Chapter 2
Recent Reforms in the German Higher Education System

This chapter focuses on specific reforms in the German higher education system in recent years. These reforms are embedded in general societal developments that will also be explored. Furthermore, it is only possible to understand recent reforms in German higher education by adopting a broader perspective that also considers the key role of international reform developments. Although the development of a national higher education system like the German one has been characterized by multifaceted processes of interaction with other systems since as far back as the nineteenth century, these processes have accelerated rapidly in the last two to three decades. We argue that only by taking account of the latest wave of international reforms is it possible to understand the considerable reform efforts in the German higher education system.

For a long time, higher education in Germany was scarcely a matter of public concern. The last major reform wave took place in the 1960s and 1970s and introduced the so-called *Gruppenuniversität* (group university). This reform primarily aimed at strengthening the right to participate in decision-making processes for students, non-professorial academic and non-academic staff vis-à-vis professors. The results of these reforms were seen as disappointing in many respects. Consequently, the reform's key goal was not achieved. The position of power enjoyed by professors at German universities compared to the other three groups (students, non-professorial academic and non-academic staff) was hardly weakened: the professoriate continued to dominate university decision-making processes. However, since this reform they only hold a narrow majority in the academic decision-making bodies and govern with a "truce" to help secure majorities. In addition, real participation, particularly among students, gradually declined over the course of time. Entirely in line with Michels' "iron law of oligarchy" (Michels 1915 [1911]), a functionary class of student representatives emerged whose affiliation to those they were supposed to represent was quite loose. At the same time, internal conflict and cumbersome decision-making processes at group universities meant that they were, in part, incapable of making decisions. This

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disappointment meant that in the 1980s and 1990s fundamental reforms were no longer desired and appeared hardly feasible (Neusel 1993, 185). Furthermore, German reunification impacted reform intension. During this phase, the deficits of the West German higher education system were rather pushed into the background to facilitate a speedy integration of the East German higher education system.

This contrasted considerably with developments in many other European higher education systems. Developments in the 1980s in the United Kingdom radically questioned the traditional governance structures of higher education institutions (e.g. Leisyte et al. 2006; Risser 2003; McNay 1999; Henkel 1999; Burnes et al. 2014). The Netherlands were also caught up in these developments from a relatively early stage (e.g. de Boer et al. 2006; de Boer and Huisman 1999). From the 1990s, governance reforms could be observed in nearly all European higher education systems (e.g. Braun and Merrien 1999; Amaral et al. 2003; Kehm and Lanzendorf 2006b; Paradeise et al. 2009; Krücken et al. 2007; Dobbins and Knill 2009, 2014; Popp Berman and Paradeise 2016; Frost et al. 2016; Gornitzka and Maassen 2000). The changes instigated in the various countries encompassed not only the regulatory and management structures of higher education institutions, but also their diversification, financing and the nature of the degrees awarded.

Germany almost entirely avoided these changes until well into the 1990s and can therefore be described as a "latecomer" when it comes to reforms in the higher education system (Kehm and Lanzendorf 2006a, 190; see also Lange and Schimank 2007; Schimank 2005). Before we turn our attention to the reform contents in Germany, we still need to clarify what actually moved so many European higher education systems to instigate such fundamental changes since the 1980s. We identify one particular trigger in general societal trends—developments that are global in nature and go beyond the higher education sector and beyond Europe. We now turn to these developments.

2.1 General Societal Developments as a Fundamental Trigger for Reforms

In our opinion, three general societal trends had a significant impact on European universities and are largely responsible for the fundamental reform efforts: the development towards a knowledge-based society, the blurring of boundaries and the rise of an audit society.

The trend towards a knowledge-based society was comprehensively sketched out as early as 1973 by American sociologist Daniel Bell in his work "The Coming of Postindustrial Society". Interestingly, for Bell (1973) the university had become the central institution of the postindustrial, knowledge-based society. Only here did the learning of theoretical knowledge, as a basic condition for the knowledge-based society, appear possible for broader sections of the population.

The societal importance of universities has clearly been strengthened over the last 40 or so years. The most obvious example is the striking increase in the proportion of an age group studying at universities and other higher education institutions. This increase is a global trend that has also clearly been seen in Europe. Therefore higher education systems and the institutions within them, not only in Europe but worldwide, have changed rapidly in just a few decades. Increasingly, a university degree has become a standard feature of any biography and the inclusion of ever more sections of the population in higher education represented a considerable challenge for higher education institutions.

A similar trend could also be seen in respect of the research function of European universities. This was, and still is, being expanded and in this respect, too, reflected the increasing significance of universities in the knowledge-based society. The European Union's Lisbon Strategy and the large-scale research program, Horizon 2020, for example, considerably enhanced the status of universities. University research has become an integral and indispensable element of national and European innovation systems with numerous national initiatives aiming to promote research excellence. These initiatives are targeted at strengthening fundamental research and facilitating collaborations with research-oriented corporations to actively drive scientific/technological breakthroughs and their further development as marketable products and processes. In addition, universities are expected to fulfill a "third mission" (e.g. Krücken 2003; Etzkowitz and Leydesdorff 2000); that means universities should contribute directly to social and economic development. Their previously indirect and uncertain contribution through education and research—only when some time has passed can we see if this knowledge can be applied or not—is no longer sufficient.

Accompanying the general societal trend towards a knowledge-based society we can see an increased social significance of universities and other higher education institutions in Europe in the last few decades that has also increased their visibility, changed the make-up of the student population, and has integrated research closer and earlier in innovation processes.

The blurring of boundaries is a second fundamental societal trend that has had a considerable impact on European higher education institutions. For us, the blurring of boundaries has two faces: in relation to a cumulative embedding of higher education institutions in a transnational framework, and in respect of blurring boundaries between various societal sectors and institutions.

Ever since the early nineteenth century we can observe intensive processes of interaction between national societies: exchange that was strengthened over time by a number of factors including the founding of international organizations such as the UN or the OECD (e.g. Henry et al. 2001; Armingeon and Beyeler 2004). More recently, developments in information and communication technologies have also played a key role. This has led to a more rapid circulation of ideas and models of how to both organize societies as a whole and individual aspects thereof. This has been demonstrated, for example, by the increased embedding of universities at transnational level both in terms of a global comparison—facilitated in particular by world rankings—and by numerous initiatives of Europeanizing national higher

education systems, in particular through the Bologna Process. Globalization and "Europeanization" processes have increased the competitive pressure faced by European higher education institutions with respect to financial resources, staffing and last but not least their legitimacy.

