies spanning 233 higher education institutions and 128 student bodies. While the DAAD is mainly funded by the state so that it can set incentives for internationalisation, it is an independent association self-administered by the universities (cf. Darnstädt, 2007: 16). In 2005, the DAAD's budget was 248 Million €, the largest share of which came from the federal level (207 Million €)⁶³, followed by the EU (30 Million €) (DAAD, 2008). In the 1990s, a political debate emerged about the global standing of Germany as a location for science and research. Especially, it was acknowledged that 'brain drain' and 'brain gain' play an important role for the economy (Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel, Kassel, 24.01.2008). Correspondingly, since the late 1990s the DAAD has put forward a range of action schemes to promote the export activities of German universities (DAAD, 1997, DAAD, 2000).

From this perspective, the activities of the DAAD can be seen as flanking the federal export initiative and export strategy of German industry. Christian Bode, Secretary General of the DAAD, clearly emphasises the cooperation with the export-oriented industries in Germany (DAAD, 2005). In this way, the DAAD is not merely an intermediary actor whose activities reflect the strategic interaction mode in coordinated market economies, but its activities are also attuned to the demands of German firms.

At the same time, the example of the DAAD illustrates that the internationalisation of universities corresponds to relations that have developed historically. It can be argued that the DAAD serves to foster the position of Germany

63 The federal money comes from the German Foreign Office, as well as the Federal Ministries for Education and Research, Cooperation and Development, and Economics and Technology (DAAD, 2008).

in the global market for higher education, and on an abstract level reflects a collective national effort to 'catch-up' and secure Germany 'a place in the sun'. In addition, as De Wit (2002: 78) states, both in the context of Germany and the UK the internationalisation of universities also relates to the different emphases in post-World War II foreign policy. For example, in the aftermath of the world wars it was (and still is) one of the tasks of the DAAD to rebuild national prestige.

In the case of the UK, inter-university relations are characterised by a more competitive institutional set-up. Thus, it is not surprising that compared to Germany one finds fewer intermediary actors playing a significant role in the internationalisation of universities. Arguably, the functional equivalent to the DAAD would be the British Council, a government agency with quasi-autonomous status, amongst other activities assisting the marketing of British higher education institutions abroad. (Interestingly, the British Council, according to its annual report 2006-07, generates only ca. 40% of its income through government grants but 60% through examinations, commercial consultancy, and English-language teaching (British-Council, 2007: 74).)⁶⁴ An intermediary body in line with more market-based coordination and frequently mentioned in regard to internationalisation is the Quality Assurance Agency (QAA). This is an independent agency owned by the British higher education institutions and an example for British universities forming self/peer-regulating bodies. It audits and makes publicly available information about teaching quality to the government, and since 1997 also has undertaken audit visits to overseas programmes of UK universities.

In the case of the UK the government also has some limited direct influence on the internationalisation of universities through public funding councils and funding by the Ministries for Foreign Affairs, Economics, Finance, Trade and Industry, Home affairs and International Development (Kontigiannopoulou-Polydorides et al., 2004: 256).⁶⁵ Yet, frame-setting of the internationalisation of higher education is not sanctioned by intermediary actors in the way as it is in Germany. That in the case of the UK the influence of the state is not to the same extent mediated by coordinating bodies reflects the market configuration of a LME.

5.3 Specialisations in the Global Market for Higher Education

Summarising the results of the previous sections, table 5 illustrates that institutional complementarities across the identified institutional spheres are relevant in the context of the internationalisation of universities.

64 Looking at the German Rector's Conference, the functional equivalent would be Universities UK (UUK), a committee of Vice-chancellors and Principals. (De Boer et al., 2006: 26).

65 In Germany, next to the Ministry of Education and Research, crucial ministries in regard to the internationalisation of universities are the Federal Foreign Office and Federal Ministry for Economic Cooperation and Development.

Table 5: Stylized indications for institutional complementarities across institutional spheres in the context of the internationalisation of universities

Institutional Sphere	Germany - <i>Coordination Mode</i> -	UK - <i>Competition Mode</i> -
<i>University-State Relations</i>	<ul style="list-style-type: none"> - Humboldtian model - Restricted institutional autonomy - Influence of state sanctioned by intermediary actors - State 'pushes' catch-up process 	<ul style="list-style-type: none"> - Steering at distance; state preserves market-oriented institutional framework - Performance-based assessment - Producer-customer relation
<i>Corporate Governance</i>	<ul style="list-style-type: none"> - Public funding for offshore projects fosters long-term relations but restricts entrepreneurial activity - Cooperation with firms on the basis of sponsorship for international activities 	<ul style="list-style-type: none"> - Financial stringency in state funding - Internationalisation as income stream - Offshore projects have to regenerate investments quickly - Profit-oriented joint ventures in internalization
<i>University-Student Relations</i>	<ul style="list-style-type: none"> - International students attracted through networks and scholarships 	<ul style="list-style-type: none"> - Selling higher education services to international students
<i>University-Labour Market- Firm Nexus</i>	<ul style="list-style-type: none"> - Exported study programmes reflect tight match between higher education credentials and occupational outcomes in a relatively well regulated labor market; e.g., programmes exported reflect industry-specific training, and with that the institutional support CMEs provide for the development of specific and co-specific assets - Degrees exported likely to reflect domestic wages being equalized at certain skill levels - Subjects of programmes exported linked to specific strength of national economy, e.g. engineering and natural sciences 	<ul style="list-style-type: none"> - Exported study programmes rather lead to general skills, reflecting that British higher education emphasizes more generalist education; the export strategies also reflect that in Britain higher education and graduate labor markets are more loosely coupled and less sheltered from market competition - Degrees exported likely to reflect higher wage differential in the domestic market - Exported subjects are mostly based in management, finance, service, and computing, reflecting the UK's industrial strength in these sectors
<i>Industrial Relations</i>	<ul style="list-style-type: none"> - Inflexibility to adjust contracts to incentivise internationalisation 	<ul style="list-style-type: none"> - Contracts offer more room to compensate international work

Institutional Sphere	Germany - <i>Coordination Mode</i> -	UK - <i>Competition Mode</i> -
<i>Inter-University Relations</i>	- Collaborative; e.g. intra-institutional communication culture and role of national intermediary actors in internationalisation	- Competitive; e.g.: prevalence of league tables and auditing agencies; internationalisation is a matter of individual university

Against the background of these findings, the following two sections identify the specialisations of German and British universities in the global market for higher education in terms of differing internationalisation strategies (section 5.3.1) as well as differing capacities for innovation (section 5.3.2).

5.3.1 Competitive versus Collaborative Strategies

In the context of strategies towards the internationalisation of higher education, there exists both the opinion that "... competition substitutes the spirit of cooperation based on mutual trust", and that there is "... even more need for cooperation based on mutual trust" (Teichler, 2007: 76). In this section it is discussed how far these two distinct views apply in the case of the internationalisation of British and German universities.

According to the Pro-Vice Chancellor of UEA (Norwich, 15.11.2007), the *domestic elements of competition* that underwrite the competitive market mode in the British higher education system lead UK universities to adapt competition-type approaches also in the global market for higher education. An example for such a domestic element of competition is the attention paid to the university league tables and rankings.⁶⁶ This is analogous to companies in the UK being monitored chiefly through a limited number of quantifiable variables and standardized 'benchmarks', and ranked according to weighted share performance (e.g. in the Financial Times ranking of the top 100 companies in the UK) (Vitolis, 2001: 340).

The activities of British universities in the worldwide market for student fees, research and consultancy contracts is largely a matter of individual universities (Huisman et al., 2005a: 238).⁶⁷ If British universities do cooperate, then this usually results from the necessity to join-up resources in order to increase market power (Huisman et al., 2005b: 16). Thus, when fierce competition sometimes leads UK universities to cooperate, this rather works on the premise that coop-

66 Linking the dominance of league-tables and rankings back to the mode of coordination in 'LME' higher education systems, it can be observed that the steeper the hierarchy of universities in terms of status (and resources), the more does competition structure student and university behaviour (cf. Marginson, 2004: 12).

