Steering in a Modern Higher Education System: The Need for Better Balances between Conflicting Needs and Expectations

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Content

1   Introduction

A first glance at the available analyses and at the discussions among actors and experts suggests that emotions run high, if steering in the higher education system is on the agenda. We come across terms such as "university autonomy" and "academic freedom" calling for a more or less unlimited power of the internal actors to shape the inner organizational life of the institutions of higher education as well as for a more or less unlimited power of the academic profession to determine the substance of their core work within the institutions of higher education. In contrast, we also find terms such as "loosely coupled system" and "organized anarchy", which underscore that steering of higher education is different from that of other institutions, e.g. governmental agencies as well as organizations in charge of production and services, and thereby hint that the extent to which steering of higher education ought to differ from that of other institutions is debatable (see Musselin 2007).

Discussions about the actual and desirable steering within the higher education system have some common elements across countries (some of the following observations have been presented in Teichler 2007, chapter 7; Teichler 2014, chapter 8). We note everywhere two major organizational issues: First, the relationships between the higher education institutions and external forces (government, external "stakeholders" as well as various political, economics, societal and cultural influences) and, second, the internal elements of organization, decision-making etc. within institutions of higher education (e.g. the role of various institutional levels and the power of institutional leaders and administrators vs. academics). And we observe everywhere a discussion about the links between organizational issues and the functional side of higher education: How do the prevailing steering approaches shape academic work and life as well as the impact of academia on society? This does not mean, however, that steering within higher education is similar across countries: there are traditionally enormous differences between the higher education steering environments of the various countries. The variety will be illustrated in this presentation through a look at a few traditional models as well as a look notably at developments, debates and analyses in economically advanced countries from the 1960s to the 1980s – a period, in which many university traditions were challenged and reform efforts flourished.

Starting in the 1980s and intensifying in the 1990s, we note a growing belief that there might be a globally suitable system of steering within higher education systems as well as somewhat convergent trends. Some features such as stronger role of university management, a spread of evaluation as well as of mechanisms of incentive and sanction, and a weakening of academic power obviously can be found everywhere in some way or another. This will be addressed in the presentation with a look whether we really can talk about a remarkable convergence or still a strong persistence of variety.

The advocates of the current almost global features of steering claim that superior ways of shaping and serving the proper core functioning of higher education have been found in recent years, while others claim that the current systems of steering are detrimental for desirable research, teaching and learning and their eventual outcomes. Therefore, an overview will be presented about the core

substantive issues, which are predominantly targeted by the steering system. Subsequently, efforts will be made to assess the strengths and weaknesses of the current major steering approaches. In this framework, special attention will be paid to the academics' views: How they assess the current steering system, can be illustrated by the findings of an international comparative study of the academic profession, quantitative, structural and organisational relationships between higher education and employment.

2 Variety of Steering Concepts and Practices

2.1 Traditional Models

Most historical analyses of higher education suggest that the "idea" of the university formulated by Wilhelm von Humboldt prior to the establishment of the University of Berlin in the year 1810 has been most influential for the emergence of the "modern" university (see for example Perkin 2006; cf. also Ben-David 1977). Among the three principles put forward, the "unity of research and teaching" is most often named, while the "community of teachers and learners" and "solitude and freedom" emphasized by von Humboldt as well tend to be named less frequently. Though, these three principles do not explicitly address the steering system, they had many implications for steering, which had a strong impact on the German higher education system up to the 1960s, as will be pointed out below, as well as on many other countries.

We can describe German higher education as being characterized in the 19th and 20th century by a central role of the individual professor. The rectors and deans were professors who just spent a short period of their life with limited administrative and ceremonial duties. Clearly, the principle of "academic freedom" was strongly emphasized, whereas "university autonomy" was viewed as less important. The students were understood as members of the internal life of the university – not as "clients" as in some other countries. The government was hoped to be a benevolent funder and as "guardian angel" for academic freedom; a strong supervision of general administrative elements and of the use of financial resources was not viewed as contradicting this major role. When it became clear in the German history in the 1930s and early 1940s that government can be very intrusive, "academic freedom" of the university professor as regards research eventually was stipulated in the German constitution of 1949 as a constitutional right (see Teichler 2011).

British universities were often described as the incarnation of a "collegial" model: Historically, emphasis was placed on the academic disciplines and on departments within universities (faculties and colleges), and cooperation concentrated on this level on issues of quality of the curriculum, teaching, learning and assessment. The coordination role of the university as a whole played the smallest role in the case of the most highly reputed universities. Government, as in the case of Germany, also was

the clearly dominant funder of universities, but it was viewed as consistently respecting university autonomy (see Rüegg and Sadlak 2011; Lockwood 2011).

Higher education in the United States of America historically is characterized by a strong role of university management supported by a large and powerful administration. The university leaders had to find their ways of getting along with a multitude of external expectations which were not as concentrated as in European countries' through strong governments. It was important in this context that the U.S. was the only economically advanced country in which private universities had the highest academic reputation (Geiger 1986), and this had an autonomy-reinforcing impact on public universities. University leaders had a stronger supervisory role as regards academic activities than their European counterparts, but as a rule they were viewed by academics as being supportive for a typical academic culture (see Birnbaum 1988).

In presenting these three models here, the author of this presentation is reminded of the opening and modernization policy in China in the mid-1980s. At that time, "wise men" from different countries were invited in various sectors of economic and societal policy to present the experiences of their countries and to share them with dozens of Chinese experts in their respective field. Thereby, the prior knowledge of the countries and possibly of the experts guided the selection of themes. At such a "wise men" meeting in October 1985 addressing higher education, the Chinese hosts asked an expert from Germany – actually the author of this contribution to concentrate on issues of the academic profession (the "professor"), an expert from Britain to focus on teaching and learning, and an expert from the United States of America to address issues of governance and management. Additional experts from France, Japan and the USSR were invited to address broader thematic areas, and experts from Yugoslavia and Turkey to report on higher education development in their respective country. These invitations were clearly based the belief that the U.S. had the internationally most successful model of higher education governance, but the search for the most modern higher education system cannot pay attention only to governance as such; the consequences of governance to academic functioning is salient.

