

Barbara M. Kehm, Ute Lanzendorf*

The Impacts of University Management on Academic Work: Reform Experiences in Austria and Germany**

This contribution analyses the impacts of managerial governance on academic work, and more especially on research, comparing German and Austrian universities. First, recent reforms of university governance in the two countries are summarized. Second, the degree of implementation of managerial governance at universities is analysed as well as its effects on decision-making and on the organisation of research by individual academics, drawing on 39 interviews conducted in the 2 countries.

Empirical evidence suggests that (a) managerial decision-making structures have been implemented at the central level; (b) deans basically see their role as protecting academics from pressures emanating from managerial interventions of university leadership; and (c) restrictions experienced by individual academics with respect to their personal research agendas are due to shortages of resources rather than to the newly-introduced mechanisms of external guidance or competitive pressure. As a conclusion, the growing importance of non-academically defined criteria for research performance is highlighted as a major consequence of the introduction of university management which could, in future, make traditional academic quality standards less relevant.

Key words: New Public Management, University Management, University Research, International Comparison, Empirical Research, Europe

* Barbara M. Kehm, International Centre for Higher Education Research of the University of Kassel, Kassel, Mönchebergstr. 17, 34109 Kassel, Germany, e-mail: kehm@incher.uni-kassel.de.

Ute Lanzendorf, International Centre for Higher Education Research of the University of Kassel, Kassel, Mönchebergstr. 17, 34109 Kassel, Germany, e-mail: lanzendorf@incher.uni-kassel.de.

** Article received: July 31, 2006

Revised version accepted after double blind review: March 29, 2007.

1. Context

In recent decades, the regulatory frameworks for academic work in universities in Europe have been undergoing substantial changes. Since the 1980s, the introduction of managerial approaches of university governance has affected the traditional power balance of academic self-organization and government regulation. The growing demand for higher education and the increasing relevance of higher education in the knowledge society, as well as decreasing public budgets have led to the efficiency and accountability of universities becoming key concerns of higher education policy. The long standing public trust in the general ability of universities to contribute to national welfare, be responsive to societal needs and adapt to change has eroded. Rather, the consensus principle which characterizes academic decision-making, in combination with state bureaucracy, seemed to hinder the adaptation of universities to changing national and international frameworks.

Thus, like other public sector institutions, universities were subjected to reforms inspired by the New Public Management concept (see for example Bleiklie 1998; Neave 1988 and 1998; Scott 2001). An increasingly 'off-loading state' redefined its role from supervision to guidance. By minimizing bureaucratic procedures and state influence on institutional structures, the state increased the decision-making power of university leadership. Together with this, it promoted more hierarchical structures for intra-university decision-making. Governments focused their own role on setting priority development objectives and monitoring universities' progress in their achievement (output control). Furthermore, they reorganized the distribution of public funds amongst universities by basing it on past performance or competitive tendering. In order to measure performance, accreditation and evaluation processes were established. Where there had been historical privileges of individual institutions, these were increasingly called into question. Among political decision-makers, the general idea is that reforms improve the working conditions of high-performing academics.

The pace of reforms differs markedly across countries. Although the different national reform projects adhere to a common conceptual idea, the procedures that are chosen largely depend on historically grown structures (path dependency) (see for example Kehm/Lanzendorf 2006a). In any case, reforms are rather far-reaching and can be assumed to have fundamental impacts on the work of universities.

New models of university governance have been the object of quite a number of studies. However, as Eckel and Kezar (2004) have pointed out, there is a gap in research with respect to the interaction between various actors and the relationships between external and internal governance systems. It can be observed that few national and internationally comparative studies have considered the possible consequences of national reforms at the level of institutions or individual academics (for example, Braun/Merrien 1999; Kogan et al. 2000; Amaral/Jones/Karsch 2002; Amaral/Meek/Larsen 2003). Only the reactions to changing regulatory contexts of academics in England, the European forerunner of reform, have been investigated in depth (notably by Henkel 2000 or Harley 2002). Overall, structural approaches have prevailed in prior studies. Major themes included "centralization versus decentralization, authority, hierarchy, bureaucracy, size, efficiency and rewards. The major assumption is that for any

governance process, a structural form can be designed and implemented to improve effectiveness and achieve ideal functioning” (Eckel/Kezar 2004: 374). But structures, the authors argue, have only a “limited capacity for understanding how governance functions” (Eckel/Kezar 2004: 389 ff.) because they tend to neglect the human side of governance, i.e. people being subjects and objects of management.

This article aims to contribute to the knowledge about the consequences of governance reforms within universities, using the example of two countries which only recently embarked on reform and have an especially strong tradition of state regulation of their university sectors, namely Austria and Germany. Higher education and its governance have very similar traditions in the two countries, but governance reforms have been more far reaching in Austria than in Germany. The impacts of country-specific governance reforms will be studied in the area of university research. Research can be regarded as the classical field of academic freedom so that the introduction of new public management could be assumed to bring about particularly radical change. Many observers have the impression that research funding has become politicized and, through the introduction of university management, socio-economic relevance becomes the ultimate quality standard for research (see for example Nybom 2006; Teichler 2006). The findings presented here are the results of research conducted within the first three-year period of an interdisciplinary research group in Germany funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) since 2003.¹ The research group will continue its work until at least 2008.