67 For example, Coate and Williams (2004) observe that "internationalisation, globalisation, and even to a large extent Europeanisation are, in England, largely a matter for individual universities" (ibid: 114).

eration and competition are two sides of the same coin (Coate et al., 2005: 202). For instance, UEA's membership in the Group of 94 "... is coined simultaneously by an ethos of competition" (Pro-Vice Chancellor UEA, Norwich, 16.11.2007).⁶⁸ In this regard, the Pro-Vice Chancellor holds the opinion that "As money changes hands mutual understanding follows" (ibid). This indicates that collaboration, be it on the national level or in the global market for higher education, is only pursued if it is paying off in financial terms and, if pursued, most often at arm's-length relation with the respective partners (cf. Evans and Williams, 2005: 69). Correspondingly, UEA has fewer collaborative agreements with neighbouring universities in the region, or with universities outside the European Erasmus exchange programme, as the preference is to recruit fee-paying students directly (Head of Admissions UEA, Norwich, 16.11.2007).⁶⁹ In deed, for many UK universities a main operational objective in regard to the Erasmus programme seems to be to capitalize on it to support European student recruitment (cf. e.g. Salford-University, 2008).

The picture looks different at the University of Kassel, which has approximately 150 bilateral agreements outside the European Erasmus framework and 22 partnerships at university level (in addition to approximately 150 bilateral agreements within the Erasmus framework), most of them subsidised through the DAAD. In the global market for higher education, German universities tend to use cooperation-type approaches, which are often more academically and culturally driven and often shaped by long-standing links and mutual trust (Coate et al., 2005: 221, Huisman et al., 2005a: 238).⁷⁰

On the global stage it is difficult for German universities to accomplish much as individual actors, but necessary to work in association with other actors (Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel, Kassel, 24.01.2008, cf. BMBF, 2008: 9). In the first and the second internationalisation strategy paper of the Senate of the University of Kassel, the aim to enhance strategic interaction with other universities in Germany, intermediary actors, and universities and partners abroad is made very explicit (Uni-Kassel, 2001, Uni-Kassel, 2006). The following are some collaborative projects University of Kassel is engaged in:

68 The *Group 94* is a grouping of 17 British universities founded in 1994 sharing common 'aims, standards, and values'.

69 The "hard-nosed few" (Head of Admissions UEA, Norwich, 16.11.2007) exchange programmes that do exist outside the Erasmus programme are mostly linked to the study programmes for which a stay abroad is compulsory, like American studies.

70 Three examples for such collaborative approaches are (1) the 'Internationale Bodensee-Hochschule', in which 24 higher education institutions from Germany, Austria, Liechtenstein, and Switzerland located nearby Lake Constance cooperate on research and teaching; (2) 'FIT für die Wissenschaft', a project in which the University Kassel and 6 further universities in the region collaboratively operate an information service on possibilities for (international) research funding and knowledge transfer; and (3) the *Verbund Norddeutscher Hochschulen*, an association assessing the internationalisation of its seven member universities in the north of Germany.

- Kassel University is a founding member of 'GATE' Germany, a consortium that offers members a range of services in the field of international marketing (Hahn, 2004a: 83).
- The Hessian universities, in a joint project, operate an office in New York to enhance students and scholarly exchange with North America.
- Kassel University in collaboration with the universities of Göttingen and Marburg runs four regional alumni networks in Latin-America, South-East Asia, Iran, and the Middle East.
- Kassel University is member the European post-graduate research network EUROGRAD (European Graduate Studies Group), a consortium of eight European universities working together in the marketing and development of postgraduate programmes.

The German approach to internationalisation reflecting the strategic interaction mode is also illustrated by a specialisation in *foreign backed institutions*.⁷¹ Research on foreign backed institutions is still in its early stages. However, Anglophone universities observe this particular strategy of German universities with great interest. To name just some German foreign-backed institutions, there is the 'German Institute of Science and Technology' in Singapore, a project by the Technical University Munich, with financial support from Degussa, Wacker, Merck, BASF, Bayer, Celanese, Südchemie and Allianz. These firms offer support, for example, through traineeship places, research contracts, and by founding chairs (Loreck, 2005). This institute's focus on industrial courses in a country where the pharmaceutical industry is a strong economic factor, serves well the interests of these companies, most of them global players in the chemical industry (cf. Lisberg-Haag, 2004a: 90-92). Another German foreign-backed institute is the 'Thai-German Graduate School of Engineering' in Bangkok of the RWTH Aachen University. Given that Thailand is an excellent production site for the automobile industry, it is not surprising that companies like Siemens, ABB, Bayer, BMW, and Mercedes-Benz are involved in this graduate school, which they expect to 'produce' local experts (cf. Lisberg-Haag, 2004b: 86-89). All of these examples illustrate that the internationalisation of universities is flanked by a coordinate presence of the German industry abroad (cf. BMBF, 2008: 7). Moreover, there are also projects which involve the development of whole universities. An example is the German University in Cairo, a joint project of the Universities of Ulm and Stuttgart, with a focus on basic sciences, engineering and technology (Spross, 2004: 80-83).⁷²

71 The term foreign backed institution is related to academic patronage and refers to a developed system of support for a new institution or programme abroad, in close cooperation with universities and relevant actors in the target country (Lanzendorf, 2007a).

72 Further partners in the German University in Cairo are the University of Mannheim, the University of Tübingen, the German Academic Exchange Service (DAAD), the German Embassy in Cairo, the German Arab Chamber of Commerce, the Goethe-Institute, the Ministry of Higher Education (Egypt), the Ministry of Science, Research and the Arts (Baden-Württemberg), the Federal Ministry of Education and Research (Germany), and the Acad-

The foreign-backed university I now describe in more detail is the Hessen-Vietnam University in Hanoi. This is a not-for profit university for up to 2,000-3,000 students that Kassel University and eleven other Hessian higher education institutions are building in a joint endeavour, in cooperation with the Vietnamese Ministry for Education.⁷³ A key stakeholder and start-up investor is the Hessian Ministry of Higher Education, Research and the Arts. From 2008/09 students can enrol in subjects such as natural science, engineering, economics, social sciences, medicine and pharmacy. Teaching will be in English, but students take German classes from the first year onwards, to then take up internships and consecutive studies in Hessen. When the agreement was signed in Hanoi in Mai 2007, Udo Cortes, the Hessian Minister of Higher Education, Research and the Arts, stated that "International higher education policy at the same time is foreign economic policy" and that "We want to win the country's masterminds for us" [translation LG] (Euler, 2007). Thus, it is made quite obvious that a major rationale behind the project is to build strong links with the future elites of Vietnam, a country that is considered very attractive given its rapid economic growth (cf. HMWK, 2007a, b, c).

Another field in which the collaborative approach of German universities can be detected is their active participation within the European Research Area. Indeed, German actors are involved in more than 80% of the EU's collaborative projects in the field of higher education and research (BMBF, 2008: 15). Just one example is the engagement in European research cooperation-networks such as COST (Coopération Européenne dans le domaine de la recherche scientifique et technique). In the case of the University of Kassel, the biggest share of its international activities is located within Europe (Head of the Department for Internationalisation, International Relations and Public Relations at University of Kassel, Kassel, 24.01.2008). That German universities actively support the 'European idea' is in line with Germany defining itself as core member of the European Union (Hahn, 2004b: 61). In the case of the UK, it stands out that it is the only country in the European Union in which participation in exchange programmes and study abroad within Europe have declined. This is partly explained due to lack of interest of British students to study abroad, which might in turn be related to the lack of interest in foreign languages (Pro-Vice Chancellor UEA, Norwich, 15.11.2007). However, the major reason for limited coopera-

emy of Visual Arts Leipzig. Further German-backed universities are the Deutsch-Kasachsische Universität (1999), German-Jordanian University of Applied Sciences (2005), Wadi German-Syrian University (2005), Oman-German University of Technology (2008), Chinese-German University of Applied Sciences (to be developed), German-Pakistani University (under negotiation), German-Turkish University (under negotiation) (Lanzendorf, 2007b).

73 It is interesting to note that in the case of the UK, international branch campus projects are usually carried out by individual universities, such as the branch campus of the University of Nottingham in Ningbo, China. (The branch campus started operations in 2004 and is built for a total of 4,000 students.) The University of East Anglia is currently not involved in an international branch campus project.

tion within Europe is disinterest in networks that are not directly profit generating (Evans and Williams, 2005: 69). Erasmus is seen as a cost burden (Pro-Vice Chancellor UEA, Norwich, 15.11.2007). The Head of Admissions of UEA (Norwich, 16.11.2007) finds that “There is no point in doing Erasmus” and wishes he had signed fewer Erasmus contracts. It is telling that in UEA’s internal accounting system only *non-EU* students are identified as international students, but not students from EU countries, simply as these are charged the same fees as home students. In the end, British universities see continental Europe first of all as a source for research funding (Coate et al., 2005: 224).⁷⁴

Since the late 1990s, the DAAD has designed programmes that are more entrepreneurially oriented and in which universities themselves are seen as service exporters. While more entrepreneurial calculated programmes charge tuition fees of between 1,000 Euros and 10,000 Euros, the intention is ‘merely’ to make these programmes financially self-sustainable in the long-run (cf. Lanzendorf, 2007b). Such programmes still reflect the German approach to foster participation in international collaborations, strategic alliances, and networks (Kontigiannopoulou-Polydorides et al., 2004: 251). For instance, the 2008 strategy paper of the Federal Ministry of Education and Research on the internationalisation of higher education puts a special emphasis on dialogue and the creation of networks with partners both inside and outside Germany (BMBF, 2008). This shows that the majority of the activities is still cooperation based (Hahn, 2004b: 76): “... we still find the overwhelming majority of activities in conformity with the more cooperative approach of internationalisation, driven by a mix of rationales”. This also corresponds to the institutional configuration in the national higher education system in Germany, in which some elements of market-competition have been introduced recently, but in which competition is not shaping the basic structure of the system (Nullmeier, 2000: 210, cf. Rau, 1993).