2.2   Experiments from the 1960s to 1980s

The following analysis of steering in higher education systems focusses on economically advanced and academically mature countries. This choice is made, because, as already pointed out, these countries have relatively similar conditions for shaping their higher education system organizationally and functionally. Mid-income and low-income often consider higher education in economically advanced countries as models to follow, but the pre-conditions for such options differ: Often, they opt for more utilitarian policies of catching up economically and academically. Additionally, many of these countries are characterized of highly intrusive governments with lesser trust in the potentials of

relatively high degrees of "university autonomy" and "academic freedom". Further, financial constraints often have a strong impact on higher education policy. Last but not least, conditions for consistent and efficient policies, strategies, management and administration vary.

During the 1960s, a strong need was widely felt in economically advanced countries to reconsider the quantities and structures of the higher education system as well as substantive activities within higher education institutions in the areas of teaching, learning and research. Controversial discussions were widespread notably (a) about the possible contribution of educational expansion for economic growth, (b) about changes of the character of higher education in the process of expansion and (c) the frequently connected growing diversity of higher education, and finally (d) about the challenges posed to traditional higher education by the student protests in various countries. As response, changes of the steering system notably with respect to the relationships between higher education and society were most strongly advocated notably in European countries for two reasons. First, the university professors were viewed to be in the majority resistant to necessary changes. Second, a stronger involvement of government in higher education policy was widely viewed – with the United Kingdom as an exception (Rüegg and Sadlak 2011) as necessary in order to fund the expansion of higher education and to support a quantitative and structural change of higher education in tune with the growing economic importance of higher education and with the aims to support educational equality and meritocratic links between education and the labour market (see Teichler 2007, chapter 6).

In looking at actual developments of steering in higher education systems in economically advanced countries from the 1960s to the early 1980s, we might state that
— the role of government was strengthened in various countries as regards mid-term planning of the higher education, for example as regards access and admission to higher education as well as diversification of institutions and study programmes, as regards preparing more detailed legislation to shape the functions and operations of higher education, and as regards involvement in incentive funding, etc.;
— steps were taken in various countries to professionalize the leadership and administration of institutions of higher education as well as to strengthen their steering power to some extent;
— some European countries opted for participatory decision-making models within higher education institutions: Junior academic staff, students and possibly other staff got certain proportions of seats and votes in senates, faculty meetings and other decision-making arenas within higher education institutions;
— the power of the professoriate was weakened somewhat in many countries and substantially in a few countries;
— the higher education sectors without a close link between teaching and research but rather with a dominant role of teaching, which newly emerged or were extended in various countries during this period, often were characterized by less power of the academic profession than in research-intensive higher education institutions.

Several scholars developed interesting concepts about the existing variety of governance models within higher education systems. Burton Clark's (1983) "triangle of coordination" – or better: triangle of power - in academia became most widely known: In the view of this U.S. scholar, national higher education systems could be described according to the extent higher education is ruled by

— the state,
— the market, or
— the academic oligarchy (i.e. the professors).

Various other scholars argued subsequently that the university leadership or management should have been named by Clark as a fourth force within this model.

Also the typology developed by the Australian scholar Grant Harman (1992) got well known. Accordingly, higher education governance in most countries is based on one or on a mix of the following models:

— the collegial model, which emphasizes non-hierarchical cooperative decision-making and a substantial degree of institutional self-determination by academic staff,
— the bureaucratic model, which stresses legal-rational authority and formal hierarchies,
— the professional model, which puts the authority of experts in the forefront as well as the importance of horizontally differentiated units linked to loose confederations, and
— the political model, which conceptualized governance in terms of political conflict among interest groups with competing views and values.

Finally, the concept presented by the Dutch scholars Peter Maassen and Frans van Vught (1992) might be named here. Accordingly, governance within higher education systems can be described best in terms of the degree of power allocated to the levels of actors: Notably the level of government and society, the level of the centre of the institution of higher education, and the level of departments and academics. For example, the university management clearly dominates in the U.S. higher education, and Britain is described by the authors by a balance between strong university management and academia. The situation in many continental European countries is characterized according to these authors by a polarization of strong government and strong academics along a weak university leadership.

Various efforts for improvement as regards teaching and learning, research and steering could be observed from the 1960s to the early 1980s, but the discussions about higher education in the 1980s eventually indicated a widely spread sense of uneasiness or even sense of crisis (see Teichler 2007). This held true as regards

— the academic profession: Trust faded that the traditional models of academic socialization and collegiality would ensure a high quality of academic work;
— government: One felt disappointed about the intensified activities of governmental planning, and the traditional modes of governmental supervision were often blamed as restraining the dynamics of modern higher education;

— financial situation: Public expenditures had not grown in tune with the increase of student numbers, and complaint was widespread that financial support for a growing relevance of research for the future of economy and society was lacking;

— teaching and learning: Although increased attention paid to teaching and learning was widely acknowledged in the 1970s, critique was often voiced that steps toward a professionalization of the academic profession as regards curricula, teaching and learning had remained over-cautious and small;

— research: Critique widely spread in the 1980s in many countries that altogether the quality of research did not reach the expected level;

— steering in the higher education system: Some experiments in this domain met predominantly with criticism, others were more or less accepted, but overall the notion was widespread in most countries that improvements should in this regard be strived for.

In total, one could observe in the 1980s not as much as in the 1960s and 1970s a strong sense of optimism shared by some actors and observers on the one hand and on the other a strong sense of fundamental critique. But obviously, a sense of uneasiness as regards the situation of higher education was so widespread in the 1980s that a search for reforms was in the air.

2.3   Towards the Managerial University

In the 1980s, two European countries started first steps towards change of the dominant steering approaches (see van Vught 1989; Neave and van Vught 1991) in a direction, which eventually spread in the 1990s and finally also affected late-coming countries in the early years of the 21st century, such as Germany (see Teichler 2002; Kehm 2006; Wolter 2007) and Japan (see Amano and Poole 2005; Ehara 2006): The unfolding of a "managerial university".