2. Research question and approach

This article presents findings concerning the degree to which the regulatory frameworks for university research have recently been reformed in Austria and Germany, to which degree hierarchical management structures have been introduced at universities and which changes – if any – this has entailed with regard to internal decision-making processes and the research activities of individual academics. In view of this top-down perspective, the research took a multi-level approach. It relies on official documents, secondary information, and interview data which were collected and analyzed at the following three levels:

¹ The overall focus of the research group which will continue to exist until at least 2008 is on identifying the consequences of a new model of university governance for the international competitiveness and innovative capacity of university research, primarily in Germany, but also in an internationally comparative perspective. The initiator and speaker of the research group is Prof. Dr. Dorothea Jansen, Research Institute for Public Administration Speyer (Germany). The specific project in which the authors are involved is entitled ‘Comparing management and self-governance models of universities – An international comparison of university decision-making processes and their consequences for research in practice’. It investigates the implementation of managerial self-governance at universities and its consequences on the research activities of academics in four countries. The project is coordinated by Prof. Uwe Schimank, department of sociology at the Distance Teaching University of Hagen. In addition to the authors, Prof. Jürgen Enders, Dr. Harry de Boer and Liudvika Leišytė of the Center for Higher Education Policy Studies (CHEPS) at the University of Twente in the Netherlands also participate in the project.

- The macro level
It refers to policies of governments and providers of non-industrial research funds with respect to universities and to research. Information was drawn from official documents and secondary literature.
- The meso level
It refers to decision-making in universities at central and department/faculty level. Data were collected from official documents and by means of interviews.
- The micro level
It refers to research decisions of individual academics. Here, data could be collected exclusively by means of interviews.

In order to identify the dimensions that enable the comparative analysis of macro and meso level developments in Austria and Germany, the project drew on governance theory. Governance theory considers all thinkable forms of social coordination, above all, the market, hierarchy and networks. According to Mayntz (2004), the term ‘governance’ encompasses “a system of rules”, as well as the ways in which such a system operates (processes of regulation). A system of rules is understood as a framework according to which the actors in a particular policy field orientate their activities. From a macro perspective, governance theory orientates research towards the specific characteristics of a system of rules – independently from its origin. From a micro perspective, governance theory brings the effects of a system of rules on the actors involved in a societal field of action to the fore of scientific inquiry. Schimank (2007) identifies the following five analytical dimensions as making up the system of rules that is relevant for the university (research) sector:

1. *External regulation of universities*

Regulation refers to the rather detailed determination of processes which must be observed by academics and university administration with respect to the organization of university activities. External regulation is typically exercised by the State.

2. *External guidance of universities*

Guidance does not rely on conditional statements - as regulation does - but on the setting of overall development goals. These goals may be prescribed or agreed upon by the actors involved. The way in which goals are reached and the means used to reach them are left to universities and academics (organizational autonomy of universities). External guidance can be exercised by the State, but also by intermediary institutions or by societal actors outside academe to which a corresponding competence has been delegated by the State (for example, representatives of industry or non-profit organizations in university boards or accreditation and evaluation agencies).

3. *Competition*

This dimension refers to the distribution of scarce resources – primarily public funds – through competitive processes amongst and within universities. The success or failure of individual actors is either determined on the basis of their quantitative performance measured in terms of ‘output’ (performance-related funding) or on the basis of the quality of suggestions (tenders) with respect to a given pro-

ject for which money is available. Competition is an important element of market or quasi-market structures.

4. *Academic self-governance*

Academic self-governance is constituted by professional communities and their mechanisms of consensus-building, based on strong egalitarianism and balanced by authority of reputation. Within universities, this mechanism has been institutionalized in the form of collegial decision-making bodies.

5. *Managerial self-governance*

Managerial self-governance is characterized by the existence of formal hierarchical leadership positions (university management). It can be exercised either as intra-organizational regulation or as intra-organizational guidance. Managerial self-governance is usually regarded as a necessary complement to the organizational autonomy of universities and intra-university competition.

The different dimensions can take effect in a formal or an informal way. Formal governance takes the form of financial incentives and is controlled by leaders or managers. Informal governance takes the form of social incentives and leads to the appreciation and high regard of complying actors. The particular strength or weakness of the individual governance dimensions in a specific system of rules can be described as a power parallelogram. Such a specific power parallelogram is called a 'governance regime'.

Current governance reforms represent a transition between two types of governance regimes. The first is the traditional governance regime. It links academic self-governance to strong state regulation. The remaining three governance dimensions are at best weakly developed. The new, managerial governance regime combines strong external guidance of universities and competitive pressure and well-developed hierarchical self-governance inside universities. The need for managerial self-governance within universities can be assumed to be particularly high where external guidance and competition have been strongly developed.