It can be summarised that universities from Germany and the UK put different emphasis in how they approach the global market for higher education, as illustrated by the comparison of the University of Kassel and the University of East Anglia. In table 6 below I interpret the relative level of activity of German and British universities with respect to four internationalisation approaches. Thereby, these approaches can be linked back to the structural incentives outlined in section 2.2. In particular, (1) the revenue-generating approach is linked to the economic rationale, (2) the skilled migration approach to the economic and academic rationales, (3) the mutual understanding approach to the academic, cultural, and political rationales, and (4) the capacity building approach to the political rationale.

As shown in table 6, relative to the dominant approaches the mutual understanding and the capacity building approach appear as minor drivers in today’s global market for higher education, rendering the cooperation with developing

74 In this context, universities from continental Europe are mostly perceived as competitors for research funds from Brussels (Evans and Williams, 2005: 83).

countries a “separately identifiable strand” (Kontigiannopoulou-Polydorides et al., 2004: 253).⁷⁵

In the case of both countries, the activities in the global market for higher education are underwritten by economic rationales. Many countries, albeit more slowly, are moving in the same direction as the UK in that commercial considerations become more explicit in the internationalisation of universities (Kontigiannopoulou-Polydorides et al., 2004: 273). However, whereas British universities are more active in projects that are directly revenue-generating, those of German universities do not lead to immediate profits, but rather tend to generate returns in the medium and long run, e.g. in the form of ‘brain gain’ or through familiarising local elites in foreign countries with German products and product technology.

Table 6: *Relative intensity of involvement in distinct approaches to the global market for higher education*

Approach	Germany	UK
<i>Revenue-generating</i> (e.g. exporting education services on full-fee basis without public subsidies)	+	+++
<i>Skilled migration</i> (e.g. attracting foreign students to work in country’s knowledge economy)	+++	++
<i>Mutual understanding</i> (e.g. pursuing political, cultural, academic, and development aid goals.)	++	+
<i>Capacity building</i> (e.g. building-up a developing country’s economic capacity)	+	+

The “+” sign refers to the intensity of involvement in the respective approach relative to that same country’s involvement in the other approaches, as well as relative to the other country’s involvement in this approach.

Source: Author; categories derived from OECD (2004: 12-13)

5.3.2 Differing Capacities for Innovation

Innovation is usually considered to be one of the most important dimensions for economic success. Innovation systems of liberal and coordinated market economies have quite distinct qualities. Table 7 illustrates some of the comparative advantages of each innovation system.

75 Further research could enquire whether engagement in these two approaches has a rather rhetorical character and essentially serves to justify some form of ‘cultural colonialism’ (cf. section 2.3).

Table 7: Comparative advantages of different innovation systems

	Coordinated market economy	Liberal market economy
<i>Strength of national innovation system</i>	<ul style="list-style-type: none"> - Producing incremental innovations in well-established sectors - Updating mass production; further developing mature technologies with the aim of quality and product differentiation 	<ul style="list-style-type: none"> - Producing radical innovations - Supporting market entry of innovative new products

Source: Author's depiction, derived from e.g. Hall and Soskice (2001) and Boyer (2003: 180-181)

The internationalisation of British and German universities reflects many of these different national strengths. One major advantage of the UK system is that it is "intense and quick" (Head of Admissions UEA, Norwich, 16.11.2007).⁷⁶ Academic freedom enables British universities to set up new programmes rapidly, which when exported can then survive direct competition with the subsidised national programmes (Evans and Williams, 2005: 68). Hence, British universities have the capability to respond quickly to challenges presented in the global market for higher education (ibid: 67). The national institutional framework permits individual and innovative strategies, and with that facilitates radical innovation and first-mover advantages in the global market for higher education. An example is the current plan of UEA to establish its School of Environmental Science as a global player in the setting of standards for the measurement of environmental change, and to sell the related expertise to governments world-wide (Pro-Vice Chancellor UEA, Norwich, 15.11.2007).

While the British universities appear as first-movers in regard to internationalisation, German universities rather are challengers and 'nichers'.⁷⁷ Germany has been relatively slow to reduce barriers to internationalisation, for example in developing a sophisticated service infrastructure for international students (cf. Coate et al., 2005: 233, Hahn, 2004b). Andreas Storm, State Secretary in the Federal Ministry for Education and Research, observes a lack of pioneer spirit: "We are not yet big players, as we have discovered later than others how important the export of higher education is" (Janus, 2006). However, that Germany is a 'second-mover' is also related to the mode of coordination in the higher education system: "... the federal structure of government and the consensus culture among 'social partners' (trade unions and employers) make the

76 For example, a major attractiveness of British MA programmes to international students is that they last only about one year. Currently there are even plans to introduce 2-year undergraduate programmes.

77 Davies, in the context of the internationalisation of universities, defines 'challengers' as those that make substantial investments hoping to take on leaders; and 'nichers' as those trying to secure near to monopoly position for specialist services in a market segment relatively unattained by others (Davies, 1995: 13-14).

implementation of reforms [in higher education] difficult" (Kehm and Lanzen-dorf, 2006: 136).

Then again, the internationalisation of German universities is predicated on incremental innovation. An example is the establishment of international post-graduate study programmes especially designed to attract international students (Hahn, 2005a: 24). In 2004 there existed 372 of such international study programmes in Germany, most of them taught in English (Hahn, 2004b: 66). (The University of Kassel alone runs eight of these programmes.) Of the non-English speaking countries, Germany is the leading ELTDP (English-Language-Taught-Degree Programmes) provider. In fact, British universities perceive these programmes as serious competition, given that they are usually much cheaper than their own programmes (Head of Admissions UEA, Norwich, 16.11.2007, cf. Fielden, 2007). German universities also have started to introduce specific regulations aimed at increasing their attractiveness to international students. Examples are outsourced admission procedures for international study programmes, and modified governance structures including internationalisation committees and strategic coordinative working units on internationalisation (all of which foster the emergence of new formal and informal communication channels) (Hahn, 2005a: 28, Huisman and Wende, 2005: 34).⁷⁸

Germany being a 'latecomer' in comparison to the UK to a certain extent explains why the internationalisation of its universities is currently driven more by the government and is more oriented to national goals. The intention is to catch up in an area of increasing concern for the national economy (namely the performance in the global market for higher education). In this context, the internationalisation programmes that the state finances, e.g. through the DAAD, can be seen as a strategy to 'buy in' dynamics for internationalisation that initially are not prevalent. However, the internationalisation of British universities, as 'first-movers' and embedded in a more competitive national context, is market-driven rather than by collective national goals.

Interestingly, German universities receive positive feedback from their more collaborative approach. The local partners appreciate that the Germans aim to integrate their programmes into the local higher education system, which frequently is not the case with the programmes e.g. by British and Australian universities (cf. Loreck, 2005). While Anglo-Saxon universities tend to franchise their home programmes and push through their own concepts, German universities usually offer tailor-made programmes in cooperation with the local partner universities abroad (cf. Leendertse, 2007: 78).

The different strengths in innovation are reflected in the focus German and British universities place on distinct product markets. To summarise some of the observations made above, British universities are operating effectively in selling higher education services to the mass-market. German universities, on the other hand, are rather niche players (cf. Hahn, 2005a: 25) focusing on for-

78 This contrasts with British universities where internationalisation appears to be more the business of top management.

eign-backed programmes offering research-based teaching including Master and PhD programmes that are intended to become 'islands of excellence' (cf. Lanzendorf, 2007b). Here, a major rationale is to establish a close relationship with Germany and, in this way, to build strong links to high-potentials in economically interesting regions. As the Deputy Secretary-General of the DAAD, Dorothea Rüländ, states, the German export of higher education cuts its own path in order to distinguish itself from the Anglo-Saxon competitors (Janus, 2006).