In the Netherlands, the Dutch government was the driver of a reform of the steering system. The model chosen in the mid-1980s, which eventually had a strong influence on subsequent reforms in other European countries, characterized the role of government as 'steering from a distance'. Three elements of the reform stood out: First, government reduced detailed procedural supervision and control dramatically, emphasized selective target-setting as regards the quantitative-structural development and functional priorities of higher education, and reserved for itself the right to intervene, if self-regulation of the higher education system led to obvious substantial deficits, notably quality losses. Second, the managerial power of the university and of the faculty (i.e. department in U.S. terms) was strengthened substantially. Third, output evaluation became an extended and diversified activity – at the beginning primarily an evaluation system of study programmes with a strong role of observations by "peers", whereby one was aware from the outset that such an evaluation system had a sensitive double function: to stimulate academics' reflection of curricula, teaching and learning, students' values and behaviour, etc., and to provide information to those in power (the university management and the government) to step in eventually (see Teichler 1989). Over the years, the

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actual power and coordination role of the university and faculty leadership increased further, and additional mechanisms of evaluation, accreditation and incentive steering were added, but still the Netherlands remained a model of relatively "soft" steering and of a somewhat cooperative climate among the various actors.

In the United Kingdom – notably in England and Wales – the shift from a "collegial" to a "managerial" higher education began in 1986, when government both reduced the overall funding of higher education drastically and introduced a "research assessment exercise". Subsequently, allocation of financial resources according to the research success of faculties and universities became a very strong element of governmental steering. Additionally, various intermediate bodies between government, the public and the higher education institutions were established, which also became highly influential in the overall steering of the higher education system. The university leaders – vice-chancellors – were traditionally appointed rather than elected from academics as the rectors in other European countries; over the years, they were less and less viewed as supporters of academic collegiality and instead more and more as supervisors of academic functioning and success, whereby assessment and performance-based funding played major roles. Nowadays, the United Kingdom generally is viewed as the European country with an exceptionally "hard" style of "managerialism" (see Deem 2005; Leisyte 2015).

In the 1990s, steering in higher education changed in the majority of economically advanced countries, whereby the strengthening of managerial power at the centre of the individual institution of higher education was the single most convergent feature. Some advocates of this change considered the strong university management in the U.S. as a successful role model. Other saw the increasing role of "New Public Management" in all societal sectors with strong governmental involvement as the driver, and others considered various weaknesses of higher education in the past as caused by academic conservatism or cosy collegial environment and, as a consequence, called for an interventionist managerial style.

Actually, all Western European countries moved in the 1990s towards a stronger managerial power in higher education (see Braun and Merrien 1998; Amaral et al. 2003). However, as various analyses show (Kogan et al. 2000; Huisman 2009; Kehm et al. 2009; Paradise et al. 2009; Lockwood 2011; Kwiek 2013; Beiklie et al. 2017), substantial differences between countries persisted as regards the view of desirable managerial power and the actual steering setting. These differences were often viewed by experts as more striking than the common features of managerialism.

2.4 Common Thrusts of the Managerial University

The "managerial university", as it spread notably during the 1990s in most economically advanced countries and still exists nowadays, is characterized by a strong power of the university leadership. It is often said that the universities now, not being caught anymore between the state and academic

self-governance, have become organizational actors (e.g. Krücken and Maier 2006). But it is clear that not "the university", but rather the university top management is referred to and that the power of the university top management is not confined to organizational matters, but that is has a strong influence at least on academic priorities.

Three features accompanied the growing power of the university management in more or less all economically advanced countries:

— A reduction of detailed "prescriptive" supervision by the state, where it had existed previously: A move away from very detailed regulatory system and a discontinuation of detailed bureaucratic involvement and supervision on the part of the responsible government.

— An increase of assessment of academic "performance": Various assessment mechanisms and their results tend to be employed by the university management to steer the inner life of the higher education institutions – for example in establishing and closing academic units, in academic staffing policies, in the allocation of funds, etc.

— Academics are the losers of increased managerial power in two ways: A reduced involvement in decision-making within the higher education institution and a gradual loss of disposition power as regards their own academic work as a consequence of stronger "expectations", incentives and sanctions.

A look at the growth of assessment mechanisms is appropriate at this point, because they are the most visible companion to the growing managerial power (see the overviews in Cavalli 2007). Assessment of academic performance and output had existed in higher education all the time, but the assessment activities in most economically advanced countries had centered in the past on specific incidences: The recruitment, promotion and dismissal of academic staff, the provision of exceptional resources for research (e.g. through specific research promotion agencies), and the award of special honours. Since the 1980s, however, we note an increase of "evaluation" and the establishment of "performance indicators": They differ from previous assessments by (a) being undertaken regularly (e.g. annually, every five years, etc.), (b) being all-embracing (i.e. including all academics or all academic units of the respective type of staff, the respective institution, the whole country, etc.), and (c) being systematic, i.e. being shaped by certain formulated procedural rules and assessment criteria.

A review undertaken in the late 1990s reported that about 40 countries had introduced major national evaluation schemes in higher education since the 1980s (Kells 1999). Many of these schemes focused on study programmes, some on curricula, teaching and learning activities of departments and some on research within departments or higher education institutions. Most of the evaluation processes were characterized by self-evaluation as a first step and evaluation undertaken by "peers", academics of similar positions and specialization from other institutions or other experts as the major step. Evaluation schemes varied according to the extent they aimed at setting general standards of "performance" or "success" ("fitness of purpose") or at respecting the desire of the evaluated unit to pursue specific goals ("fitness for purpose"). Actually, such elaborate evaluation schemes of study

programmes or the educational functions of departments or institutions lost ground in European countries in the early years of the 21st century. This was in part due to the introduction of accreditation of study programmes at that time (see Schwarz and Westerheijden 2004). In part, it was a consequence of the spread of performance indicators in higher education.