The collection of information at meso level referred to formal regulations with respect to university management. Information about their implementation was gathered by means of semi-structured interviews with university leaders and deans. Data collection at the micro level – interviews with individual academics – was specifically concerned with the relevance of reforms for the following aspects which were assumed to be essential for research decisions by individual academics:

- availability of time for research,
- relevance of research for teaching,
- applied versus basic research,
- unorthodox, risky or innovative research versus mainstream research,
- short-term versus long-term research,
- design of research projects, including problem choice, methodological approaches and disciplinary foci as well as choice of project partners, funding sources, and personnel,
- symbolic action in the context of tendering for external funds,

- the existence of opportunities to use their full personal research potential as perceived by the individual academics,
- strategies with respect to research output.

Semi-structured interviews gave interviewees ample possibility to elaborate on overall changes in their daily work brought about by reforms, new decision-making practices, challenges with respect to the realization of their individual research interests, the general contexts and backgrounds of decision-making in research matters and overall perceptions of reforms. On average, interviews lasted about an hour. They were recorded, transcribed and then coded, using the variables listed above.

3. Reforming university governance in Austria and Germany

Austria and Germany are European latecomers in the reform of university governance. Governance traditions and higher education structures are similar in both countries, though the role of the state has been rather more pronounced in Austria than in Germany before the beginning of the reforms. Both countries have implemented considerable parts of their reform packages and Austria more especially has made major progress with respect to the implementation of managerial governance, even in comparison with the UK and the Netherlands, the European forerunner countries (Kehm/Lanzendorf 2006a). It is interesting to study the reform experiences of the two countries because they issued rather comprehensive reform packages, implying a complete renewal of national higher education legislation. Reforms in Austria and Germany were no immediate responses to specific pressures, but were intended as an overall modernization of the state-university relationships. To this end, reform elements from the European forerunner countries, especially the UK (England), but also the Netherlands, were adapted and merged with new elements. New elements were largely developed out of the tradition of a strong planning and coordinating function of the state. Here, changes at macro and meso levels in Austria and Germany will be presented in detail. Country analyses are structured according to the five governance dimensions introduced in chapter two.

3.1 Austria

In Austria, a first, cautious piece of reform legislation introduced a kind of “soft managerialism” (Pechar/Pellert 1998: 144) in universities already in 1993. In 2002, however, a historically authoritative and reform-prone conservative government triggered a rather radical reform and implemented it in record time. This latest reform has been described as having launched a ‘managerial revolution’ in Austrian universities. In contrast to Germany, the reform process was not accompanied by substantial budget cuts for higher education.

Before the 2002 reforms, Austrian universities were fully dependent on the government in organizational terms. They were departments of the federal ministry and their heads of administration were its employees. University budgets had to be spent via national education budgets. Apart from the high dependence of universities on governmental bureaucracy, their internal decision-making procedures were extremely complex because of a large number of committees and the need for frequent re-elections of committee members. In retrospect, Welan (1995) diagnosed that universi-

ties had become the most complex organisations at the national level. As additional factors that led to a loss of confidence of key actors in traditional patterns of university organization, Pechar (2003) mentions a general crisis of central steering and of public finance.

On the basis of the 2002 reform legislation, state regulation of Austrian universities has now been almost entirely abolished (Lanzendorf 2006). As a first step, universities were granted full legal capacity and became independent public entities. They continue to be funded by the state, but are now free to decide how to spend their budgets. Lump sum budgets have been introduced so that funds may now be shared between different items and do not have to be spent during the budget year. Moreover, universities are now allowed to take out loans from private banks. They can also decide about their internal structure: departments or faculties may be opened or closed without the approval of the ministry. The same holds true for staff contracts: professorial positions no longer need the approval of the ministry when filled. Payment scales for newly recruited staff no longer have to comply with public salary structures, but are to be negotiated between the university sector and the trade unions.

According to the New Public Management (NPM) concept, in parallel to the withdrawal of the state from bureaucratic regulation, mechanisms for an external guidance of universities were set up. The most important element of newly introduced non-governmental guidance is the university councils which have been assigned a controlling and steering function and also take over supervisory tasks which were formerly the responsibility of the federal ministry. They are composed of five to nine members who are past or present holders of responsible positions in academic, cultural or business life, but not from within the university or from politics. Although the councils are not entitled to take initiatives, they have considerable influence on the development of universities. They appoint their rectors, negotiate work contracts and performance agreements with them, and approve the rules of procedure of university leadership (the 'rectorate') as well as university organization plans and other documents to be submitted to the ministry.

Guidance by the state will start in 2007 when a set of performance indicators is implemented to calculate a certain share of individual universities' lump sum budgets. Additionally, universities must conclude three-year performance agreements with the federal government for the first time. These agreements specify the development priorities a university should achieve with the public funding provided.