6. Conclusion

The aim of this paper has been to examine the extent to which the distinct institutional features associated with varieties of capitalism are apparent in the internationalisation of the British and German universities. According to the 'one best way' hypothesis, there should be one most effective practice that universities must adopt in the global market for higher education, or face severe penalties. However, the cases observed have not shown that differences in the internationalisation of universities are deviations from one sole 'best practice'. Rather, the results are in line with the path dependence hypothesis as the specialisations of universities in cross-border activities are influenced by and reflect the institutional configuration and mode of coordination prevalent in the national higher education system and political economy, leading to the maintenance of specific comparative institutional advantages.⁷⁹

Universities from Germany and the UK have put different emphasis in their approach to the global market for higher education and continue to do so. Here, such differences led us to argue that national models of capitalism are articulated in the internationalisation of universities. In the first step, I showed that in both German and British universities similar structural incentives offered in the global market for higher education apply. Based on the concepts such as *institutional complementarity* and *comparative institutional advantage* theoretical expectations were raised why the internationalisation of universities from CMEs (Germany) and LMEs (UK) nevertheless follow divergent paths. In particular, in applying the VoC approach, I showed that the higher education system is a complementary subsystem within the national model of capitalism. Higher education systems based more on market coordination (as in the case of Britain) were identified and contrasted with those based more on strategic interactions (as in the case of Germany). Thus, in this paper the VoC approach was developed to better understand the role of higher education in advanced industrial countries.

The analysis has shown that VoC can be fruitfully applied to the study of higher education. However, in regard to the criticism that the VoC approach downplays the role of the state, it has, indeed, turned out to be necessary to add the state as a factor of differentiation to enhance the applicability of VoC to the field of higher education research. In the case of Germany the state appears to 'push' universities to catch-up with internationalisation, whereas the internationalisation of British universities is 'pulled' more directly by market forces. In the former case, the pressure of global market tends to create a concerted response by the actors in the national higher education system, whereas in the latter case the same pressure rather leads to increased competition between universities in the higher education system.

⁷⁹ For a detailed summary, see also table 5 at the beginning of section 5.3.

Whether similar results would be found in other LMEs and CMEs besides Germany and the UK is the province of future research. While a more conclusive statement would require further comparative research, it can be noted that across developed economies patterns appear which fit the hypothesis that varieties of capitalism are articulated in the national internationalisation patterns of universities. For example, LMEs are leaders in the market for the export of study programmes as a commercial service commodity. This can be easily confirmed by cross-checking the list of OECD countries that Hall and Soskice (2001) classify as LMEs (i.e. the US, the UK, Australia, Canada, New Zealand, and Ireland) with the list of countries that Hahn (2005b: 23) identifies as market leaders in numbers of offshore programmes, students enrolled in offshore programmes, and international branch campuses, namely the UK, the US, Australia, Canada, and New Zealand. That universities from LMEs tend to be the first movers in the sector of for-profit offshore projects indicates parallels between the institutional configuration of a political economy and market share in particular sectors of cross-border higher education. However, this does not imply that LMEs are generally more successful in all sectors of cross-border higher education, such as international student exchange.

While the differences presented in the above case studies do not indicate that one approach to internationalisation is generally superior to the other German universities nevertheless must adapt to some international standards, which appear biased towards the LME mode of coordination, in their internationalisation strategies. An example would be that most of the programmes that German universities export have the binary BA and MA degree structure (cf. e.g. Hoffrogge, 2005: 22). Yet, the research presented indicates that German universities need not adapt completely to stand competition in the global market for higher education since adaptations are contingent upon the national institutional framework. Rather, the implication, in line with the VoC tenets, is that universities from Germany and the UK have quite different capacities for innovation with regard to the export of higher education services. For instance, while British universities are strong and innovative in the export of study programmes for the mass market, universities from Germany open up new markets by exporting differentiated programmes with stronger involvement of the respective partners abroad. Table 8 gives an overview in relation to these comparative institutional advantages.

The specialisations described in the table above further highlight parallels between the mode of coordination in the national model of capitalism and the internationalisation of universities. An interesting question for further research is whether such difference in the approaches universities have towards internationalisation is possibly *mutually beneficial* for the two higher education systems. In this context, we could test whether the different patterns in the internationalisation of universities are 'complementary', reinforce comparative institutional advantages, and thus reduce direct competition between the two systems - while at the same time 'feeding' the other system with innovations. This

Table 8: Stylized description of specialisations in international competition

	Germany	UK
Strategy towards Internationalisation	<ul style="list-style-type: none"> - Coordinated strategies; e.g.: foreign backed institutions; European dimension to internationalisation 	<ul style="list-style-type: none"> - Individual, commercial and market-based strategies; e.g.: commercial franchise agreements; recruitment agencies
Capacities for Innovation and Product Markets	<ul style="list-style-type: none"> - Challenger and niche player - Incremental innovation; exported programmes are differentiated and tailored to niche markets - Offshore projects focused on postgraduate studies and research 	<ul style="list-style-type: none"> - First-mover advantage - Quick response to new opportunities in global market for higher education - Innovation in development of offshore programmes for mass market

would imply that both systems can prosper from the differences in their institutional configuration, which would bring a rather optimistic message about the persistence of contrasting internationalization paths. In any case, given the crucial impact the state has on the configuration of the higher education system, policy makers in Germany should be wary with reforms that push higher education towards the Anglo-Saxon model, as the related liberalisation may lead to dysfunctionalities within the system and put at risk the specific comparative institutional advantage German universities currently have in global education markets.

References

- Albert, M. (1993): *Capitalism against Capitalism*, London: Whurr.
- Altbach, P. G. & Knight, J. (2007): The Internationalization of Higher Education: Motivations and Realities. In: *Journal of Studies in International Education*, 11, 290-305.
- Amable, B. (1999): Institutional Complementarity and Diversity of Social Systems of Production and Innovation. *Discussion Paper FS 99-309*. Berlin, Social Science Research Center Berlin.
- Amable, B. (2003): *The Diversity of Modern Capitalism*, Oxford: Oxford University Press.
- Amable, B. (2005): Complementarity, Hierarchy, Compatibility, Coherence. In: Streeck, W. (Ed.), *Dialogue on 'Institutional Complementarity and Political Economy'*. *Socio-Economic Review*, Vol. 3, 359-382.
- Aoki, M. (1994): The Japanese Firm as a System of Attributes: A Survey and Research Agenda. In: Aoki, M. & Dore, R. (Eds.), *The Japanese Firm: Sources of Competitive Strength*. Oxford: Clarendon Press, 11-40.
- Archer, M. S. (1989): Cross-National Research and the Analysis of Educational Systems. In: Kohn, M. L. (Ed.), *Cross-National Research in Sociology*. London: Sage, 242-262.
- Armbruster, B. (2007a): *Uni Kassel international: Stärken und Schwächen – Erster Kennzahlen-Bericht zum Stand der Internationalisierung Phase II*, Publik Kassler Hochschulzeitung, 10.7.2007, Kassel: Universität Kassel.
- Armbruster, B. (2007b): *Universität Kassel – Heute für Morgen*, Kassel: Präsidium Universität.
- Arthur, W. B. (1994): *Increasing Returns and Path Dependence in the Economy*, Ann Arbor: University of Michigan Press.
- Barrow, C. W., Didou-Aupetit, S. & Mallea, J. (2003): *Globalisation, Trade Liberalisation, and Higher Education in North America - The Emergence of a New Market under NAFTA?* Dordrecht: Kluwer Academic Publishers.
- Bekhradnia, B. & Vickers, P. (2007): *The Economic Costs and Benefits of International Students*. Oxford, UK, Higher Education Policy Institute.
- Black, J. (2002): *Dictionary of Economics*. 2nd ed. Oxford, Oxford University Press.
- BMBF (2007): *Notification of the Administrative Agreement between the Federal and Länder Governments on the Establishment of a Joint Science Conference (GWK Agreement)*, Berlin: Bundesministerium für Bildung und Forschung (BMBF).
- BMBF (2008): *Deutschlands Rolle in der globalen Wissensgesellschaft stärken - Strategie der Bundesregierung zur Internationalisierung von Wissenschaft und Forschung*. Berlin, Bundesministerium für Bildung und Forschung (BMBF).
- Böhm, A., Davis, D., Meares, D. & Pearce, D. (2002): *Global Student Mobility 2025 – Forecasts for the Global Demand for International Higher Education*. *IDP Research Publication*. Sydney, IDP Education Australia.
- Boyer, R. (2003): The Embedded Innovation Systems of Germany and Japan: Distinctive Features and Futures. In: Streeck, W. & Yamamura, K. (Eds.), *The End of Diversity? Prospects for German & Japanese Capitalism*. Ithaca: Cornell University Press.
- Boyer, R. (2005): Complementarity in Regulation Theory. In: Streeck, W. (Ed.), *Dialogue on 'Institutional Complementarity and Political Economy'*. *Socio-Economic Review*, Vol. 3, 359-382.