The blurring of boundaries refers not only to the globalization and Europeanization of national systems and the higher education institutions embedded in them. The blurring of boundaries also increasingly questions clearly drawn institutional boundaries within a society. Whereas in the 1980s Western societies were often described as functionally differentiated societies with clear boundaries between their subsystems, more recent descriptions emphasize the network character of societies (Castells 2011) or even liquefaction processes (Bauman 2000). The former view sees higher education institutions as a central part of the scientific subsystem. It underlines that the scientific system is operating according to its own standards, values and incentive structures that differ from other subsystems like the economy or the political system. Other studies, however, emphasize that the scientific system is closely entwined with external social contexts (in particular the general public, economics and politics). In contrast to the views advanced by the traditional sociology of science, the scientific system today is no longer seen as a distinctive and clearly demarcated part of society (Gibbons et al. 1994; Nowotny et al. 2001; Latour 1988). In particular, the broad discussions on the "New Production of Knowledge" (Gibbons et al. 1994) conducted since the 1990s contain implications for higher education institutions and for the knowledge they generate. Even if the thesis is seen as controversial, it does highlight a trend that puts pressure on higher education institutions. It questions the legitimacy of a purely "internal" production of knowledge as part of independent higher education institutions that seal themselves off from societal influences solely for this purpose. The new production of knowledge therefore calls for far-reaching institutional change and new notions of identity at the level of higher education institutions and at the level of individual academics and researchers.

A third general societal trend consists in what Power (1999) describes as the "audit society". Such a society is characterized by its expectations that organizations exhibit formal responsibility or accountability and control their internal processes. This general trend can be seen in widely different types of formal organizations. One example is the introduction of new public management in general administrative organizations (Pollitt and Bouckaert 2004), but also in hospitals (Preston 1992; Reay and Hinings 2009; Bode 2010) and universities (Krücken and Meier 2006; de Boer et al. 2007).

The audit society reflects an erosion of societal trust in organizations, in particular those—such as universities, hospitals and schools—that organizational sociology describes as "professional organizations". Many of these professional organizations are being reorganized, based increasingly on a standard model of an accountable, independent decision-making and responsible organization (Bromley and Meyer 2015).

This implies significant changes to higher education institutions: Traditionally, the control of higher education institutions was the responsibility of the academic

profession, primarily professors. In terms of higher education's core activities—research and teaching—this can be justified, given that both activities are not only highly complex, but they also do not lend themselves to being depicted externally by measurable data. Their measurement is based on the knowledge of professional experts (Mintzberg 1983). This presupposes a high degree of trust from society at large in the ability of the academic profession to regulate itself. The rise of external evaluations and performance assessments, together with the corresponding expansion of management capacities and hierarchical decision-making structures are now placing considerable pressure on traditional higher education institutions, where the focus has previously been on self-regulation by the profession.

This change represents a significant challenge, especially for European higher education institutions, that historically have hardly any experience with boards of governors, evaluation and accreditation agencies, and the use of performance indicators. There are, however, doubts concerning the positive effects of these reforms on the performance of European higher education institutions that many had hoped for. Formal accountability is viewed with skepticism, given that it can lead to bureaucratization of working processes, demotivation of academic staff and high costs for supervision and monitoring while the benefits remain unclear (e.g. Welpe et al. 2015; Whitley and Gläser 2014).

Besides Power (1999) and others who are critically applying his approach to higher education institutions, we also need to take account of technological developments. Such developments have also contributed to the erosion of trust in professions as can be seen in the field of medicine—perhaps one of the classic examples in professional sociology of the unique and unbridgeable "knowledge divide" between the doctor as the representative of the profession and the patient, the uninitiated layperson. However, this knowledge divide disappears to some extent when the patient has access to medical knowledge that today is broadly available in the internet.

Similar developments are also presenting higher education institutions with new challenges: students are now capable of questioning locally available expertise during lectures by being able to conduct internet research in real time. Massive open online courses (MOOCs) and other offerings make it easier to compare content and form of knowledge transfer, a fact which itself puts local expertise into perspective. The same applies to research. Using bibliometric indices, ministries can generate key data to assess the academic performance of individual universities and disciplines, independent of the willingness of professors to cooperate. Equally, corporate organizations can use bibliometric and patent data to paint their own picture of potential cooperation partners in higher education without having to consult the academic profession. Thus, in a wide variety of ways trust in the profession is being increasingly replaced by trust in numbers (Porter 1996).

The three general societal developments described above have had an impact on higher education institutions in two respects: firstly, by the pressure exerted directly by society at large to adapt; and secondly, by pressure exercised by state actors to adapt. The latter is particularly significant for European higher education institutions given the fact that higher education institutions are traditionally often public

institutions principally financed—either directly or indirectly—by the state. These general societal developments initially put pressure on the state; the state then—more or less explicitly—passes this pressure on to the higher education institutions. Historical experience shows that higher education institutions in Europe react much more strongly to the pressure exercised by the state than to requirements directly imposed on them by society (Schimank 2002, 3; Führ 1993, 58).

The multifaceted reforms in the individual European countries are so embedded in general societal and global developments that state bodies are increasingly reacting with fundamental attempts to reform higher education systems and higher education institutions. Although the German reaction has been somewhat slow compared to its European neighbors, since the mid-1990s Germany has also instigated fundamental reforms. These will be described briefly below.

2.2 Higher Education Reforms in Germany Since the Mid-1990s

Discussions on restructuring the higher education system in Germany gained pace from the mid-1990s. This can be seen in publications from Führ (1993), Glotz (1996) and Daxner (1996), for example. Numerous publications from the German Council of Science and Humanities[1] (*Wissenschaftsrat* – WR) and the German Rectors' Conference[2] (*Hochschulrektorenkonferenz* – HRK) were concerned with a fundamental reform of higher education (e.g. Wissenschaftsrat 1993, 1996, 2000; Hochschulrektorenkonferenz 1992, 1995). Discussions also took account of the state's financial problems arising from the costs incurred by German reunification.