Specific external guidance of university research derives from research policy. Two councils have been established at state level to advise relevant ministries and the universities: the Council on Research and Technology and the Science Council. While the first is composed of an equal number of representatives from industry and from academe, the latter includes government and university representatives. The councils monitor the development of the Austrian higher education and research system and make recommendations. Research grants increasingly have to fit into programmes deriving from national strategic plans. Moreover, a trend towards the concentration of public research funds on priority thematic fields can be observed in recent years.

The governance dimension of competition has been developed by the legislator in a cautious way: For example, the performance-based calculation of university budgets to be implemented in 2007 implies only limited risks with respect to budget variations. This is because budgets are established in advance for three-year periods. Cuts to a university's global budget from one three-year period to the next cannot exceed certain limits. At the university level, basic funds to decentralized units are provided according to the units' performance. The units are then free to distribute institutional resources to individual professors according to their performance or not. Thus, university management does not necessarily stimulate competition between academics. Performance-related remuneration of academic staff does not exist.

The acquisition of research grants, however, has clearly become more competitive. At the largest Austrian provider of public research funds, the number of grant applications is increasing so that approval rates are falling, and the proportion of funding approved for individual projects has decreased on average. Now, even projects which are highly rated according to international standards must be rejected.

Inside universities, managerial self-governance has been introduced by strengthening leadership positions, especially at central university level, but also at department level. The position of the rector is no longer an office but a full-time executive position. He or she does not have to be an academic and does not need formal working experience in the university which he or she will be heading. The rector can now take independent decisions when negotiating performance agreements with the federal ministry and is responsible for the selection of new professors from shortlists and the negotiation of their employment conditions. As a corollary to the strengthening of the rector and the introduction of university councils, the tasks of the senates have largely been limited to teaching and examination matters. A formal responsibility of the central level for the development of decentralized units that did not exist before has been introduced. The rector must now reach performance agreements with the heads of organizational units who, in turn, must conclude performance agreements with the staff of their units. To monitor the success of these agreements, universities must carry out internal evaluations on an ongoing basis.

Heads of decentralized units continue to be chair holders and their term of office is still relatively short (about 2 years). As before, they are elected, but must now be confirmed by the rector. In addition to reaching performance agreements with the professors in their departments, they also distribute available resources and develop structural plans. They may be granted as much additional power as rectors see fit. The composition and role of department committees can be determined by individual universities. In practice, their formal power has largely been reduced to that of advisory bodies as far as matters outside teaching and research are concerned.

3.2 Germany

In Germany, there is little national coherence in higher education policy because it is traditionally the responsibility of the 16 states of the federation. Each individual state chooses how to implement national framework provisions and enacts its own higher education legislation.

Already in 1985, an amendment to the national framework legislation introduced measures aiming at a reform of university governance. However, the lack of political consensus between the federal government and the states prevented the development of the reform process. Later, German unification delayed any further reforms in this area. Only after another amendment of the national framework legislation in 1998 was managerial university governance introduced on a nationwide scale. Reforms had to be implemented under the overall condition of declining public resources for higher education.

German universities have traditionally been corporations under public law. Since 1976, collegial bodies made up of representatives of the different groups of academic and non-academic university staff have been responsible for taking decisions in all internal matters. The role of rectors and deans was rather weak and consisted mainly of implementing the committees' decisions, moderating discussions and representing the university or department.

Recent reform legislation has left the legal status of universities largely untouched. Only in some of the 16 states may universities now opt to change their status from the traditional corporation under public law to that of a foundation under public law. Only a few universities, especially in Lower Saxony, have made use of this new option. An important change at the national level is that options for the fixed-term employment of academic staff have been increased considerably by a recent amendment to national framework legislation.

Initially, the German states have largely focused on areas that promise efficiency gains when deregulating their higher education laws. In those areas of state responsibility which concern the disciplinary and subject related structure of universities, however, university autonomy was increased only very slowly (Kehm/Lanzendorf 2006b). For example, lump sum budgets have been introduced all over the country, but many German states continue to determine the structure and number of academic positions at their universities. Often, they also continue to be responsible for the final decision concerning the appointment of professors. Finally, universities often still need state approval to change the number and structure of departments and the responsible state ministries can also prescribe the establishment of new departments or the closure of existing ones.

External guidance of universities has primarily been increased by involving stakeholders in the planning of the future development of the university sector. This trend can be observed both at the level of states and at the level of individual universities. University councils have been introduced at the level of universities. In most states, they are composed of members from outside universities. In some states, however, university members are also represented in the councils. The councils with mixed representation are the only ones to have real decision-making powers.

As a further element of external guidance of individual universities, state ministries negotiate target agreements with them. In some states, these agreements serve to outline innovative future activities of universities in areas of political interest. In others, the agreements establish priorities for institutional development and universities commit themselves to adhere to these priorities when spending their lump sum budg-

ets. In addition, states provide guidance by determining performance indicators for the calculation of shares of university budgets.