Indicator-based assessment in higher education spread along increasing managerialism. Governments, in discontinuing supervision through detailed bureaucratic procedures, called for aggregate and transparent information to assess the performance and output of higher education, and university managers increasingly preferred handy and seemingly "objective" measures as well, on which they could base and justify their decisions. As regards teaching and learning, indicators notably on success and drop-out rates and the graduate employment success spread. As regards research, indicators notably on the acquisition of research grants became popular, on the number of publications in highly reputed publication outlets and possibly on their citations as well as on the numbers of patents and prizes.

2.5   Continuous Noteworthy Variety of Managerial Systems

We often note a simplified discourse with widespread similar rhetoric about the managerial university suggesting that a more or less identical system of steering within the higher education system has emerged across economically advanced countries. A close look, however, suggests that the underlying principles are varied (see Ferlie et al. 2008). And a look at the actual mechanisms and practices reveals striking differences across countries as well as in many instances also between institutions within the same country. Five major dimensions of variety might be named (see Teichler 2007, chapter 6), whereby only some examples of the actual variety can be provided as illustration.

First, the role of government, its modes of actions and its specific ways of influencing higher education vary. In some countries, governments now put prime emphasis on indicator-based fund allocation according a limited set of policy criteria. There are cases as well, where government undertakes a selective target-setting, e.g. efficiency, select societally relevant research areas, equality of opportunity in access. In some countries, higher education legislation shapes the higher education system in detail, but government is hardly additionally involved. Other thrusts might be named.

Second, the role of external actors varies substantially (see Jongbloed et al. 2008). In some countries, about nine tenth of higher education expenditures are publicly covered, in others less than half; this has enormous consequences as regards the involvement of external actors. In some countries or at some institutions of higher education, boards composed by external stakeholders are enormously powerful, whereas at other places, they have a moderate advisory role or are non-existent. Countries vary as well as regards the extent to which intermediary bodies and research promotion agencies shape higher education policy.

Some observers of the changing steering in higher education system claim that there was a trend towards increasing "autonomy" of the university in recent decades. Others argue, in contrast, that various components of direct supervision of higher education have been substituted by an even stronger more indirect power of financial cuts, "expectations", "market pressures" and a growing magnitude of influential external "stakeholders". We also observe a third view according to which external pressures have increased, but also the leeway for the institutions of higher education to make strategic choices.

Third, "authority" is distributed differently within higher education institutions. This holds true for management according to institutional level: The departmental management might have little to say, it might be a collegial buffer vis-à-vis the managerial centre, it might be a strong managerial actor clearly subordinated to the managerial centre, or it might be a strong managerial actor of its own. The role of the academics vis-à-vis the managers vary: Ranging from strong decision-making power to clear subordination. In those respects, we note differences between countries, but additionally specific strategies and specific milieus of the individual institutions of higher education (see for example Clark 1998).

Fourth, the modes of exercising authority vary both in the relationships between government and the institutions of higher education as well as between the different levels with institutions. Clear commands for action might play a role; often, in contrast, a "market" regulation is dominant through allocation of resources. One interesting model, which is for example widespread in Germany, is a contractual relationship: Multi-annual contracts are negotiated and eventually decided upon between governments and institutions of higher education, between the university leadership and the department, as well as between the institutional leadership and the individual professor. This permits a mix of top-down and bottom-up target-setting, incentive-funding and other principles.

Fifth, we note substantial differences as regards the extent to which these moves towards stronger managerial power are accompanied by increasing professionalism – of the university leaders, of the academics as well as in the size and the role of professional staff within higher education institutions in charge of manage-support and services – called for example "middle-level managers" or "higher education professionals" (see Meek et al. 2010; Schneijderberg and Merkator 2013).

Altogether, the models of steering within higher education systems are nowadays less varied than about five decades ago: at that time, as already pointed out above, one could observe distinct national models of internal substantial power of university management, of academic collegiality, and of the individual professor alongside strong organizational supervision by the state: at that time governmental involvement ranged across countries from moderate financial steering to detailed bureaucratic control. The models of steering are nowadays also in some respects more similar than about three to four decades ago, when Burton Clark saw the national systems somewhere located within triangle of the power of the state, the market and the academic oligarchy. Nowadays, we observe a convergent element of a strong central managerial power within institutions of higher

education; yet, recent public discourse suggests that the remaining differences of the managerial university across countries and individual institutions of higher education are no means trivial.

3 Steering as Viewed by University Professors

3.1 The Findings of an International Comparative Survey

As already pointed out, the changes over the years of steering in higher education had one element in common: the gradual reduction of the academics' power as regards
— making choices how to do their academic work (a relative decline of "academic freedom"), and
— decision-making within their institutions of higher education on organizational and academic matters in general (a relative decline of "academic self-governance").

It is interesting to observe how academics nowadays view and assess the steering system, as it had emerged in recent years. The academics can be providers of information through testifying how the changed steering system affects their professional role. But they concurrently present a subjective point of view as one type of the actors involved: Their statements might be influenced normatively by a sense of sorrow about the gradual loss of academic power in recent years and by a desire to strengthen their role.

The best source available for such an analysis of differences between higher education steering systems in different countries in the eye of academics is the international comparative survey "The Changing Academic Profession" (Teichler et al. 2013). Issues of governance had been one of the key themes of this comparative survey conducted in 2007 (see Locke et al. 2011). In the following overview, the responses of senior academics (professors and associate professors in U.S. terms) from research universities ("universities" in Europe and universities with a strong research role for example in Japan and the U.S.) in nine economically advanced countries are included (Finland, Germany, Italy, Norway, Portugal, the United Kingdom, Australia, Japan, and the U.S.) (see Teichler 2011).
— 89% of university professors on average of the countries included felt closely affiliated to their academic discipline, 62% to their department, and 57% to their university. Among the four countries also participating in a similar survey in 1992 (see Altbach 1996), the responses in Germany remained almost unchanged. In contrast, the professors' affiliation to the department and the university dropped in Australia, the U.S. and the United Kingdom on average by about 20% - in the case of the UK most dramatically.
— 38% on average across these countries believed that they have a real influence on academic decisions on departmental level. This ranged from about 63% in Germany and 50% in the U.S. to less than 30% in Norway and the United Kingdom. As regards the university level, only 17% on average believed to have a substantial influence. This was clearly above average in Germany

compared to 15 years earlier, professors in Australia noted a loss of influence on department level, but not on the university level; in contrast, professors in Germany and the U.S. observed an increase of influence both on departmental and university level.