The starting point for implementing the first reform attempts was the fourth amendment of the Framework Act for Higher Education (*Hochschulrahmengesetz* – HRG) from 1998. The Framework Act for Higher Education was introduced in 1976 in a bid to harmonize what is fundamentally a federally structured system of higher education in Germany. Historically, the German higher education system was exclusively a federal system, i.e., the states themselves were responsible for higher education, including its financing. Until 1969, the national government bore no responsibility whatsoever for higher education. In the light of financing problems caused by the rapid rise in student numbers and the desire to harmonize different higher education structures, in 1969 the federal government was granted framework legislative competence in higher education through amendments to the

[1]The German Council of Science and Humanities is a science policy advisory council founded in 1957 that advises federal and state governments in all key questions of higher education and scientific developments (more detailed information at: http://www.wissenschaftsrat.de/en/home.html).

[2]The German Rectors' Conference is a voluntary body of nearly all state and state-recognized higher education institutions in Germany, represented by their respective rectors (more detailed information at: https://www.hrk.de/hrk-at-a-glance/).

Basic Law, Germany's constitution. In other words, the federal government was able to prescribe framework structures with the filling in of details being a matter for the states, governed by their respective higher education legislation. For instance, the Framework Act for Higher Education contained rules for regulating organizational structures. It was precisely these basic organizational regulations that the 1998 Framework Act for Higher Education deleted entirely,[3] allowing the federal states to go their own way. Reforms in Germany therefore began with a process to strengthen federal structures (e.g. Hüther 2010; Lynen 2004; Detmer 2004). This federalization process was further strengthened by the 2006 Reform of the Federal System (*Föderalismusreform*) because the national government's framework legislative competence introduced in 1969 was removed from the Basic Law.[4] Following a phase of harmonization after 1976, the German higher education system has therefore increasingly become an exclusively federally structured system again since 1998, which has led to strong differentiation at state level. Reforms thus coincided with a differentiation at state level. This is somewhat unusual when seen in an international perspective. Therefore, the reform trends described below vary in intensity from state to state.

The following reconstruction of reform trends aims to provide an overview. We have made a conscious decision not to go into detail at this point, but to handle the details in other chapters of the book in their respective context. In the following we analytical distinguish five reform areas. The reforms affected on the one hand the two traditional core activities of higher education institutions, teaching and research, and on the other hand their structures: financial structures, staffing structures and governance structures.

2.2.1 Reforms in Teaching

Reforms initiated as part of the Bologna Process in respect of teaching are unprecedented in the German higher education system. The quality of teaching at higher education institutions had already been the subject of criticism for a long time. The critique concerned for example the high drop-out rate, long periods of study, the lack of practical relevance of courses and the feeling that some professors were neglecting their teaching duties. However, fundamental reforms of teaching at higher education institutions only came about with the Bologna Process. The

[3] Articles 60 to 69 of the Framework Act for Higher Education were abolished. These contained specific regulations on the internal organization of universities.

[4] This meant that the national government hardly had any influence at all on higher education institutions in Germany and, in particular, could not carry out any long-term financing (the so-called ban on cooperation) which led to controversial discussions as things developed. As a consequence, the Basic Law was amended again in 2014 and the ban on cooperation eased. As in the past, however, all states have to approve measures instigated by the federal government in higher education. This also applies, for example, to the Excellence Initiative discussed later.

central issue of teaching reform concerned the consecutive degrees (bachelor and master) as part of the Bologna Process (see for example Winter 2009; Hochschulrektorenkonferenz 2008; Krücken 2007). For Germany this meant giving up the traditional Diplom and Magister qualifications in favor of bachelor and master degrees.[5] The aim of the process is to create a European higher education area, making it easier for students to change higher education institutions between the national systems. At the same time, this process aims to harmonize comparability of degrees in Europe (Bologna Declaration 1999). Here, we can clearly see that while these changes are linked to the blurring of boundaries described above, this comparability also marks a trend towards an audit society.

Alongside the pursuit of official pan-European political aims, the introduction of bachelor degree courses was seen as an opportunity in Germany to shorten the period of study, which had hitherto been regarded as too long, and to reduce the supposedly high drop-out rates (Reichwald 2000, 319). More pronounced practical elements incorporated into these bachelor courses make it clear that these are also intended to be occupational qualifications with the concept of "employability" (for an overview see Tomlinson 2012) playing a key role in the discussion. Accordingly, the bachelor degree was to be the higher education standard qualification (KMK 2003).

It can therefore hardly be surprising that educational policy has greatly accelerated the implementation of the Bologna Process, seeing in it a solution to long-standing problems inherent in higher education study. The Bologna Process was a "legitimated chance" to realize fundamental structural change that would not have been possible without it.

In the course of the Bologna Process, the doctorate degree has also been the focus of attention. At the conference of education ministers on the Bologna Process that took place in Bergen in 2005, the doctorate was recognized as the third phase of study following the bachelor and master degrees. Traditionally, the doctoral phase in Germany was less structured and was characterized by a master-pupil model (Enders 2005). Under the guidance of a professor, the doctoral student would complete a dissertation largely independently. The unstructured nature of this master-pupil model was already apparent in the selection of doctoral students, who were accepted based on professors' idiosyncratic criteria. The lack of formal structures is also shown in the fact that doctoral students are traditionally not integrated in any taught course system during their program.

The traditional German doctoral system has also come under increasing criticism since the 1990s, with the length of the doctoral phase and the poor support offered to students found to be at fault. Since then there is a discernible trend towards making the doctoral phase subject to a more formally structured approach (Röbken 2007). This includes the graduate colleges of the *Deutsche*

[5] State examinations in law and medicine, however, have not been changed. In contrast, teacher-training courses either have bachelor/master qualifications or a traditional state examination, depending on the states.

Forschungsgemeinschaft (DFG)[6] and the graduate schools set up as part of the Excellence Initiative. The selection of doctoral students, the support and the nature of the qualification in these colleges and schools is clearly more structured than traditionally was the case. In addition, several universities have set up their own graduate schools, providing a more or less structured taught program for doctoral students.

The trend witnessed in the last few years reveals that the doctoral phase has been subject to greater structuring. However, this process is not just restricted to Germany, it is taking place in a range of European countries (Kehm 2005). Despite these developments, the significant majority[7] of German doctoral students still complete their degrees in traditional systems and not in structured doctoral programs.

A further aspect of reform efforts in teaching can be seen in the obligation of higher education institutions to give a detailed account of their teaching performance as part of their evaluation reports. Students have been increasingly assessing taught courses in the last few years and this has also been seen as a quality assurance measure (e.g. Rindermann 2009; Klein and Rosar 2006; Engel and Krekeler 2001; Daniel 1998; Windolf 1995; Wolbring 2013). Here we can also see an increase in the responsibility not only of higher education institutions overall, but also of individual lecturers for students and their learning success, which in turn can be seen in connection with the trend towards an audit society.