For some time now, university research has been orientated towards politically defined thematic priorities. Quality standards for research and nationwide disciplinary research evaluations are currently being developed as new elements of research policy.

The governance dimension of competition has been relevant from the beginning of the nationwide reform implementation. The major federal provision in this respect is the introduction of the performance-based funding of higher education institutions. Yet, at state level, limits have been set for possible changes in the annual budget provisions. The higher the proportion of a budget which is calculated on the basis of indicators, the lower the number of annual changes permitted (Leszczensky/Orr 2004). In some states, a certain share of the overall funds for higher education is earmarked for a distribution according to individual universities' achievement in policy objectives.

With regard to intra-institutional competition, the most relevant measures which have been introduced nationwide are (a) the performance-based distribution of basic university resources among departments and (b) performance-related payment components for new professors. Salaries will no longer be increased according to years of service. Instruments for the evaluation of individual performance, however, still have to be developed. Research performance is to a large degree measured by the amount of external funds attracted.

Competition in the research sector has become considerably more intense. In addition to greater selectivity of research funding due to the limited availability of resources and rising numbers of proposals, there is a trend to actively concentrate public research funding to provide support to an ever smaller number of outstanding projects. Recently, the federal initiative for excellence selected a small number of promising research concepts and supported them with considerable extra funding.

Changes in the higher education legislation of the states have clearly subscribed to the introduction of managerial self-governance in universities. In principle, people from outside universities can be elected as presidents. In addition, as part of a new supervisory role of university leadership, heads of universities may now reach target agreements with deans. Both university leaders and deans have been assigned an executive function with respect to the use of resources and matters of structural development. In some states, university leaders can now select new professors from short-lists. The deans' term of office of deans was extended from one year to up to four years or more.

With respect to the use of resources and matters of structural developments, collegial bodies at universities only retain responsibility for laying down general rules of procedure or commenting on plans developed by the respective leadership teams. The role of the Senates is further limited by the introduction of university councils. The presence of academic self-governance in research management, i.e. the peer review system, continues to be in place but is met with increasing doubts regarding its objectivity.

Comparing the reform measures introduced in Austria and Germany, it can be said that mixed modes of governance have developed in both countries. The current situation in Austria is quite similar to that in Germany in that elements of a managerial governance regime coexist with elements of traditional governance. In other words: state regulation exists next to state guidance and managerial self-governance next to academic self-governance. A clear difference between the new governance regimes in the two countries can be seen with respect to the competition dimension. In Germany, competitive pressure at university and departmental levels as well as in the research sector is certainly more developed than in Austria.

In both countries, universities have gained new decision-making powers. Yet, the greater institutional autonomy tends to be held in check by a number framework conditions to which they have to conform. The state can be assumed to be at least as present as before. It has introduced mechanisms for a tight monitoring of the results of universities and of individual academics' work. Individual academics have to serve more masters than before who all have different conceptions about how institutions or research should become more relevant for society and the economy and contribute to a country's competitiveness and wealth creation. The next chapter analyses the practical consequences of the governance reforms described above.

4. The consequences of new governance regimes

This chapter presents empirical findings about the impacts of new governance regimes at the meso and micro levels of university systems in Austria and Germany, i.e. university decision-making and academics' research activities. The findings are based on 39 interviews conducted at four universities in each of the two countries between mid-2005 and mid-2006, i.e. some years after the beginning of the reform implementation. Interview partners had experienced both the prior and the current system of research governance.

To take specific subject cultures into account, two university cases focused on the humanities (medieval history) and two cases concentrated on research in the life sciences (red or green biotechnology) in each country. Medieval history and biotechnology were chosen to represent mode 1 and mode 2 research. Mode 1 research is characterized by its highly disinterested nature and a strong disciplinary orientation. Mode 2 research, on the contrary, is transdisciplinary and integrates stakeholders from outside academe. It investigates issues with a clear relevance for society and is often closely related to industry or application. The two universities studied in each subject and each country represented different institutional sizes and traditions. In Germany, they are located in different Länder and therefore represent different legal and political framework conditions.

Each university case included one interview at the level of university leadership, one with the dean responsible for the subject area under study and interviews with all researchers in medieval history or a biotechnology research group who held at least a PhD. In some instances, following the request of interview partners, two people of the same or of different status were interviewed together.

Since only very few substantial differences in reform experiences of universities in Austria and Germany could be observed, findings will be presented by issues and only differentiated by country where there are notable particularities to be reported.

4.1 *The meso level: university leadership and deans*

At the universities in both Austria and Germany, reforms were implemented by rectors or presidents who were already in office before the reforms began. The general observation of interview partners² in both countries was that organizational autonomy of universities had become a reality and that universities used their new decision-making possibilities. The fact that they did so to differing degrees is explained by personal leadership styles. No general disagreements between university rectors or presidents and university councils were reported.