— 53% on average across countries noted a top-down management style at their university. This was observed by three quarters of the professors in the United Kingdom and Australia, but only by one quarter of the professors in Norway. 39% on average said that the lack of the academics' participation on shaping their university was a serious problem.

— 55% on average across the nine countries believed that the existing expectations to increase the utility of their research activities and results are a threat to academic quality. This view varied by country moderately from 45% to 62%.

— 68% of the professors surveyed on average stated that they were satisfied with their overall professional situation. This was stated by 77% in Japan, by around 70% in six of the countries included, but less than average (63%) in the U.S. and clearly least frequently by professors in the United Kingdom (49%). As compared to 15 years earlier, more professors in Japan and Germany were satisfied, about the same in the U.S. and slightly fewer in the United Kingdom.

The author of this article has summarized the responses to various questions about the institutional culture. Four types of institutional characteristics were developed, which were called "the academic university", "the managerial university", "the collegial university", and "the supportive university" (Teichler 2011). Accordingly,

— University professors in the United Kingdom characterized their university as managerial and as not academic and as not collegial.

— Professors in Australia and Finland considered their university as well as managerial, but had less negative views as regards other dimensions.

— Professors in the U.S. appreciated their university as being managerial and concurrently academic and supportive.

— Professors in Japan viewed their university as supportive, but as not academic.

— Professors in Norway considered their university as collegial, but as not managerial and as not academic.

— Professors in Germany viewed their university as academic, but as not managerial.

— Professors in Portugal did not underscore any of these dimensions, but hardly considered their university as managerial and as supportive.

It must be noted that this international comparative study reports the views of academics about a decade ago. A new similar international comparative survey, called "The Academic Profession in the Knowledge Society" is underway in 2018 and 2019, but the results are not yet available so far.

3.2   Substantial Differences of Steering Climates across Countries

All the information collected in this international comparative research project suggests that at one extreme many university professors in the United Kingdom viewed their university negatively as taken over by a managerial style hostile to academics. In contrast, university professors in Germany often believed that managerialism has not taken over, that an academic climate has persisted to some extent and that the academics still have some influence. The professors in the U.S., further, saw managerial power and academic power less in conflict than their European colleagues. Finally, professors in Japan note very little influence on key decisions on university level, but they voiced a higher degree of overall satisfaction with their profession than more than a decade earlier.

The university professors in Germany have so much adapted themselves to the mild increase of managerial power that they state a slightly higher professional satisfaction in this survey than their colleagues in a similar survey undertaken 15 years earlier. The satisfaction of U.S. professors did not change on average, whereas UK professors already had reported a relatively low degree of satisfaction in the first survey and the average ratings went down further to some extent.

These findings suggest that managerial power in some countries might be compatible with a good academic climate within the university, while in others a conflicting relationship seems to prevail. The overall professional satisfaction might be linked to the steering modes in different ways. But, obviously, strong managerial steering could undermine a productive and desirable academic climate according to the academics' view: The comparative survey suggests that managerialism in the United Kingdom has been too much confrontational to the traditional collegial academic climate.

4 Functional Consequences of Steering Systems

4.1 Controversial Views about the Functioning of Steering Systems

Since more than two decades, we observe in almost all economically advanced countries steering approaches in higher education which are primarily characterized by a strong power of the central management within the individual university. Many proponents of the "managerial university" hail this approach as the best possible steering solution and believe that it is likely to persist in the foreseeable future. But we observe as well massive criticism and elaborate arguments about undesirable consequences (see for example Birnbaum 2000; Deem and Brehony 2005; see also Krücken 2014).

Moreover, there are major controversies in many economically advanced countries about specific features of the "managerial university". Germany is an interesting case in this respect. The prime

governmental responsibility for higher education is decentralized: Legislation, administrative super-vision and core funding is the task of the 16 "Länder" according to the constitutional principle of "cultural variety", but the Federal government is involved in nation-wide coordination and support, and the ministers of the Länder cooperate in various respects as well in order to reinforce the con-stitutional principle of "homogeneity of living conditions". Among others, an agreement was reached to enact in 1976 the "Framework Act for Higher Education" as a national law calling for common features of the higher education system which have to be followed in the higher education laws of the individual "Länder". The Framework Act comprised various elements of steering, both regarding the relationships between governments and institutions of higher education as well as regarding management and organization within the higher education institutions. Around 2000, however, when German higher education moved stepwise towards a managerial model, a decision was taken to abolish those regulations in the Framework Act which call for a common German approach in gov-ernance. As a consequence, the individual "Länder" moved towards greater heterogeneity for exam-ple as regards the supervisory role of government, the role of university boards, the coordination power of university presidents, the role of the faculties and deans, etc. (see Kehm 2006; Teichler 2007).

A close look at the controversial debates about the dominant steering approaches in higher education suggests that these debates do not focus completely on the operational logic of the overall steering within higher education systems. Rather, the impact of the steering system on the core of higher education is under debate: How does steering affect the academic functioning?

It is not possible here to present a comprehensive overview of the discourse in economically ad-vanced countries about the impact of the currently dominant steering approaches on the academic functioning. The author of this presentation, however, intends to summarize this discourse by dis-cussing key issues in six thematic areas. These might be phrased in terms of six provocative ques-tions:

— Is the university really an academic unit?
— Does "managerialism" in higher education lead to an uneven treatment of teaching and research?
— Is managerialism endemically inclined to overemphasize assessment and to reinforce simple in-dicators?
— Is the "managerial university" at a loss, as far as the balance of the criteria quality, relevance and efficiency is concerned?
— Are the academics bound to be the substantial losers of the "managerial university" and likely to be opponent to the dominant steering approaches?
— Does the sum of the strategic options taken by the individual universities lead to a distorted overall higher education system, and does it thus call for a strong macro-steering alongside?