2.2.2 *Reforms in Research*

The recent reforms in research in the German higher education system were mainly triggered by worldwide university rankings. In particular, the ranking conducted by Times Higher Education (THE 2016) and the Academic Ranking of World Universities carried out by the Jiao Tong University in Shanghai (Shanghai Jiao Tong

[6]The *Deutsche Forschungsgemeinschaft* (DFG) was established in 1951 and is the most important source of third-party funding for German universities. In 2014, the overall budget measured 2.8 billion euros, with the federal government and the states providing over 99%. The history of the DFG extends back to the Weimar Republic, when a state-financed body was established in 1920 at the behest of research academies to provide support for research projects. In keeping with the DFG's concept of its role as a self-governing organization, it represents all academic disciplines, from the humanities through to engineering sciences. This reflects the strong role of the academic profession and a broader understanding of the German tradition of "science and research"—the unity of the systematic and open search for truth that includes all academic disciplines (more detailed information at: http://www.dfg.de/en/dfg_profile/index.html).

[7]According to estimates supplied by the German Federal Statistical Office, 92% of doctoral students were not in structured programs in 2012 (Statistisches Bundesamt 2012, 23; see also Bosbach 2009). More recent studies show that the proportion of doctoral students in structured programs has increased moderately in recent years and now lies between 12% and 23%, depending on the study (Konsortium Bundesbericht Wissenschaftlicher Nachwuchs 2017, 146–148).

University 2017) were important. Just like the "PISA shock" that was felt when Germany did not occupy any of the top places in an international comparison of school student performance, the first Shanghai Ranking from 2003 prompted broad and critical discussions because no German university was to be found among the top 50. Despite the considerable methodological criticism of these and other rankings of research (e.g. Marginson 2007), they have played a key role in the reform debate although they have often been criticized as a media event (Maasen and Weingart 2006, 38). Therefore, the effects of the general societal trends described above can be fully recognized here too. On the one hand, given their transnational focus these rankings are promoting the embeddedness of universities beyond national boundaries. On the other hand, rankings represent an attempt to measure performance, again providing a link to the trend towards the development of an audit society.

The measuring and evaluation of the research performance of individuals, departments, universities and the whole German system is now a standard procedure in Germany. Indicators of performance measurement primarily include third-party funding and publications in international journals. This increases pressure within the system to acquire third-party funding and to publish in international peer reviewed journals. Therefore, the obligation to evaluate and measure performance in research is at the same time increasing competition within the system.

In addition, we can see attempts to initiate an institutional process of differentiation in terms of research reputation. While in the past—despite all the awareness of differences—the assumption in Germany was that universities were fundamentally equal in terms of research performance, now the aim is to differentiate reputation. Among other things, the goal is to have internationally visible research universities that could compete with Harvard, Princeton, Stanford, Oxford and Cambridge. In other words, the aim of the latest reforms is to establish world-class universities. Although it is not quite clear what is meant by world-class universities (Altbach 2004; Huisman 2008), the aim is clearly about keeping up with top American and British universities in international rankings (Hazelkorn 2009; Hazelkorn and Ryan 2013), regardless of the potential negative side effects of such a development (Deem et al. 2008).

As far back as 2000, the federal government considered establishing "elite" universities. This was implemented in particular through the creation of the Excellence Initiative that identified high-performing universities and attempted to raise performance still further by plowing in considerable additional funding. The program only targeted universities, not universities of applied sciences (for an overview see Leibfried 2010; Deutsche Forschungsgemeinschaft and Wissenschaftsrat 2015).

The German Excellence Initiative is an ambitious program. It began in 2006 and will run in its present form until the end of 2018. In summer 2016, the decision was taken to extend the program still further, at least until 2032. From 2006 through to 2017, a total of 4.6 billion euros is to be invested in high quality research to strengthen the international visibility and competitiveness of German universities and the German higher education system overall. Before the Excellence Initiative

got underway, a marathon negotiation and decision-making process was necessary to define competencies and responsibilities between the federal government and the states.

The result is a joint program between the federal government and all 16 states with three lines of funding: graduate schools, excellence clusters and institutional strategies (*Zukunftskonzepte* – concepts for the future).

Graduate schools aim at training particularly well-qualified doctoral students in structured programs. The design of such schools can vary: they can comprise single disciplines or subject groups or can be set up at the level of the whole university. Excellence clusters try to bundle research capacities and are based on networking and cooperation. There is also no prescribed structure for these clusters: cooperation can refer to inner-university cooperation, but also to other public research institutions such as Max Planck Institutes or partners from industry. As part of institutional strategies, whole universities can be distinguished. The prerequisite for this is a coherent concept for the future, overall strong research performance and success in the two other lines, with at least one graduate school and one excellence cluster.

In terms of institutional innovation in research, the third line of funding is certainly the most interesting: graduate schools and research clusters are also supported in other programs sponsored by the *Deutsche Forschungsgemeinschaft* (DFG).

While financial resources are raised jointly by the federal government and the states, competition is organized by the DFG and the German Council of Science and Humanities (*Wissenschaftsrat*). Because most German universities take part in one form or another in this competition, the selection process is based on an international academic peer review. A large number of international experts from a wide variety of disciplines and areas of research came to Germany to review the applications. The final decision was made in a joint commission comprising DFG, German Council of Science and Humanities and ministers from both federal and state governments. In the past, academic assessments have largely been followed whereas regional considerations, for example, have hardly played any role.

To date there have been two phases of the program. The first phase lasted from 2006 to 2012 and provided 1.9 billion euros in funding. The second runs from 2012 to 2018 and provided until October 2017 2.7 billion euros in funding. In 2017, a total of 45 graduate schools, 43 excellence clusters and 11 institutional strategies at 44 universities are being funded in this way. Given the number of universities involved, it is clear to see the break with the program's original idea of funding a few elite universities. This is especially so given that Germany only has around 100 traditional universities and technical universities.

A report compiled by an international commission of experts evaluating the Excellence Initiative published in 2016 draws an overall positive balance:

> The Excellence Initiative has made the German university system more dynamic and has become a tangible symbol for the will to improve the international competitiveness of German universities (Internationale Expertenkommission zur Evaluation der Exzellenzinitiative 2016, 6).