State influence on institutional development and institutional profile building is sometimes regarded as still too strong. It is considered legitimate that governments ask universities from time to time where they are going, but too detailed a monitoring of their activities does not seem desirable. Some interview partners felt that an unreasonable amount of time had to be spent on reporting obligations to ministries. In the opinion of university leadership, ministerial decisions taken on the basis of reliable information have been acceptable in the reform process so far.

Different motivations underlie reform implementation by university leadership. One interview partner pointed to the fact that universities were just playing the game, irrespective of whether they thought that this was sensible. Another interviewee believed that creativity in the day-to-day running of institutions was essential for their performance and that reforms were providing more opportunities in this respect.

The most important internal policies of newly autonomous universities in Austria as well as in Germany aim at optimising organizational university structures, creating specific employment conditions for individual categories of academic staff, developing procedures for the re-allocation of vacant positions according to strategic development priorities, the strategic creation and filling of new professorships, the distribution of basic university funds between departments or faculties and the setting up of broad interdisciplinary thematic research foci. Most interview partners pointed to the fact that they not only implemented the minimum requirements of reform but that they were trying to develop particular institutional strategies and policies which went beyond them.

Amongst the different instruments of university management, target or performance agreements seem to be particularly difficult to implement in universities. They are largely seen as increasing bureaucracy without improving working conditions. From the point of view of university leadership, the performance-oriented distribution of resources, however, worked well and was widely accepted. University leaders actively looked for information from evaluations to support decision-making. Evaluations were valued as increasing the transparency of performance and providing university leaders with convincing arguments for initiating change. In principle, university

² Overall, 8 interviews were conducted, one with a rector, six with vice-rectors in charge of research matters and one with a head of a university president's office.

policies were seen as having the desired effects. Sometimes, new procedures had to be readjusted as a result of institutional learning processes.

Overall, the external reform impulse from the government was regarded as a positive stimulus for necessary institutional development processes. Historically grown structural 'petrifications' could be abolished in the course of reform implementation. New organizational units were set up which had similar starting conditions with respect to intra-university competition. Defining big thematic research foci and promoting horizontal links within universities were considered helpful to concentrate a university's activities on its particular strengths and was expected to contribute to an institution's success.

Interview partners reported that there was evidence that conflict avoidance at universities was being overcome and that university leadership was now more prepared to take unpopular decisions. At the case study universities, some 'authoritarian' decisions had already been taken by university leadership against the will of senates. The impression of interview partners was that such leadership decisions were accepted by university members once the first irritations had passed.

Yet, in principle, interview partners agreed that university management was not possible without a climate of general consensus and confidence between the leadership and departments/faculties – the organizational units below the central level of university leadership may take either of these two forms. The reduction of the former power of senates was not criticized, but dialogue and interaction were seen as essential elements of decision-making at universities. The motivation of professors should in any case be kept up and high quality bottom-up initiatives should always receive the support of university leadership. However, especially in Germany, interview partners often saw themselves as unable to live up to their own ambitions because availability of resources was too limited.

University leadership - especially in Germany - believed that the introduction of university management had improved the framework conditions for 'good' research. General agreement existed with respect to the issue that university leadership should not interfere in individual researchers' selection of research topics. According to the interview partners, the function of university leadership was to provide incentives and deal with the filling of vacant professorships. There was a common understanding that research had to be determined and designed by research personalities themselves and that this was an important element of academic freedom.

University management was understood as the management of processes of knowledge production of which human capital was the most valuable asset. Under the regulations set by responsible ministries, the newly-defined university leadership aims at organizing and distributing the available resources in a way that optimizes intra-university conditions for achieving excellence and keeping up competitiveness. Academic standards are highly respected, but the expectations of the broad public also have a strong weight in decision-making. Enabling the generation of knowledge which is relevant to society and maximizing the visibility and standing of a university vis-à-vis other (inter)national institutions have become general concerns.

The deans in Austria and Germany³ who were interviewed for the study saw themselves as ‘managing academics’ with a fixed-term function on behalf of their faculty or department - the organizational units below the central level of university leadership may take either of these two forms. They supported structural reorganization and the introduction of financial incentives as long as they had the impression that these measures remained within reasonable bounds, i.e. they did not call the general nature of the university into question. Deans saw their units in a constructive competition with other units of their universities. Some of the deans in the humanities were concerned with the visibility of their units’ work vis-à-vis the university leadership.

All deans felt responsible in ensuring the internal integration of their units. They tried to maintain an equal treatment of different personalities and research activities and implemented guidelines issued by central level leadership in a way or to a degree which the community of professors considered adequate. Pressure with respect to performance and competition coming from the top was only passed on through the deans to academic staff to a limited degree. According to the deans, management activities of central university leadership could not substantially change the work of individual academics as long as academics maintained their consensus culture and central level leadership did not take decisions against their will when vacant or new professorships had to be filled.

For the strategic development of departments/faculties, informal communication was regarded as important as the newly-introduced instruments of hierarchical guidance. Deans would only make use of their new decision-making authorities if they had the impression that the interests of the majority of the faculty council members would be detrimental to the future development of their unit.