4.2   The University – an Academic Unit?

In many countries of the world, the university has been historically viewed as a loose federation of disciplines and small units in charge of the core functions of teaching and research. Academia consisted of different "tribes and territories", as Tony Becher (1989) characterized the coexistence of varied academic cultures within universities. Surveys of the academic profession, like the one discussed above (Teichler et al. 2013), underscore that academics feel most strongly affiliated to their discipline. As regards a secondary or tertiary sense of affiliation, academics in some countries feel much closer to the department than to the university, whereas in other countries the sense of affiliation to the department and the university is similar. As a consequence, the university leaders in some economically advanced countries played a marginal coordination role as regards academic matters: Academic decentrality was the prevailing approach.

A strong power of the university management is tempting for the university leaders to push the institution in the direction of a somewhat common academic unit: nowadays, many universities try to underscore a university-wide profile through "mission statements" and "vision statements". They might push departments and scholars, who are not close to such a thematic or conceptual thrust, to adapt themselves to the mainstream. Some universities aim at bundling their international cooperation with a few partner institutions abroad. Some universities encourage cross-departmental cooperation.

The recent popularity of world-wide university rankings is based on various highly controversial assumptions, for example, that a steep vertical stratification of a national higher education is academically more productive than a system with a flat hierarchy, that success in publishing research is the most important indication of academic performance, that international visibility is the major aim of the university, that strong competition contributes substantially to academic enhancement, etc. (see Hazelkorn 2011, Shin et al. 2011). In this framework, it is worth noting that rankings of "world-class universities", which gained substantial popularity since the beginning of the 21st century, depict the university as a common academic unit. This is in contrast to the major prior rankings. For example, rankings of faculties according to selectivity in admission to higher education and according to the graduates' employment success were the most popular ones in Japan. In the U.S., rankings of graduate schools in individual disciplines were most often named. In Germany, rankings of the quality of study provisions in individual disciplines at individual universities were introduced in the 1990s as the single regular nation-wide ranking scheme. In all these cases, it was customary to employ the names of the universities (Harvard University, University of Tokyo, Oxford University, University of Heidelberg, etc.), but actually the individual academic sub-units for teaching and research were ranked. In contrast, the nowadays most popular rankings seem to encourage the top universities to boast publicly a strong academic commonality of the university as a whole and to take measures towards a growing commonality.

Critics point at a variety of risks and possible quality hazards of such policy: Academic units, which are not close to the publicly presented profile of the university, might artificially adapt themselves without real substantial impact. High-quality academic units, which do not fit directly to such institutional profiles, might lose financial support. The same holds true for international cooperation: Academic units might be better served, if they find themselves the best partners for their specialization and if the financial and organizational support for international activities is widely spread. Similar observations are made as regards quality differences between academic units: The university management might be tempted to reduce the academic breadth of a university, which can be useful for the region and for intra-disciplinary links, in favor of a relatively homogeneous level of quality across the institution.

The emphasis on the university as a common academic unit in the framework of the "world-class university" discourse plays down the fact that the departments are likely to differ in quality. Moreover, many analyses of "academic productivity" have shown that the most active tenth of academics are so active that they produce together one half of all publications (see Kwiek 2015): there are also enormous differences of research output between the individual scholars within a department of a highly reputed university. The strategic emphasis on the university as a common academic unit often does not only create un-justified advantages for low achievers in highly ranked universities, but disadvantages as regards research funding, external cooperation etc. of highly talented and highly productive scholars, who happen to be not located within a highly ranked university.

Certainly, there seem to be benefits, if on the one hand the university is not completely viewed as a roof for a heterogeneous bunch of academics with only a common interest in university parking lots. But there seem to be dangers on the other hand, if a multi-disciplinary university is pushed strongly to appear or really to be a common academic unit. As a consequence, one might argue that a powerful university management has to strive for a convincing balance between underscoring common academic thrusts and features across the university as a whole on the one hand and on the other encouraging or protecting variations between the various academic units.

4.3   The Uneven Reinforcement of Teaching and Research?

As already pointed out, the idea of the "unity of research and teaching" put forward by Wilhelm von Humboldt at the beginning of the 19th century is often named as the core idea of the modern university worldwide. One has to bear in mind, though, that this "unity" initially was postulated in contrast to the prior domination of teaching. And many references have been made to this idea subsequently in calls to build up "research universities". Actually, the above named international comparative survey of the academic profession shows that the majority of professors at universities, which emphasize both research and teaching, adhere to the idea of the "unity" of research and teaching, but that most of them appreciate research more highly than teaching (Shin et al. 2014).

Leaders of universities with a strong role of research are tempted to put the strongest emphasis in their strategies and daily decision-making on the research function of higher education. This seems to be most important for the reputation of the university, has a very strong weight in the most popular rankings of "world-class universities", and is likely to please many academics.

Critics of such strategies of university managers point out that research within universities is strongly reinforced anyway externally through the mechanisms of reputation of the individual professors, through public research promotion policies, through assessment systems of research, etc., while the performance in teaching and learning tends to be visible almost exclusively within the university – the exception of the employment success of graduates often is not so clearly attributed to the university's teaching and learning successes (see van der Velden and Allen 2011). Thus, university managers, who put strong emphasis on supporting the research quality and reputation of the university, actually encourage academics to neglect teaching and teaching-related activities. One could argue that university leaders, in contrast, would have to put stronger emphasis on the support of teaching and learning than on research in order to counterbalance the strong external reinforcement of research as thus to contribute to a real "unity" of research and teaching.

4.4 Overemphasis Placed on Assessment and Simple Performance Measurement?

Under the currently prevailing approaches of steering in higher education, the management of the individual university tends to have a strong power in the assessment of academic "performance" and in the use of such assessments for key decisions as regards academic careers (e. g. appointment and promotion) and as regards the resource allocation (notably for research, but for other academic activities as well). Altogether, academic activities are much more exposed to assessments nowadays than in the past.