- Boyer, R. & Hollingsworth, J. R. (1997): Coordination of Economic Actors and Social Systems of Production. In: Boyer, R. & Hollingsworth, J. R. (Eds.), *Contemporary Capitalism - The Embeddedness of Institutions*. Cambridge: Cambridge University Press.
- Brandenburg, U. & Federkeil, G. (2007): *How to Measure Internationality and Internationalisation of Higher Education Institutions! Indicators and Key Figures*. Working Paper No. 92. Gütersloh, CHE Centre for Higher Education Development.
- British-Council (2007): *Annual Report 2006-07*. London, British Council.
- Brömer, J. (2006): *Jahresbericht Universität Kassel 2005*, Kassel: Präsidium der Universität Kassel.
- Bultmann, T. (2008): Kartell der Profiteure - Die "Exzellenzinitiative" und ihre Auswirkungen auf die Hochschullandschaft. *Junge Welt*, 05.08.2008. Berlin.
- Campbell, J. L., Hollingsworth, J. R. & Lindberg, L. N. (1991): Economic Governance and the Analysis of Structural Change in the American Economy. In: Campbell, J. L., Hollingsworth, J. R. & Lindberg, L. N. (Eds.), *Governance of the American Economy*. Cambridge: Cambridge University Press.
- Campbell, J. L. & Pederson, O. K. (2005): The Varieties of Capitalism and Hybrid Success: Denmark in the Global Economy. *Published in Comparative Political Studies, Vol. 40, No. 3, 307-332 (2007)*.
- Clark, B. R. (1983): *The Higher Education System - Academic Organization in Cross-National Perspective*, Berkeley: University of California Press.
- Clark, B. R. (1993): Conclusion. In: Clark, B. R. (Ed.), *The Research Foundations of Graduate Education. Germany, Britain, France, US, Japan*. Berkeley: University of California Press, 355-378.
- Coate, K., Kontigiannopoulou-Polydorides, G., Luijten-Lub, A., Papadiamantaki, Y., Stamelos, G., Van der Wende, M. & Williams, G. (2005): International Comparative Analysis. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalization*. Bonn: Lemmens.
- Coate, K. & Williams, G. (2004): The United Kingdom. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition - National and European Policies for the Internationalization of Higher Education*. Bonn: Lemmens.
- Coulby, D. (2005): The Knowledge Economy - Technology and Characteristics. In: Coulby, D. & Zambeta, E. (Eds.), *Globalization and Nationalism in Education - World Yearbook of Education 2005*. Now York: RoutledgeFalmer, 23-36.
- Crouch, C. (2005): *Capitalist Diversity and Change: Recombinant Governance and Institutional Entrepreneurs*, Oxford: Oxford University Press.
- Crouch, C. & Farrell, H. (2002): *Breaking the Path of Institutional Development? Alternatives to the New Determinism*. Discussion Paper 02 / 5. Cologne, Max-Planck-Institut for the Study of Societies (MPIfG).
- Crouch, C., Finegold, D. & Sako, M. (2004): *Are Skills the Answer? The Political Economy of Skill Creation in Advanced Industrial Countries*, Oxford: Oxford University Press.
- Culpepper, P. D. (2007): Small States and Skill Specificity: Austria, Switzerland, and Interemployer Cleavages in Coordinated Capitalism. In: *Comparative Political Studies*, Vol. 40, No. 6, 611-637.
- Culpepper, P. D. & Thelen, K. (2008): Institutions and Collective Actors in the Provision of Training: Historical and Cross-National Comparisons. In: Mayer, K. U. & Solga, H. (Eds.), *Skill Formation: Interdisciplinary and Cross-National Perspectives*. New York: Cambridge University Press.

- DAAD (1997): *Studien- und Wissenschaftsstandort Deutschland: Aktionsprogramm des DAAD zur Förderung des Studiums von Ausländern an deutschen Hochschulen*, Bonn: DAAD.
- DAAD (2000): *Zweites Aktionsprogramm des DAAD zur Stärkung der internationalen Wettbewerbsfähigkeit des Studien- und Wissenschaftsstandorts Deutschland*, Bonn: DAAD.
- DAAD (2005): *Export deutscher Studienangebote – DAAD-Tagung "Studienangebot im Ausland" eröffnet*, <http://www.daad-magazin.de/00757/index.html> (last accessed: 04.02.2008), DAAD-Magazin, 02.03.2005: Deutscher Akademischer Austauschdienst (DAAD).
- DAAD (2008): *DAAD - Herkunft und Verwendung der Mittel*, <http://www.daad.de/portrait/de/1.8.html> (last accessed: 08.02.2008): Deutscher Akademische Austauschdienst (DAAD).
- Darnstädt, T. (2007): *Was ist eigentlich. Der Deutsche Akademische Austauschdienst?* Uni-Spiegel (4/2007), Hamburg: Spiegel-Verlag.
- Davies, J. L. (1995): *University Strategies for Internationalization in Different Institutional and Cultural Settings - A Conceptual Framework. Fifth Annual EAIE Conference*. The Hague.
- Davies, L., Lowes, B. & Pass, C. (2000): *Economics Dictionary*. 3rd ed. Glasgow, Harper Collins.
- De Blij, H. J. & Downs, R. (2006): *National Geographic Collegiate Atlas of the World*, Wil- lar- d: R.R. Donnelley & Sons.
- De Boer, H., Enders, J. & Leišytė, L. (2006): *England - The Prototype of the 'Evaluative State'*. In: Kehm, B. M. & Lanzendorf, U. (Eds.), *Reforming University Governance – Changing Conditions for Research in Four European Countries*. Bonn: Lemmens.
- De Wit, H. (2002): *Internationalization of Higher Education in the United States of America and Europe*, Westport: Greenwood Press.
- De Wit, H. & Callan, H. (1995): *Internationalisation of Higher Education in Europe*. In: De Wit, H. (Ed.), *Strategies for Internationalization of Higher Education - A Comparative Study of Australia, Canada, Europe, and the United States of America*. Amsterdam: European Association for International Education (EAIE).
- De Wit, H. & Knight, J. (1995): *Strategies for Internationalisation of Higher Education: Historical and Conceptual Perspectives*. In: De Wit, H. (Ed.), *Strategies for Internationalisation of Higher Education*. Amsterdam: European Association for International Education, 5-32.
- Deem, R. (2004): *New Managerialism in UK Universities: Manager-academic Accounts of Change*. In: Eggins, H. (Ed.), *Globalization and Reform in Higher Education*. Buckingham: Open University Press, 55-67.
- DiMaggio, P. J. & Powell, W. W. (1983): *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*. In: *American Sociological Review*, 48, 147-160.
- DiMaggio, P. J. & Powell, W. W. (1991): *Introduction*. In: Powell, W. W. & DiMaggio, P. J. (Eds.), *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.
- Djelic, M.-L. & Quack, S. (2007): *Overcoming Path Dependency: Path Generation in Open Systems*. In: *Theory and Society*, Vol. 36, 161-186.
- Estevez-Abe, M., Iversen, T. & Soskice, D. (2001): *Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State*. In: Hall, P. A. & Soskice, D. (Eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press, 145-183.