In several departments, the definition of broad thematic research foci which are relevant for current societal concerns or the development of tenders for high level funding programmes requested by university leadership were reported to have stimulated discussions about future research activities, entailed a sense of awakening and a new sense of community. In others, however, it was just seen as the same kind of administrative nuisance as other management mechanisms.

4.2 The micro level: individual academics

The general conclusion from the interviews with individual academics⁴ was that they did not perceive restrictions to the realization of concrete personal research agendas imposed by hierarchical university management, intra-university competition or the greater competition when tendering for external funds. With respect to hierarchical management, the academics who were interviewed were not even aware of the existence of many of the newly-introduced instruments or of the ways in which these

³ In total, seven people in deanship positions were interviewed. One of them was a research dean and another one had no budgetary responsibilities. At two universities, deans were professors in medieval history and were therefore also interviewed as researchers.

⁴ Overall, 24 interviews were conducted with individual academics. 11 interview partners were medieval historians (of whom 8 were professors) and 13 worked in the biotech field (of whom 6 were professors).

were supposed to work. On the contrary, the structural reorganization of universities which accompanied the introduction of management structures provided windows of opportunity for gaining additional basic resources which were seized by the highly active academics at the case study universities. These findings hold true for medieval historians and academics involved in biotechnological research alike.

There was an overall consensus amongst the academics who were interviewed that institutional guidance, newly-designed decision-making processes or output control at best led to marginal adaptations in their research designs and publication strategies. Interview partners stated that they had externally defined thematic and structural priorities in mind when they planned their research and publication activities and observed these priorities insofar as their overall research interest and personal quality standards allowed for this. They said that they generally accepted an overarching thematic guidance as long as their individual research foci could be fitted in. Financial incentives were only accepted if they fell into their field of expertise and covered themes in which they were interested. At several case study universities, the request made by university leadership to academics to develop overarching research foci was deemed to be in line with academic autonomy. Practical restrictions, but also disciplinary norms were considered as putting more limits on one's own research agendas than thematic guidance.

It was acknowledged that successful tendering for external funds implied a great degree of symbolic action, i.e. superficial compliance with external demands concerning the thematic approach and partly also the design of data collections. Academics pointed out that they made sure they took the 'right' approach to introduce their specific research interest when tendering for third-party funds. They did, however, deny designing projects by starting off from outside expectations which would be non-academic ones. All the academics who were interviewed said that they wanted to provide quality research and would therefore not work outside their field of expertise even if they could attract a high amount of external funding. They categorically ruled out work outside their field of expertise to conform to any interest because in such a case they could no longer assume responsibility for the quality of their findings. Such a situation would be incompatible with their professional identity. Also in this respect, no differences could be seen between researchers in medieval history and in biotechnology.

At the micro level again, the degree of intra-university competition experienced was considered to be constructive. Medieval historians said that university leadership judged their work according to similar standards as those they used to judge the work of other disciplines. Medieval historians had not personally experienced prejudices at institutional or faculty level with respect to a possibly low societal relevance or competitiveness of their field of research. Nevertheless, there was widespread anxiety about the impact of structural change on the size of their subject. Academics involved in biotechnology research were aware that their field received important amounts of basic university funding because of its topicality.

The most relevant consequence of the new governance regime which academics observed was that administrative work took up an increasing share of their time. Time was generally regarded as one of the most scarce and therefore highly appreciated resources for research. Having to provide regular evidence to faculty and university ad-

ministration about the results of their work and reporting to the providers of third party funding about project progress impacted on their time budgets. In addition, reporting exercises and the management of research grants were tasks which academics often did not feel qualified for and they were not interested in acquiring extensive expertise in either.

Many of the academics who were interviewed had been subjected to external evaluations of their work and experienced these processes as particularly time-consuming. Expectations of further evaluations were reported as not having a major impact on any dimension of research. In general, academics had sympathy for research evaluation, the performance-based distribution of university funds and the competitive tendering for research grants. They expected, however, that the measurement of performance took different types of performance criteria into account, i.e. not only externally defined, but also traditional academic criteria, especially field-specific criteria. Several interview partners reported experiences with irrational evaluation standards and procedures, insufficient feedback about evaluation results or the neglect of positive evaluation results in political decision-making.

Academics clearly perceived public scepticism concerning their work. They were well aware that the introduction of university management and the development of quantitative performance indicators for academic work happened in the context of a public discourse on 'good universities' and 'good research', and that the broader public had, to a certain degree, lost confidence in academics determining quality criteria for research themselves.

The amount of funds acquired from external sources and successful doctorates stood out amongst the new quality standards for university research which had been developed and put into practice by external stakeholders. Externally-funded research has become an important element of academic reputation. This holds true for the reputation of individual academics as well as for that of a subject. At the subject level, the amount of external funding attracted is an important argument when decisions on the distribution of university resources have to be taken in the context of structural university development.