As governments in many countries have reduced or completely discontinued direct supervision of academic performance within the universities, simple performance measurement through so-called "indicators" is a comfortable way of assessment on the part of government. Within universities, however, strategic choices can be made about the role of indicators vis-à-vis more complex measurement tools. Many university leaders, though, put a strong emphasis on indicators in internal decision-making as well; this is often justified as fair, cost-saving and useful to stimulate academic enhancement.

Critics, however, point out that universities are in the position to make choices between performance measurement through the most popular indicators, through the employment of varied other indicators or through undertaking more complex assessment exercises. Strong reliance on widely used indicators creates an incentive for academics to be productive only in tune with the indicators and their use. If, for example, the amount of acquisition of research grants is measured, academics are

tempted to look more closely on the highest possible amount of money than about the value of a research grant for interesting inquiries. If the number of publications in international reviewed journals is underscored, those academics are rewarded who neglect their country reference groups, disregard books as publication outlets, do not care much about publications important for application of knowledge and communication with stakeholders, etc. There are widespread critical voices suggesting that academics are led to do low-risk research and low-risk publications rather than taking the risk to strive for real innovation and creativity (see the discussion in Krücken et al. 2018).

Many years ago, when the OECD conducted a review of the national educational policy in the Netherlands, the author of this contribution had the opportunity to interview the high-level administrator in the Dutch Ministry of Education and Science, who had been the "master mind" in the introduction of evaluation schemes in the Netherlands. He said that ideally each evaluation scheme and similar assessment scheme should be completely revamped every five years or so, because each assessment scheme loses its validity to measure academic quality within a few years, because too many people would try to be visibly successful according to such a scheme rather than striving for quality of academic work, which the evaluation scheme initially had intended to measure.

4.5   Quality, Relevance, Efficiency?

The growing activities of assessment as well as of steering through incentives and sanctions in recent years, naturally, has led to more controversial debates about the appropriate criteria. In a simplified summary it was occasionally argued that academics most strongly like to pay attention to quality, external stakeholders to relevance, and governments and university managers to efficiency.

Obviously, the universities in economically advanced countries have been increasingly exposed to external pressures in recent decades. Governments in many countries have reduced financial support for higher education or least not increased in tune with inflation and with the expansion of higher education. Moreover, an increased proportion of governmental support was linked with certain targets. Altogether, universities noted that they were expected to "do more with less" and that some of the targeted financial support calls for increasing relevance – for example in order to fit into the presumed need of the "knowledge economy" (see for example Etzkowitz and Leydesdorff 2011), while others aimed at reinforcing "academic excellence". Concurrent efforts of universities to get more funds for research from industry and other external organisations often led to increasing activities of applied research. In the domain of teaching and learning, the term "employability" became popular as a call to gear study programmes more strongly to the presumed needs of the employment system (see the overview of the debate in Teichler 2016). Finally, the popularity of university rankings was often viewed by university leaders as a call to intensify efforts to be successful according the dominant criteria implied in these rankings: for example, efforts to increase the number of publications in internationally respected academic journals are often understood as implying efforts to enhance academic quality.

Critics argue that the "managerial university" is inclined to over-emphasize single performance criteria. This holds true, for example, if a university decides that internal promotion on the academic career ladder is dependent on a certain number of publications in internationally respected journals or that the allocation of funds for teaching to the individual departments ought to be linked to the graduates' employment success. The individual university might strive for strengthening a specific profile, and this might imply to put either a stronger emphasis on quality or a stronger emphasis on relevance, but most critics argue that a good university is too heterogeneous to set common criteria for all departments and for all academics and that an appropriate balance between these criteria has to be strived for.

4.6   The Academics as the Losers of the Managerial University?

Undoubtedly, the new "managerial university" is generally viewed as provoking the traditional academic university. The academic profession is put under much stronger pressure than in the past to gear their academic work according to "expectations" and incentives – often set outside of higher education, but often channeled and reset by the university management: Academics' job security has declined in many countries in recent years (see Teichler et al. 2013), incentive-based remuneration has spread, and resources for academic work have become more strongly dependent on visible performance. Moreover, as already pointed out, academics in many countries have less power as regards decision-making within institutions of higher education. There are controversial debates about the benefits and dangers of the managerial university, as far as the values, motives and the actual activities of the academics as the "workers" within the institutions of higher education are concerned.

Advocates of the managerial university are convinced that a complete reliance on "academic freedom" and on the academics' intrinsic motivation leads altogether to poorer academic performance than could be expected as indispensable. Moreover, they assume that a strong university management as a rule is wiser in strategic decision-making than any model of academic power.

Critics, in contrast, argue that the predominant features of a managerial university are incompatible with the conditions of a professional organization. Academics exposed to a magnitude of assessments, incentives and sanctions are likely to become less productive and creative – either due to a decline of motivation in general or due to a dominance of extrinsic motivation which reinforces adaptation to visible success rather than innovation and creativity.

In an overview of the available literature about the changing role of academics at the time of rising managerialism, three higher education researchers from Ireland come to the following conclusion: "Thus far, the general picture emerging in the literature is that of a profession in crisis, though moral

panic about the situation is tempered by arguments that higher education has been always in transition, and in any case, a good deal of the increased regulation of academics is overseen by those within their own ranks via peer review. Whilst managerial ideology is increasingly becoming a dominant discourse within universities, the extent to which it has superseded collegiality is debatable. Empirical studies indicate that managerialism has neither been whole-heartedly rejected nor accepted by academics, but rather has been received in a more fluid and haphazard way. It has also been acknowledged that there are variations in how managerialism has rolled out in terms of its timing, pace and extent in different social locations." (Hyde et al. 2013, p. 50)

In sum: There are cases of beneficial impact and there are cases of detrimental impact of strong managerial power. Altogether, most observers call for a soft managerial approach as far as steering devices directed to the academic profession are concerned, and for a strong involvement of academics in strategic decision-making of the individual higher education institution.