In principle, the report highlights the positive contribution the Excellence Initiative has made to generating differentiation within the system and that it clearly elucidates differences in performance. In terms of the specific causal effects of the Excellence Initiative, the report remains somewhat low key given the myriad of changes in the German system that coincided with it—such as the huge expansion in higher education and the number of students, governance and organization reforms, and numerous other funding programs. Moreover, the experts believed that the evaluation period of 10 years was hardly sufficient to determine the actual impact in the field of top research and its lasting effects. They recommend continuing the Excellence Initiative beyond 2017. However, instead of the three lines of funding—graduate schools, research clusters and institutional strategies—they argue that just the last two should be continued, and these, in part, in considerably modified form. Whole universities should no longer be funded upon application coupled with a future concept. Instead, the process should be based on past research performance founded on simple indicators (DFG third-party funding, research prizes). Excellence clusters should be more flexible in structure and facilitate smaller formats than has been the case to date. This reflects some of the past criticisms of the Excellence Initiative: uncertain benefits of graduate schools, research clusters are too large for small departments and universities, high degree of complexity, especially in applying for the third line.

Nonetheless, the discussion of higher education policy in Germany raises a very much deeper criticism of the Excellence Initiative. In particular, this relates to the vertical differentiation of the German higher education system in respect of the research objectives of the Excellence Initiative. Critics argue that such a differentiation runs counter to the broad, high quality of the German system, that the harmony of research and teaching is under threat because of the sole emphasis on research in the Excellence Initiative, and that the competition for excellence produces too many losers and aggravates social inequalities (e.g. Hartmann 2010; Münch 2006).[8] There is a similar discussion on the international stage where the question has been raised whether one should be striving towards achieving world-class universities or a world-class university system (e.g. Hazelkorn and Ryan 2013; Cremonini et al. 2014).

We cannot at this point go into the pros and cons of the respective arguments. Nevertheless, two points need to be made. Firstly, the Joint Science Conference[9] (*Gemeinsame Wissenschaftskonferenz* – GWK) decided in April 2016 to set up a new initiative once the Excellence Initiative expires, which would target the continuation of excellence clusters and institutional strategies. Secondly, the Excellence Initiative has certainly contributed to the increased international visibility of

[8]For some regional effects of the shift toward academic excellence in Germany see Koenig et al. (2017).

[9]Founded in 2007, the Joint Science Conference is a body that coordinates higher education and science policy between the states and the federal government. Its members are ministers for research and finance from the states and the federal government (more detailed information at: http://www.gwk-bonn.de/english).

the German higher education system and corresponding reform initiatives. If, since the 1990s, the German higher education system could mainly be seen as a "recipient" of reform initiatives coming from other national higher education systems, as a "sender", the German Excellence Initiative has influenced a range of European and Asian nations and triggered a broad international wave of comparable initiatives (for France see for example Boudard and Westerheijden 2017; for Denmark Aagaard and de Boer 2017; for Spain Seeber 2017).

2.2.3 Reforms in Financing

Changes have also taken place in the financing of higher education in Germany, even though this may appear less radical compared to other countries (especially in comparison to the English system). We will deal with the financing of the German higher education system later in the book (Chap. 3) and just mention the key points briefly here. We will only deal with the introduction and abolition of tuition fees in some states in detail, since this is one point we will not be picking up on in the course of the book.

A key change in the financing of the German system has been the introduction of global budgets that can be used more or less freely by higher education institutions. Previously, state funds were only allocated for specific purposes and could only be spent for these purposes. Higher education institutions now have greater flexibility in how they spend their budgets.

The introduction of global budgets is linked to two further changes. Firstly, spending of global funds is only being monitored within the framework of target and performance agreements concluded between the individual higher education institution and the ministry. Spending is no longer monitored in detail, only whether pre-defined targets have been achieved with the funds available. Secondly, most states have changed the way in which funds are distributed among their higher education institutions. At least some of the funds are distributed based on performance indicators, whereas in the past funds were allocated as a continuation of the previous year's funding. The states have therefore tried to initiate competition for funding between higher education institutions.

Another key aspect of financing is that the proportion of temporary funding to higher education institutions has increased over the course of time. In part, this is due to the rise in importance of temporary third-party funding at higher education institutions. It is not as if there have been comprehensive cuts in basic funding of higher education institutions; instead, new and additional state funding is increasingly distributed through competitions which thus reduces the proportion distributed through basic funding. In this respect we could mention the Excellence Initiative described above, but also the fact that funds distributed through the DFG over the last few years have increased faster than the basic financing of higher education institutions. In addition to the rise in third-party funding, the proportion of temporary funding has also been rising because new financial support packages

granted by the federal government for higher education relate to fixed-term programs, such as the financing of new study places because of increasing demand. This is also because, between 2006 and 2014, the federal government was not permitted to finance the higher education system on a permanent basis. As additional funds have been made available to higher education, mainly by the federal government in recent years, and these had to be temporary funds, over time, the proportions of temporary and permanent funding available to German higher education institutions has changed.

A further aspect of funding higher education institutions is the sensitive topic of tuition fees. With most of the recent reforms described in this chapter, Germany tends to move with the mainstream of global developments in higher education: in part we find late adoption processes (NPM reforms), in part early innovations that have been adopted by others (the Excellence Initiative). However, the issue of tuition fees is an interesting exception to this mainstream trend (see also Hüther and Krücken 2014). Tuition fees can be found in a wide variety of national higher education systems and of late we have seen a considerable rise in these fees, for instance in England and the USA (e.g. Ertl and Dupuy 2014). In Germany, however, from 2006 onward there were only isolated attempts to introduce tuition fees at public higher education institutions which were abolished again shortly after, at the latest by 2014. How did this unusual development in international terms come about?

The discussion concerning tuition fees began in the mid-1990s. As part of the much debated crisis in higher education institutions in Germany, funding was one of the issues raised. Although student numbers continued to rise, given the costs of reunification, states were finding it difficult to find the funds for higher education institutions. Budget cuts in higher education coincided with an intensive discussion on what many thought of as the inadequate quality of teaching as part of the criticism of the "mass university". In the light of this, introducing tuition fees promised to overcome bottlenecks in funding on the one hand, and to improve teaching quality on the other. Between 2006 and 2007, seven of the 16 states—Lower Saxony, Hesse, Saarland, Hamburg, North Rhine-Westphalia, Bavaria and Baden-Württemberg—introduced universal tuition fees. In most states, tuition fees stood at roughly 500 euros per semester. In 2014, Lower Saxony was the last state to abolish fees. Thus, the attempt to introduce tuition fees has failed for the time being and there are no signs at present for a rekindling of the discussion.