- Euler, R. (2007): *Hessisch-Vietnamesische Kooperation - Hessen will Universität in Vietnam Gründen*, F.A.Z. Net, 22.05.2007, <http://www.faz.net/s/Rub8D05117E1AC946F5BB438374CCC294CC/Doc~E0517BC1D305443D3AA0C517D360BBE19~ATpl~Ecommon~Scontent.html> (last accessed: 06.02.2008).
- Evans, J. & Williams, G. (2005): English University Responses to Globalisation, Internationalization and Europeanization. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalisation*. Bonn: Lemmens.
- Ferlie, E., Ashburner, L., Fitzgerald, L. & Pettigrew, A. (1996): *The New Public Management in Action*, Oxford: Oxford University Press.
- Fielden, J. (2007): Global Horizons for UK Universities. London, Council for Industry and Higher Education.
- Füller, C. (2005): *Wir verkaufen uns noch unter Wert!* <http://www.daad-magazin.de/03095/index.html> (last accessed: 08.02.2008), DAAD-Magazin, 04.05.2005, Bonn: Deutscher Akademischer Austauschdienst (DAAD).
- Gingerich, D. W. & Hall, P. A. (2001): Varieties of Capitalism and Institutional Complementarities in the Macroeconomy: An Empirical Analysis. *Annual Meeting of the American Political Science Association*. San Francisco, California.
- Gingerich, D. W. & Hall, P. A. (2004): *Varieties of Capitalism and Institutional Complementarities in the Macroeconomy: An Empirical Analysis*. Discussion Paper, Max-Planck-Institut für Gesellschaftsforschung.
- Goldschmidt, D. (1991): Idealtypische Charakterisierung sieben westlicher Hochschulsysteme. In: *Zeitschrift für Sozialforschung und Erziehungssoziologie*, Vol. 11, 3-17.
- Greinert, W.-D. (2005): Mass vocational education and training in Europe. *CEDEFOP Panorama*, 118. Luxembourg, European Communities.
- Hahn, K. (2004a): *Die Internationalisierung der deutschen Hochschulen - Kontext, Kernprozesse, Konzepte und Strategien*, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Hahn, K. (2004b): Germany. In: Huisman, J. & Van der Wende, M. (Eds.), *On cooperation and competition - National Policies for the Internationalization of Higher Education*. Bonn: Lemmens, 51-79.
- Hahn, K. (2005a): German Universities in the Process of Globalisation, Europeanisation and Internationalisation. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalisation*. Bonn: Lemmens.
- Hahn, K. (2005b): Hochschulen auf dem internationalen Bildungsmarkt und die Positionierung Deutschlands. In: Hahn, K. & Lanzendorf, U. (Eds.), *Wegweiser Globalisierung - Hochchulsektoren in Bewegung. Länderanalysen aus vier Kontinenten zu Marktchancen für deutsche Studienangebote*. Kassel: INCHER, 13-35.
- Hahn, K. & Lanzendorf, U. (2007): *Der Globale Markt für Hochschulbildung - Trends im Grenzüberschreitenden und Gebührenpflichtigen Angebot von Studiengängen*. Kassel, International Centre for Higher Education Research.
- Hall, P. A. (2008): Systematic Process Analysis: When and How to Use It. In: *European Political Science*, Vol.7, No.3, 304-317.
- Hall, P. A. & Soskice, D. (2001): An Introduction to Varieties of Capitalism. In: Hall, P. A. & Soskice, D. (Eds.), *Varieties of Capitalism - The Institutional Foundation of Comparative Advantage*. New York: Oxford University Press, 1-68.
- Hall, P. A. & Thelen, K. (2008): Institutional Change in Varieties of Capitalism. In: *Socio-Economic Review*, published online, October 14, 2008, p.1-28.

- Hancké, B., Rhodes, M. & Thatcher, M. (Eds.) (2007): *Beyond Varieties of Capitalism - Conflicts, Contradictions, and Complementarities in the European Economy*, New York: Oxford.
- Heap, S. H., Hollis, M., Lyons, B., Sudgen, R. & Weale, A. (1992): *The Theory of Choice - A Critical Guide*, Oxford: Blackwell.
- HESA (2006): *All Students by Institutions, Mode of Study, Level of Study, Gender and Domicile 2005/06*, http://www.hesa.ac.uk/index.php?option=com_datatables&Itemid=121&task=show_category&catdex=3 (last accessed: 12.02.2008): Higher Education Statistics Agency (HESA).
- HMWK (2007a): Gemeinsame Absichtserklärung über die Zusammenarbeit bei der Gründung einer Deutsch-Vietnamesischen Universität. Hessisches Ministerium für Wissenschaft und Kunst (HMWK), Wiesbaden.
- HMWK (2007b): Wesentliche Punkte aus den Gesprächen mit dem Vietnamesischen Ministerium für Erziehung und Ausbildung. Hessisches Ministerium für Wissenschaft und Kunst (HMWK), Wiesbaden.
- HMWK (2007c): *Wissenschaftsminister Corts unterzeichnet Vereinbarung in Anwesenheit von Bundespräsident Köhler in Hanoi*, Wiesbaden: Hessisches Ministerium für Wissenschaft und Kunst (HMWK), Pressemitteilung, 22.05.2008.
- Hoffrogge, R. (2005): GATS, Bologna und die deutsche Hochschullandschaft. In: Berlin, A. F. (Ed.), *Universität im Umbruch*. Berlin: Allgemeiner Studierendenausschuß (AStA) der Freien Universität Berlin.
- Hollingsworth, J. R., Schmitter, P. C. S. & Streeck, W. (1994): Capitalism, Institutions, and Performance. In: Hollingsworth, J. R., Schmitter, P. C. & Streeck, W. (Eds.), *Governing Capitalist Economies - Performance and Control of Economic Sectors*. Oxford: Oxford University Press.
- Hughes, R. (2008): Internationalisation of Higher Education and Language Policy: Questions of Quality and Equity. In: *Higher Education Management and Policy*, OECD, Vol. 20, No.1.
- Huisman, J., Luijten-Lub, A. & Van der Wende, M. (2005a): Conclusions, Reflections and Recommendations. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalization*. Bonn: Lemmens.
- Huisman, J., Luijten-Lub, A. & Van der Wende, M. (2005b): Introduction. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalization*. Bonn: Lemmens.
- Huisman, J. & Wende, M. v. d. (Eds.) (2004): *On Cooperation and Competition - National and European Policies for the Internationalization of Higher Education*, Bonn: Lemmens.
- Huisman, J. & Wende, M. v. d. (Eds.) (2005): *On Cooperation and Competition II - Institutional Responses to Internationalization, Europeanization and Globalisation*, Bonn: Lemmens.
- IIE (2008): *Atlas of Student Mobility - The Official Web Site of Project Atlas*, <http://www.atlas.iienetwork.org/> (last accessed: 09.01.2008): Institute of International Education (IIE).
- Janus, A. (2006): *Bangkok bis Riga - Bildung made in Germany*, <http://www.daad-magazin.de/06495/index.html> (last accessed: 08.02.2008), DAAD-Magazin, 06.12.2006, Bonn: Deutscher Akademischer Austauschdienst (DAAD).
- Jungclausen, J. F. (2007): *Das Neue Empire*, Hamburg: DIE ZEIT, 27.07.2007.

- Kamm, R. (2008): Wettbewerb in der Hochschulbildung: Hochschulen zwischen Marktzwang und staatlicher Steuerung. *Jahrestagung der DVPW-Sektion "Politik und Ökonomie": Die nächste große Transformation? Marktschaffende Politik*. Cologne.
- Kehm, B. M. (2006): Germany. In: Altbach, P. G. & Forest, J. J. F. (Eds.), *International Handbook of Higher Education - Part Two*. Dordrecht: Springer.
- Kehm, B. M. & Lanzendorf, U. (2006): Germany - 16 Länder Approaches to Reform. In: Kehm, B. M. & Lanzendorf, U. (Eds.), *Reforming University Governance - Changing Conditions for Research in Four European Countries*. Bonn: Lemmens.
- Kehm, B. M. & Teichler, U. (2007): Research on Internationalization in Higher Education. In: *Journal of Studies in International Education*, Vol. 11, No. 3/4, Fall/Winter 2007, 260-273.
- Kemp, N. (2004): The Global Market for Higher Education in Business and Management (1): Trends and Forecasts. London, The British Council.
- King, R. (2004): *The University in the Global Age*, Basingstoke: Palgrave Macmillan.
- Knight, J. (1997): Internationalization of Higher Education: A Conceptual Framework. In: Knight, J. & De Wit, H. (Eds.), *Internationalization of Higher Education in Asia Pacific Countries*. Amsterdam: European Association for International Education, 5-19.
- Knight, J. (2002): Trade in Higher Education Services: The Implications of GATS. London, The Observatory on Borderless Higher Education (OBHE).
- Knight, J. (2005): *Borderless, Offshore, Transnational and Cross-border Education: Definition and Data Dilemmas*. London, The Observatory on Borderless Higher Education.
- Kontigiannopoulou-Polydorides, G., Luijten-Lub, A., Williams, G. & Van der Wende, M. (2004): International Comparative Analysis. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition - National Policies for the Internationalization of Higher Education*. Bonn: Lemmens.
- Kosmützky, A., Krücken, G. & Torka, M. (2006): *Towards a Multiversity? Universities between Global Trends and National Traditions*, Bielefeld: Transcript.
- Krücken, G. (2003): Learning the 'New, New Thing': On the role of path dependency in university structures. In: *Higher Education*, 46, 315-339.
- Krücken, G. & Meier, F. (2006): Turning the University into an Organizational Actor. In: Drori, G., Hwang, H. & Meyer, J. (Eds.), *Globalization and Organization: World Society and Organizational Change*. Oxford: Oxford University Press.
- Lanzendorf, U. (2007a): Globalisation: Trend and Major Players in Transnational Education. *International Master Programme "Higher Education", Module 6.3, 10.12.-14.12.2007, Session 4*. Kassel, International Centre for Higher Education Research.
- Lanzendorf, U. (2007b): National Strategies of Internationalisation - Germany and Australia Compared. *International Master Programme "Higher Education", Module 6.2, 10.12.-14.12.2007, Session 14*. Kassel, International Centre for Higher Education Research.
- Leendertse, J. (2007): Präsenz zeigen - China drängt bei Bildung und Forschung an die Weltspitze. Deutsche Unis bauen deshalb die Kooperation mit chinesischen Hochschulen aus. In: *Wirtschafts Woche*, 01.10.2007.
- Lehrer, M. (2001): Macro-varieties of Capitalism and Micro-varieties of Strategic Management in European Airlines. In: Hall, P. A. & Soskice, D. (Eds.), *Varieties of Capitalism - The Institutional Foundation of Comparative Advantage*. New York: Oxford.