4.7   Distorted System Steering as Consequence of Institutional Strategies?

As already pointed out, the single strongest change of steering in higher education in recent decades was the strengthening of the power on the meso-level of the higher education system: Notably the strategic and operational strength of the university management. This strengthening of the power on the meso-level took place not only at the expense of the power of the micro-level – the basic academic units or the individual academics, but in many economically advanced countries also at the expense of the power on the macro-level, notably of the government. This obviously calls for the question: Is the sum of "wise" decisions taken at the meso-level "wise" for the demands of the macro-system, i.e. the overall higher education of a country or even wise for higher education worldwide?

Some critiques as regards the "wisdom" of the sum of university strategies for the proper functioning of the overall system are frequently voiced:
— Many universities reduce the resources of those disciplines, which have limited opportunities of raising external grants. The sum of these institutional strategies leads to phenomena such as "the crisis of the humanities" (see various views discussed in D'hean 2012).
— Many universities try to copy the characteristics of the most highly reputed universities. Efforts to move upwards in rankings have the overall effect of an "academic drift". This contradicts the view, that expanded higher education system needs both "horizontal" and "vertical" differentiation (see Teichler 2017), i.e. also efforts to opt for substantially different profiles of institutions of higher education, departments and of the activities of individual academics.
— Many universities are ardent followers of the ideology of the "world-class university" rankings. They hope that they are the winners of policies and trends in favor of a very highly stratified higher education system. They like to claim that the race for high ranks in a highly stratified system is beneficial for the quality of the overall national higher education system, even though

— Many universities are ardent followers of the ideology of the "world-class university" rankings. They hope that they are the winners of policies and trends in favor of a very highly stratified higher education system. They like to claim that the race for high ranks in a highly stratified system is beneficial for the quality of the overall national higher education system, even though available data suggest that moderately stratified systems, e.g. Switzerland, the Netherlands, Sweden, etc., have on average a higher academic productivity per population size or per number of scholars than highly stratified systems, e.g. Japan and the U.S. (see Shin et al. 2011).

In sum, we cannot be surprised to note that governments in many countries do not really trust the "wisdom" of the sum of institutional strategies. Thus, we can observe in many countries not only government "deregulation", but concurrently an increase of deliberate target-setting policies on the part of governments and possibly other external "stakeholders".

5 Concluding Observations

The aim of this contribution has been to analyze the character of steering in higher education and its impact in the academic domain. Attention has been paid to developments in economically advanced countries over a period of more than five decades.

It is possible to summarize steering in higher education as a constant experimentation as regards the distribution of power to steer and as regards the dominant modes of steering. The experimentation could be characterized as a trial-and-error search for an appropriate in-between solution between the calls for "university autonomy" and "academic freedom" as the most suitable environment for the unfolding of academic potentials on the one extreme hand and on the other efforts to treat higher education similar as a production firm or á service organization usually operates. This search for a suitable in-between solution could be described as continuous, because any steering approach so far has shown strengths and deficiencies.

It is possible as well to point out a few trends more or less common across all economically advanced countries. First, the power of the central management within universities has increased in recent decades at the expense of strong state supervision in many countries and at the expense of the power of the academic profession everywhere. Second, the steering system has been considered as more and more important in shaping the academic functioning and the results of academic activities, and this has led to increasing efforts to steer and assess academic work. However, steering in higher education has remained more varied across countries altogether than a look at the most popular management fads suggests.

The analysis in this contribution has concentrated on economically advanced countries. Certainly, there are some similar features of steering in other countries as well, but the overall setting is distinct. For example, steering of the higher education in China is similar to steering in economically advanced in having implemented some elements of "managerialism". But it is more similar to steering in various other mid-income countries in terms of (a) keeping a stronger role of government, (b) reinforcing utilitarian pressures on higher education more strongly, and (c) being altogether less generous in funding higher education and research. Moreover, steering in higher education in China has been for a long time almost obsessed in reinforcing steep vertical stratification: This has helped a few universities to catch up in rankings of "world-class universities", but had questionable consequences for the higher education at large; however, efforts have been made in recent years to reinforce the pride and conditions of higher education outside a small elite sector and to encourage the development of diverse profiles rather than copying the top.

The basic similar features of a strong university management amidst little direct governmental supervision and moderate external steering and amidst limited power of academics and increased expectations, incentives and sanctions as regards the academics' academic work have been widely spread and relatively stable now over more than two decades across economically advanced countries. And the proponents of such a steering approach consider this as the best possible solution and likely to remain stable for the foreseeable future.

But the dominant steering approaches have remained controversial. The critics of "managerialism" notably note over-steering towards a common character of the single university, too much competition and imitation as regards top universities, a hollowing out of the academics' intrinsic motives and the reward of opportunistic adaptation to visible success rather than efforts in favour of innovation and creativity.

These controversies look somewhat exaggerated, if we pay attention to academics' responses to the current steering fads. Many academics get along with changing steering setting with some praise and some criticism. In most economically advanced countries, only minorities of academics look at the dominant steering approach with enthusiasm or with massive critique. This seems to reflect the fact that a soft style of steering is widely spread; there are cases, though, where harsh styles of "managerialism" are in place and are viewed by academics as counterproductive provocation.

There are reasons to doubt that the dominant approaches of steering in higher education have reached stability and will remain more or less unchanged. For example, many governments and external stakeholder have turned toward a stronger steering policy to counterbalance some questionable elements and effects of strong university steering. Among others, the widespread overemphasis on steep quality hierarchies in higher education and the widespread inclination of many universities to imitate the most successful ones have led in Europe to efforts of substituting the power of "world-class university ranking" by a "multidimensional" ranking (van Vught and Ziegele 2012); if such a ranking system would be successful, it would change the external conditions for the individual

university in designing its institutional strategy. There are also signs here and there that academics become more resistant against "managerialism" (see for example Leisyte 2015). Finally, we note moves to encourage a much greater intra-institutional diversity (e.g. "diversity management") than it was customary two or three decades ago, when the idea of the "managerial university" widely spread connected with the belief that a highly targeted strategy should be strived for. As a consequence, we should not be surprised, if the discourses as regards the most desirable steering in higher education will turn away in the future from the current management fads and if features of steering in higher education will be appreciated in the future, which we have not yet anticipated so far.

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