In our opinion, the interaction of three mutually reinforcing factors can be held responsible for the failure of the introduction of tuition fees. Firstly, Germany boasts a strong welfare-state orientation. Therefore, the public at large view the funding of higher education—as with education generally—as a function of the state. The crisis in the "German-style" welfare state and the simultaneous stronger acceptance in society of a neo-liberal body of thought towards the end of the 1990s opened a window that facilitated the introduction of tuition fees in some states. However, the window closed again in the wake of the financial and banking crisis.

Neo-liberal market-based solutions were viewed much more critically than previously and uncertainties arising from the financial crisis led to a call for a restrengthening of welfare-state policies.

Secondly, the effects of tuition fees are unclear. It could neither be proved beyond doubt that tuition fees actually led to an improvement in teaching quality, nor that they did not lead to an increase in social selectivity when it came to access to higher education. In fact, studies showed that there was only an insignificant improvement in quality whereas the social selectivity in the education system—which is high anyway—was further strengthened by the fact that tuition fees had a deterrent effect on some students from so-called less well-educated families. Even if such effects were case specific, uncertain and ambiguous, they had an impact because of the already somewhat generally skeptical view of tuition fees.

Finally, the third factor—the federal system—is of particular importance. The effects of federalism could initially be seen in the fact that only seven states introduced universal tuition fees. In other words, the opposition to tuition fees was evident in the political system and the majority of states were able to advertise their waiving of tuition fees. But federalism also affected the institutionalization and legitimacy of tuition fees in another way. At state level, Germany is in a constant election campaign. Between 2006 and 2012, there were 27 elections in the states, taking place at 17 different points in time. Tuition fees were a major issue in many campaigns and the controversy was constantly being updated.

While centralist systems enjoy a period of consolidation following an election—until the next election—we did not have this in Germany in relation to tuition fees. This contrasts with other neo-liberal reforms in Germany that were not passed at state level, but at national level. Far-reaching reforms in labor market policy in Germany implemented under the social democratic Schröder government in 2002 and 2003—much against the sometimes vehement resistance of the trade unions and some of Schröder's own social democratic party—were retained and not abolished later. This example of the unsuccessful introduction of tuition fees in Germany shows—beyond this specific issue—what reform processes in a federal system can look like: they are not uniform, not nationwide and are somewhat incremental in nature—500 euros tuition fees per semester is very little compared to other countries. Instead they are highly fragile, and given the many election campaigns they can easily become a permanent, controversial ongoing topic. It is, therefore, likely that such reforms will not be adopted on a larger scale or even abolished, if, as in our case, there is an ingrained fundamental skepticism toward the reform.

2.2.4 Reforms in Staffing Structures

The reforms in staffing structure comprise three principal aspects. The first is the conversion from "C" to "W" salary structures for professors (e.g. Handel 2005;

Herzog and Kehm 2012). The "C" salaries were introduced in the 1970s in Germany and comprised four scales (C1 to C4), with full professors[10] categorized in scales C3 and C4. In each of the "C" salary scales there was a fixed basic salary that applied nationwide and which rose based on set rules over the course of employment (increments based on experience). In principle, this meant that professors employed at the same scale and with the same level of experience would be paid the same salary regardless of their subject and their performance. A slight variation in this was only available at the highest scale (C4), where professors could negotiate an increase in salary based on a call from another higher education institution (Wahlers 2006).

In contrast, the new "W" salaries have three scales (W1 to W3), with scales W2 and W3 applying to full professors and W1 to non-tenured junior professorships. Unlike "C" salaries, "W" salaries consist of a (significantly smaller) basic salary, which can be improved through performance bonuses that are usually restricted to a certain amount. Pursuant to Article 33.1 of the Civil Service Remuneration Act (*Bundesbesoldungsgesetz* 2006), there are three ways to obtain performance bonuses: based on appointment terms and negotiations to remain at the institution when professors receive a call from another higher education institution; for individual performance in research, teaching, further education and/or support given to junior academics (special performance bonuses); and by taking on management functions (management performance bonuses). The conversion of the salary structure meant that individual performance had an impact on professors' salaries. The conversion increased competition between professors, particularly so because the overall amounts allocated for professors' salaries was not increased. This is more or less a zero sum game in which the gain enjoyed by one meant a loss for another.

The introduction of performance-based salaries is a good example of how the trust in the work of professors we described above has been replaced with a "trust in numbers" (Porter 1996). At the same time, this has led to a differentiation of salaries—albeit significantly limited. This differentiation was however increased as a result of the Reform of the Federal System which we described above when responsibility for regulating professors' salaries was handed over to the individual states in 2006. Although they did not change the fundamental structures in any way, differences arose in the basic salary paid by each of the states. The basic gross salary of W3 professors in Thuringia mid-2015, for example, was 5732.73 euros per month, while in Baden-Württemberg the same scale stood at 6575.51 euros (Deutscher Hochschulverband 2016).

However, the Federal Constitutional Court passed judgement on the regulations governing the state of Hesse's performance bonuses for W2 salaries (BVerfG 2012), declaring them unconstitutional as the salary—without the performance element—

[10]In the German system there are two types of full professorships (before 2002, C3 and C4; since 2002, W2 and W3). Whereas in the past both types were different in status, salary and endowment, nowadays these differences play a far smaller role.

did not adequately comply with constitutionally guaranteed payments in line with the maintenance principle[11] for public officials (*Beamte*). Although the judgment only referred to the regulations in Hesse and the W2 salary scale, it did question the whole "W" salary system since the basic gross salary for W2 professors in Hesse of 4176.45 euros per month was not much different to salaries paid in other states. This gave cause for all states to review their salary regulations. In most states, the basic salary was increased, with a simultaneous lowering of the performance proportion of the salary. In addition, increments based on experience were re-introduced in some states (Gawel 2013).

As we will see as the book progresses, this is our first encounter with the Federal Constitutional Court as an actor exerting considerable influence on the reform of higher education in Germany. In terms of formal jurisdiction and the legitimacy of its judgments, the position of the Federal Constitutional Court can be best compared to the Supreme Court in the USA. Given the various constitutional norms, the Federal Constitutional Court has passed a number of judgments on higher education reforms in the last few years. This has led to considerable adaptations of the reforms compared to how they were originally envisaged. In respect of performance incentives, for example, it can be seen that the Constitutional Court does not have any fundamental objections under constitutional law to such a salary structure. If the basic salary is sufficient, the Federal Constitutional Court has no concerns about performance incentives. The fact that performance incentives have nevertheless been reduced in the wake of the judgment is due to the states not wanting to increase the total sum allocated to salaries. This then leads to a zero sum game, now to the detriment of performance incentives.