- Leipold, H. (1996): Zur Pfadabhängigkeit der Institutionellen Entwicklung – Erklärungsansätze des Wandels von Ordnung. In: Cassel, D. (Ed.), *Entstehung und Wettbewerb von Systemen*. Berlin: Duncker und Humblot, 93-115, 93-115.
- Leuze, K. (2007): Smooth Path or Long and Winding Road? Comparing the Institutional Embeddedness of Graduate Careers in Germany and Britain. *Dissertation, Fachbereich Sozialwissenschaften*. Bremen, Universität Bremen.
- Lisberg-Haag, I. (2004a): Absolventen mit Guten Chancen: Forschungsintensive Masterkurse für die Industrie. In: Lisberg-Haag, I. & Spross, K. (Eds.), *Die Internationale Hochschule - Deutsche Studienangebote im Ausland*. Bielefeld/Bonn: Bertelsmann/DAAD.
- Lisberg-Haag, I. (2004b): Zukunftsweisende Standortpolitik: Qualifizierte Fachkräfte und Technologieentwicklung. In: Lisberg-Haag, I. & Spross, K. (Eds.), *Die Internationale Hochschule - Deutsche Studienangebote im Ausland*. Bielefeld/Bonn: Bertelsmann/Deutscher Akademischer Austauschdienst.
- Loreck, L. (2005): *Deutsches Studienangebot im Ausland - Geglückter Export*, <http://www.daad-magazin.de/00759/index.html> (last accessed: 08.02.2008), DAAD-Magazin, 04.03.2005, Bonn: Deutscher Akademischer Austauschdienst (DAAD).
- Mahoney, J. (2000): Path Dependence in Historical Sociology. In: *Theory and Society*, 29, 507-548.
- Marginson, S. (2004): National and Global Competition in Higher Education. In: *The Australian Educational Researcher*, Vol. 31, No. 2.
- Merkley, C. & Verbik, L. (2006): *The International Branch Campus - Models and Trends*, London: The Observatory on Borderless Higher Education.
- Meyer, J. W. & Schofer, E. (2004): The World Expansion of Higher Education in the Twentieth Century. Stanford, Stanford University.
- Moerland, P. W. (1995): Alternative Disciplinary Mechanisms in Different Corporate Systems. In: *Journal of Economic Behavior and Organization*, 26, pp.17-34.
- Naschold, F. (1993): *Modernisierung des Staates - Zur Ordnungs- und Innovationspolitik des öffentlichen Sektors*, Berlin: Edition Sigma.
- Nölke, A. & Taylor, H. (2007): A Varieties of Capitalism Perspective on the Rise of Challenger Companies - Tentative Exploration of the Case of "Multilatinas". Frankfurt, Johann Wolfgang Goethe Universität.
- North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- Nullmeier, F. (2000): "Mehr Wettbewerb!" - Zur Marktkonstitution in der Hochschulpolitik. In: Czada, R. & Lütz, S. (Eds.), *Die Politische Konstitution von Märkten*. Wiesbaden: Westdeutscher Verlag.
- OECD (2004): *Internationalization and Trade in Higher Education - Opportunities and Challenges*, Paris: OECD Centre for Educational Research and Innovation.
- Papatheodorou, C. & Pavlopoulos, D. (2003): Accounting for Inequality in the EU: Income Disparities between and within Member States and Overall Income Inequality. *MPRA Paper No. 209*. Munich Personal RePEc Archive.
- Pierson, P. (2004): Positive Feedback and Path Dependence. IN PIERSON, P. *Politics in Time - History, Institutions, and Social Analysis*. Princeton: Princeton University Press, 17-53.
- Porter, M. E. (1991): *Nationale Wettbewerbsvorteile - Erfolgreich konkurrieren auf dem Weltmarkt*, München: Droemersch Verlagsgesellschaft.

- Powell, J. J. W. & Solga, H. (2008): *Internationalization of Vocational and Higher Education Systems - A Comparative-Institutional Approach*. Discussion Papers. Berlin, Social Science Research Centre Berlin (WZB).
- Qiang, Z. (2003): Internationalization of Higher Education: Towards a Conceptual Framework. In: *Policy Futures in Education*, 1, 248-269.
- Ramirez, F. (2006): Growing Commonalities and Persistent Differences in Higher Education: Universities between Global Models and National Legacies. In: Meyer, H.-D. & Rowan, B. (Eds.), *The New Institutionalism in Education*. Albany: SUNY Press, 123-142.
- Rau, E. (1993): Inertia and Resistance to Change of the Humboldtian University. In: Gellert, C. (Ed.), *Higher Education in Europe*. London: Jessica Kingsley.
- Sackmann, R. (2007): Internationalization of Markets for Education? New Actors Within Nations and Increasing Flows Between Nations. In: Leuze, K., Martens, K. & Rusconi, A. (Eds.), *New Arenas of Education Governance - The Impacts of International Organizations and Markets on Education Policy Making*. Basingstoke: Palgrave, 155-175.
- Salford-University (2008): *International Relations Operating Plan*, Salford: Salford University International Office.
- Sanderson, M. (2002): *The History of the University of East Anglia*, London: Hambledon and London.
- Scherrer, C. (2001): *Jenseits von Pfadabhängigkeit und "natürlicher Auslese": Institutionentransfer aus diskursanalytischer Perspektive*, Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).
- Schmidt, V. A. (2002): *The Futures of European Capitalism*, Oxford: Oxford University Press.
- Schomburg, H. & Teichler, U. (2006): *Higher Education and Graduate Employment in Europe - Results from Graduate Surveys in Twelve Countries*, Dordrecht: Springer.
- Scott, R. W. (1995): *Institutions and Organizations*, Thousand Oaks: Sage.
- Shattock, M. (2006): United Kingdom. In: Altbach, P. G. & Forest, J. J. F. (Eds.), *International Handbook of Higher Education - Part Two*. Dordrecht: Springer.
- Shonfield, A. (1965): *Modern Capitalism - The Changing Balance of Public and Private Power*, London: Oxford University Press.
- Spiewak, M. (2008): Heimatkunde - Die deutschen Universitäten sind zu provinziell. *DIE ZEIT*, 17.01.2008. Hamburg.
- Spiewak, M. & Wiarda, J. M. (2008): Runderneuert - Die deutschen Hochschulen stecken mitten in einem tief greifenden Veränderungsprozess. Hamburg, *DIE ZEIT*, 17.01.2008.
- Spross, K. (2004): Von der Idee zum Export: Schritte ins Ausland. In: Lisberg-Haag, I. & Spross, K. (Eds.), *Die Internationale Hochschule - Deutsche Studienangebote im Ausland*. Bielefeld/Bonn: Bertelsmann/Deutscher Akademischer Austauschdienst.
- StADaf (2006): *Deutsch als Fremdsprache - Datenerhebung 2005*. Berlin, Ständige Arbeitsgruppe Deutsch als Fremdsprache (StADaf): Auswärtiges Amt, Deutscher Akademischer Austauschdienst e.V., Goethe-Institut e.V., Zentralstelle für das Auslandsschulwesen.
- Streeck, W. (1991): On the Institutional Conditions of Diversified Quality Production. In: Matzner, E. & Streeck, W. (Eds.), *Beyond Keynesianism*. Aldershot: Edward Elgar.