Connected to the reform of "W" salaries was the introduction of junior professorships (W1) as a second important reform element in staffing structures (e.g. Federkeil and Buch 2007; Burkhardt and Nickel 2015). On the basis of amendments to the Framework Act for Higher Education, this scale was introduced on a national level. The junior professorships gave newly-qualified academics access to independent teaching and research positions after gaining their doctorate—much earlier than under the traditional German system. At the same time it was planned to replace the post-doctoral habilitation[12] with the junior professorship

[11]The maintenance principle is one of the principles guaranteed in German civil service law. Article 33.5 of the Basic Law establishes the jurisdiction of the principles of the professional civil service. The maintenance principle means that the employer is obliged to provide suitable maintenance commensurate to the office assigned to public officials, and this life long. Commensurate is measured in comparison to other professions. This regulation must be seen in the light of the fact that public officials in Germany cannot go on strike and thus are somewhat limited in the manner they can assert their interests over those of their employer. The maintenance principle does not therefore apply to public service employees (*Angestellte*), who are permitted to assert their interests by striking. In Germany, most professors are public officials, which explains why the maintenance principle is relevant here.

[12]The habilitation is a post-doctoral examination typically 6–8 years after the doctorate and for a long time in Germany it was required to become a full professor (for more details, see Chap. 6).

as a requirement to qualify as a full professor. An attempt was thus being made to abolish the habilitation (Detmer 2004, 54).

However, in a judgment passed by the Federal Constitutional Court, the original plans were amended (BVerfG 2004). Several states took legal action. They were of the opinion that the federal government had overstepped its framework legislative competence in prescribing detailed guidelines for the junior professorship and that the states would no longer have decision-making authority. The Federal Constitutional Court shared this view, repealing the nationwide regulations in the Framework Act for Higher Education relating to junior professorships and affirming that the federal government had transgressed its authority. This was not about the structures of the junior professorship itself, and from a constitutional law perspective there was nothing against anchoring the junior professorship with identical words at the level of the individual states.

The junior professorship was actually incorporated in the states' respective higher education acts—however, with one central disparity: it was no longer prescribed as the only possible prerequisite for gaining a full professorship. In practice, the junior professorship has now become an alternative to the traditional habilitation to qualify as a full professor. Federal government plans to replace the habilitation with the junior professorship clearly did not succeed.

A third change in the area of staffing concerns the fixed-term employment arrangements for non-professorial academic staff at higher education institutions introduced in the fifth amendment to the Framework Act for Higher Education in 2002 and in the meantime found in the Law on Fixed-Term Contracts in Higher Education and Research (*Wissenschaftszeitvertragsgesetz*). This stipulates that academic contracts could be limited for a total of up to 12 years following graduation.[13] Six of these 12 years could be assigned to the period prior to gaining the doctorate and six following the doctorate. The aim of the law was to force a decision on whether a member of staff could remain in the higher education system at the latest after 12 years' employment. In addition, "vacant positions should not be blocked permanently" (Deutscher Bundestag 2001, 20), because the ability of research to innovate is also based on the fact that there is fluctuation in staffing and that young researchers with new ideas can then be integrated.

These regulations—both in an overall sense as well as in detail—have proven to be controversial and have triggered lively discussion. The first change was introduced in 2007. This opened up the possibility of extending temporary employment beyond these 12 years through the use of third-party funding. Another key change was instigated in 2016. The primary reason for this was an evaluation of the Law on Fixed-Term Contracts in Higher Education and Research conducted by Jongmanns

[13]Normally, German labor law only allows fixed-term employment contracts for no longer than 2 years. The question of whether an employment contract is for a fixed term or indefinite is important in the German labor law system because indefinite contracts are subject to German employee protection law—including not inconsiderable restrictions on terminating the contract. On the other hand, if the contract is for a fixed term, employment can simply be terminated once the term has expired.

(2011) and the discussions which followed. The evaluation established that 53% of contracts were fixed-term contracts of up to 1 year, 36% between 1 and 2 years and only 11% were for fixed terms of more than 2 years. This meant that these regulations had led to a chain of short-term contracts and a high degree of uncertainty in terms of whether a contract would be renewed or not. In many subsequent discussions, this was described as a precarious situation that acted as a deterrent for young academics. Since 2016, the law now stipulates that the length of fixed-term contracts should correspond to the respective qualification goal and that with positions based on third-party funding, contracts should cover the full duration of a project. The aim here is to put a stop to short-term chains of contracts and to implement longer-term contractual periods. What the real effects will actually be remains to be seen—not least because of the very wishy-washy wording of the legislation.

2.2.5 Reforms in Governance Structures

Reforms in governance structures in Germany are strongly related to new public management[14] (NPM). These reforms comprise a wide range of measures including some that have already been described in this chapter. The fundamental aim of NPM reforms is to structure the regulations of higher education institutions and higher education systems in such a manner as to ensure that goals can be achieved as efficiently and effectively as possible.

The traditional governance model of universities in Germany was characterized by the coexistence of strong state regulation and academic self-organization (e.g. Clark 1983; Braun 2001). In contrast, the NPM model strengthens competition both between and within the higher education institutions, strengthens managerial self-governance, weakens the principle of academic self-organization and provides for stronger external guidance, instead of detailed state regulation (de Boer et al. 2007; Lange and Schimank 2007; Kehm and Lanzendorf 2006b; Braun and Merrien 1999). Alongside the "New Public Management Model" label we can now find

[14]In the general NPM concept, we need to distinguish between a macro (regulatory dimension) and a micro dimension (internal structures). The regulatory dimension assesses the whole public sector to determine whether certain tasks can be undertaken by the state or by private providers and attempts to limit state influence on core tasks. Examples of this include the privatization of rail and postal services and power supply in Germany. In relation to higher education, these discussions have played a somewhat minor role (for the international discussion see Serrano-Velarde and Krücken 2012). On the other hand, the internal structures dimension is concerned with the manner in which state tasks can be performed as effectively and efficiently as possible. The focus is on the internal structures of public organizations, which, in terms of decision-making structures, staffing policies, performance assessment and management are to be aligned with private corporations, especially those in the service sector (for the German discussion on the general NPM concept see Bogumil et al. 2007; Kegelmann 2007; Proeller and Schedler 2006; Vogel 2006; Naschold and Bogumil 2000; for international developments see Pollitt et al. 2007; Christensen and Lægreid 2002).

terms such as "New Managerialism" and, if one focuses on the underlying university model and not the governance model, "Entrepreneurial Universities".

Let us first take a look at the notion of competition. Competition between higher education institutions has increased in recent years. This is expressed, for example, in the Excellence Initiative mentioned above and the program from both federal and state governments aimed at improving conditions for studying and the quality of teaching (the Teaching Quality Pact). At the same time, many states have established competition between their higher education institutions by, on the one hand, initiating their own "excellence" competitions at state level, and on the other hand by linking an element of funding to performance, with performance measured by comparing higher education institutions (e.g. Nickel and Ziegele 2008; Hartwig 2006; Schröder 2004; Jaeger et al. 2006; Leszczensky and Orr 2004).

There has been a significant increase in competition within higher education institutions between departments and institutes. Some state Higher Education Acts now call for funds to be distributed within the higher education institutions based on evaluations and performance indicators. Thus departments are competing among themselves for funding. While in the traditional German system, funding was based on cameralistic, or single-entry, accounting, now we are witnessing competition between and within higher education institutions (e.g. Jaeger 2008; Jaeger et al. 2006; Schröder 2004).

This heightened competition also affects professors in terms of both staffing remuneration and their endowment. The clearest sign of this is in the introduction of performance bonuses for special achievements in teaching and research mentioned above. This establishes competition between professors within a higher education institution. In much the same direction, this means that a chair is endowed normally only for a temporary period and only when appropriate performance continues to be guaranteed (e.g. Detmer 2003; Schenke 2005). By way of contrast, in the traditional system endowment commitments were indefinite and thus independent of any future performance.

Overall, it can be noted that the competitive mechanisms within the German higher education system have increased on a number of levels in recent years. However, this competition is not taking place on traditional markets, but at the most on quasi-markets (Le Grand 1991). The only attempt at introducing traditional market competition in higher education was the tuition fees, but as we described above, this attempt failed.

The fact that external guidance or "steering from a distance" (Marginson 1997; de Boer et al. 2006) has become the new dominant leitmotiv of the reform process in recent years[15]—more or less replacing the detailed state regulation—can also be illustrated with the help of some examples. These include the introduction of global budgets described above (e.g. Lanzendorf and Pasternack 2008; Hartwig 2006; Postlep 2004), target and performance agreements (e.g. Rogal 2008; König 2006;

[15]The first discussion of external guidance as a governance mechanism for higher education systems can be found in van Vught (1989).

Schimank 2006; Ziegele 2006; Lanzendorf and Orr 2006) and the transfer of state supervisory functions to the newly-created higher education boards of governors (Hüther 2009; Jochheim et al. 2016; Kretek et al. 2013).

In some areas, there is thus a trend towards deregulating the higher education system and converting it to a form of "steering from a distance". Higher education institutions are therefore being freed from the regulations concerning formal detailed provisions that had been required since the 1970s. Accordingly, higher education institutions have been gaining formal autonomy since the end of the 1990s. In part, this includes rights they have not enjoyed for centuries. A number of states now allow higher education institutions to appoint professors themselves: traditionally appointments were made by the respective ministries for education and research in the states.

In terms of autonomy, however, three facts need to be taken into account. Firstly, external steering has not been implemented consistently across the board and has in fact been organized to different degrees in the individual states. Secondly, the past few years have seen a curtailing of autonomy with new state-based higher education acts re-introducing intervention rights for education and research ministries (e.g., 2015 in North Rhine-Westphalia). And thirdly, higher education institutions' autonomy can also be narrowed through external guidance—sometimes clearly more effectively than through the regulation of details. What has changed as part of NPM is the mode of steering, not necessarily the intensity of the steering.

Closely connected to the reduction in the regulation of details is the strengthening of managerial self-governance. According to the ministries for education and research, the new competences and freedoms are not being transferred to academic decision-making bodies which are regarded as being incapable of making decisions. The strengthening of managerial self-governance is achieved by shifting decision rights from the state and academic bodies to presidents and deans (Hüther 2010, 195–336).

Moreover, there have also been attempts to professionalize higher education management. This has been expressed not only in extending the terms of office for presidents, vice presidents and deans (Hüther 2011), but also for the professionalization of the whole administrative body of higher education institutions (Krücken et al. 2009, 2012, 2013; Whitchurch 2006; Gornitzka et al. 1998). Overall, the literature on the subject assumes that we are seeing the emergence of a managerial hierarchy at German higher education institutions and at the same time the previously dominant principle of academic self-organization is losing importance.

The aim of these reforms is to resolve some of the decision-making problems incumbent in the group universities introduced in the 1960s and 1970s. Decision-making processes are to be accelerated and the quality of decisions should be increased by strengthening the management level. In terms of internal organizational structures, the new reforms are attempting to correct misguided developments and the transintentional effects of the introduction of the group universities imposed by the state.

However, upon closer observation, it can be seen that the regulations introduced to strengthen higher education management are, in part, inconsistent. In most states,

presidents, vice presidents and deans are still elected by academic decision-making bodies. Furthermore, these bodies play an important role in voting out presidents, vice presidents and deans (Hüther 2011). In addition, higher education leaders have hardly any chance to safeguard their decisions by exercising power and imposing sanctions on academic staff (Hüther and Krücken 2011, 2013, 2015). Recent research results show that consensual decision-making is still the norm at German higher education institutions, even though formal hierarchical decisions could have been made (e.g. von Stuckrad and Gläser 2012; Bieletzki 2018; Kleimann 2015). Within higher education, we are still witnessing a continuation of the consensual culture. This is hardly surprising given the long tradition of academic self-organization.

This chapter has shown that many reforms on a wide variety of levels have taken place in the German higher education system since the late 1990s. Regardless of how these reforms are evaluated—either individually or overall—it can be seen that the German higher education system is being put unter pressure to change. This book takes a deeper look at many of these reforms, attempts to retrace effects to date and to deliver preliminary assessments with regard to the scope and depth of the elicited changes. From an academic point of view, the new dynamics in the German higher education system, a system rich in tradition and which has been highly successful in the past, make this a rewarding and exciting field of study.

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