- Streeck, W. (2001): Explorations into the Origins of Nonliberal Capitalism in Germany and Japan. In: Streeck, W. & Yamamura, K. (Eds.), *The Origins of Nonliberal Capitalism: Germany and Japan in Comparison*. Ithaca: Cornell University Press.
- Streeck, W. & Thelen, K. (2005): Introduction: Institutional Change in Advanced Political Economies. In: Streeck, W. & Thelen, K. (Eds.), *Beyond Continuity – Institutional Change in Advanced Political Economies*. New York: Oxford.
- Stromquist, N. P. (2007): Internationalization as a Response to Globalization: Radical Shifts in University Environments. In: *Higher Education*, Vol. 53, 81-105.
- Tahlin, M. (2007): Skills and Wages in European Labour Markets: Structure and Change. In: Gallie, D. (Ed.), *Employment Regimes and the Quality of Work*. Oxford: Oxford University Press, 35-77.
- Teichler, U. (2007): *Higher Education Systems - Conceptual Frameworks, Comparative Perspectives, Empirical Findings*, Rotterdam: Sense Publishers.
- Thelen, K. (2004): *How Institutions Evolve – The Political Economy of Skills in Germany, Britain, the United States, and Japan*, Cambridge: Cambridge University Press.
- Thompson, F. (1997): Defining the New Public Management. In: Jones, L. R., Schedler, K. & Wade, S. W. (Eds.), *International Perspectives on the New Public Management*. London: JAI Press.
- UEA (2007): *University of East Anglia Prospectus 2008*, Norwich: University of East Anglia (UEA).
- UEA (2008): *Key Facts – The University of East Anglia in Brief*, <http://www1.uea.ac.uk/cm/home/services/units/mac/comm/publicationsoffice/keyfacts> (last accessed: 25.07.2008), Norwich: University of East Anglia (UEA).
- Uni-Kassel (2001): *Konzept zur weiteren Internationalisierung der Universität Gesamthochschule Kassel - Entwicklungsstand, Aufgaben und weitere Schritte bis 2005*, Kassel: Senat der Universität Kassel.
- Uni-Kassel (2006): *Internationalisierungskonzept der Universität Kassel - Zweite Phase 2006-2010*, Kassel: Senat der Universität Kassel.
- Uni-Kassel (2007): *Universität Kassel - Zahlen und Fakten 2007*, <http://cms.uni-kassel.de/index.php?id=418> (last accessed: 25.07.2008), Kassel: Universität Kassel.
- Vaira, M. (2004): Globalization and Higher Education Organisational Change: A Framework for Analysis. In: *Higher Education*, 48, 483-510.
- Van der Wende, M. (2004): Introduction. In: Huisman, J. & Van der Wende, M. (Eds.), *On Cooperation and Competition - National Policies for the Internationalization of Higher Education*. Bonn: Lemmens.
- Vitolis, S. (2001): Varieties of Corporate Governance: Comparing Germany and the UK. In: Hall, P. A. & Soskice, D. (Eds.), *Varieties of Capitalism - The Institutional Foundation of Comparative Advantage*. New York: Oxford University Press, 337-360.
- Walkenhorst, H. (2007): Research on Higher Education in Europe: Mapping the Empirical Evidence. *European Union Studies Association Conference*. Brussels and Leuven.
- Wood, S. (2001): Business, Government, and Patterns of Labor Market Policy in Britain and the Federal Republic of Germany. In: Hall, P. A. & Soskice, D. (Eds.), *Varieties of Capitalism - The Institutional Foundation of Comparative Advantage*. New York: Oxford.

List of Tables

Table 1: The three major forms of cross-border higher education	5
Table 2: Stylized characterization of liberal and coordinated market economies	12
Table 3: Key data on the internationalisation of German and British higher education	27
Table 4: University of Kassel and University of East Anglia – Key Facts	28
Table 5: Stylized indications for institutional complementarities across institutional spheres in the context of the internationalisation of universities	42
Table 6: Relative intensity of involvement in distinct approaches to the global market for higher education	48
Table 7: Comparative advantages of different innovation systems	49
Table 8: Stylized description of specialisations in international competition ..	54

Abbreviations

BA	Bachelor of Arts
BMBF	Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung)
CME	Coordinated market economy
DAAD	German Academic Exchange Service (Deutscher Akademischer Austausch-Dienst)
DFG	German Research Foundation (Deutsche Forschungsgemeinschaft)
GATS	General Agreement on Trade in Services
GWK	Joint Science Conference (Gemeinsame Wissenschaftskonferenz)
HESA	Higher Education Statistics Agency
HMWK	Hessen State Ministry of Higher Education, Research and the Arts (Hessisches Ministerium für Wissenschaft und Kunst)
INFER	International Network for Economic Research
KMK	Standing Conference of the Ministers of Education and Cultural Affairs (Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland – „Kultusministerkonferenz“)
LME	Liberal market economy
MA	Master of Arts
MBA	Master of Business Administration
PPP	Public-Private Partnership
OECD	Organisation for Economic Co-operation and Development
UEA	University of East Anglia
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
VoC	Varieties of capitalism; in this paper “VoC” often refers to the particular approach to varieties of capitalism developed by Hall and Soskice (2001)
WTO	World Trade Organisation

Books published by members of the research unit “Skill Formation and Labor Markets”

(only available from commercial retailers)

2008

Mayer, Karl Ulrich; Heike Solga (Eds.) (2008): Skill Formation – Interdisciplinary and Cross-National Perspectives. New York: Cambridge University Press

Söhn, Janina (2008): Die Entscheidung zur Einbürgerung. Die Bedeutung von Staatsbürgerschaft für AusländerInnen in der Bundesrepublik Deutschland – Analysen zu den 1990er-Jahren. Saarbrücken: VDM Verlag Dr. Müller

2007

Baethge, Martin; Heike Solga; Markus Wieck (2007): Berufsbildung im Umbruch – Signale eines überfälligen Aufbruchs. Berlin: Friedrich-Ebert-Stiftung. (auch online verfügbar: <http://library.fes.de/pdf-files/stabsabteilung/04258/studie.pdf>)

Martens Kerstin, Alessandra Rusconi and Kathrin Leuze (eds.) (2007): New Arenas of Educational Governance – The Impact of International Organizations and Markets on Educational Policymaking. Houndmills, Basingstoke: Palgrave

2006

Rusconi, Alessandra (2006): Leaving the Parental Home in Italy and West Germany: Opportunities and Constraints. Aachen: Shaker Verlag

2005

Solga, Heike (2005): Ohne Abschluss in die Bildungsgesellschaft. Die Erwerbschancen gering qualifizierter Personen aus ökonomischer und soziologischer Perspektive. Opladen: Verlag Barbara Budrich

Solga, Heike; Christine Wimbauer (Hg.) (2005): Wenn zwei das Gleiche tun ... – Ideal und Realität sozialer (Un-)Gleichheit in Dual Career Couples. Opladen: Verlag Barbara Budrich

2004

Hillmert, Steffen; Ralf Künster; Petra Spengemann; Karl Ulrich Mayer (2004): Projekt „Ausbildungs- und Berufsverläufe der Geburtskohorten 1964 und 1971 in Westdeutschland“. Dokumentation, Teil 1-9 (Materialien aus der Bildungsforschung No. 78). Berlin: Max-Planck-Institut für Bildungsforschung

Discussion Papers

Research Unit “Skill Formation and Labor Markets”

(available via Informations- und Kommunikationsreferat,
Wissenschaftszentrum Berlin, Reichpietschufer 50, 10785 Berlin
download <http://www.wzb.eu/publikation/>)

2008

SP I 2008-501

Justin J.W. Powell, Heike Solga, Internationalization of Vocational and Higher Education Systems – A Comparative-Institutional Approach, 49 p.

SP I 2008-502

Anja P. Jakobi, Alessandra Rusconi, Opening of Higher Education? A Lifelong Learning Perspective on the Bologna Process, 32 p.

SP I 2008-503

Janina Söhn, Bildungschancen junger Aussiedler(innen) und anderer Migrant(inn)en der ersten Generation. Ergebnisse des DJI-Jugendsurveys zu den Einwandererkohorten seit Ende der 1980er-Jahre, 37 p.

SP I 2008-504

Lisa Pfahl, Legitimationen schulischer Aussonderung. Eine Rekonstruktion des Lernbehinderungsdiskurses im 20. Jahrhundert in Deutschland, 42 p.

SP I 2008-505

Alessandra Rusconi, Heike Solga, A Systematic Reflection upon Dual Career Couples, 32 p.

SP I 2008-506

Paula Protsch, Wachsende Unsicherheiten: Arbeitslosigkeit und Einkommensverluste bei Wiederbeschäftigung, 27 p.

SP I 2008-507

Lukas Graf, Applying the Varieties of Capitalism Approach to Higher Education: A Case Study of the Internationalisation Strategies of German and British Universities, 64 p.