In order to keep ownership of issues of research quality, academics felt that they had no choice but to observe both the new standards and the classical disciplinary ones. Some academics were worried or irritated by the strong public expectations with respect to their work. Practically all of them felt uncomfortable about the high relevance of the new standards because they had great reservations about whether externally-funded research was automatically good research according to classical academic standards. Interview partners thought that the new type of competitive pressure resulting from non-academically defined performance criteria could conflict with a traditional academic understanding of 'good' research if it became more powerful.

Highly motivated academics who tried to seize the available opportunities for interesting research reported continuous tiredness. Their time budgets were not only restricted by reporting duties, but also, for example, by short-term offers of attractive project funding. In the case of historians, these were, for example, in relation to commemorative dates which could not be ignored. Sometimes, academics were frus-

trated because they were unable to live up to their aspirations. Moreover, not being able to fulfil their capacities with respect to research quality because of time restrictions could impact on their motivation to engage in new projects.

The following general picture of decision-making in research emerged from the interviews: Academics attributed decisions concerning their research design primarily to personal competences, research interests, experience, and personality. This was in line with their professional identity. With respect to the choice of partners or the interdisciplinarity of research projects, academics considered the local and disciplinary peers and possibly the requirements of funding bodies. Possible limitations to conducting long-term, basic or non-mainstream research, as well as the full use of their individual research potential and, to a certain degree preferred ways for publishing research findings, resulted from a lack of funding, time (including the duration of employment contracts), and personnel.

The introduction of hierarchical university management did not make a substantial difference to these aspects. Rather, the availability of external funding, the conditions attached to public or private research grants, time to be spent on the administration of grants or institutional evaluation procedures, as well as the duration of own contracts and the contracts of academic staff should be regarded as decisive. In both fields of research under study, these factors seemed to be considered most relevant for being able to fulfil one's capacities. With the exception of one Austrian university, even history professors said that their research largely depended on external funding. In both the German universities where medieval history was studied, this subject was amongst the most successful fields at the institutional level in terms of attracting external funding.

According to the professors in both countries, their tendering for external funding had started long before reforms of university governance were implemented and the amount of external funds acquired began to be used as a performance indicator. In Germany and in the Austrian biotech sector, the tendering for external funding by academics was described as having been triggered by the lack of necessary resources to realize personal research interests. Professors with permanent contracts considered cut backs, especially in academic staff, laboratories and libraries, as the major obstacles for carrying out their personal research agendas. Problems in these areas were responsible for interview partners' feelings of uncertainty as to whether they were able to make use of their full research potential. In Austria, medieval historians stated that it was the overall attractiveness of externally-funded projects which made academics embark on them. External funding enabled them to deal with a certain issue in their field of expertise under particularly comfortable conditions. Many professors and non-professorial academic staff from both countries enjoyed working on their externally-funded projects because these allowed for interdisciplinary contacts and an early integration of good students and especially graduates and PhD students in research.⁵

⁵ In this context, it should be noted that the interview partners had attracted external funds, especially for projects of several years' duration and from national disinterested organizations. The management of this kind of external funding can be assumed to be less complex than that of short-term grants or working in politically-defined project contexts.

5. Conclusions

The research has shown that the governance of universities in Austria and Germany has changed in recent years to include important elements of a managerial state-university relationship and of intra-university management. External guidance has been increased and university leadership and deans have been granted decision-making authority with respect to budgets and structural development planning. In addition, the governance dimension of competition was strengthened by introducing a performance based distribution of institutional funds. The award of public research grants has become more competitive as well. In principle, reforms were more far-reaching in Austria than in Germany. The dimension of competition, however, has developed more strongly in Germany. This can at least partly be explained by the more severe shortage in public funding for higher education.

Interviews at meso and micro levels provided information on the degree of implementation of hierarchical management at universities and its consequences for the work of individual academics. Interestingly, data analysis revealed a quite similar overall picture for both countries and both disciplines studied. This may perhaps be due to the perpetuation of classical academic values and norms which hold across disciplines and the two national higher education systems. Empirical evidence suggests that managerial decision-making structures have largely been introduced at the top level of universities. Here, academic self-governance is reduced to a supportive, consensus building function. However, at the eight universities studied, the meso level is still a stronghold of academic self-governance. Independent decision-making by deans is regarded to be relevant only if acute problem-solving weaknesses of academic self-governance have to be overcome.

At the micro level, the research aimed to find out how far the new governance regimes triggered changes in individual academics' research agendas. Did the implementation of managerial governance actually lead to rectors, presidents, deans or external funding bodies exerting strategic influence on the research work of individual academics? The general observation resulting from interviews was that the increase in external and hierarchical guidance as well as in competitive pressure only led to very minor adaptations of individual research topics and designs. Academics flexibly fitted their research interests in the thematic contexts provided ('symbolic action'). This, however, was perceived as a more minor problem with respect to research quality than the increasing time pressure. The impact of managerial governance on academics' time budgets was considered problematic. Professors with permanent contracts regarded the availability of time, staff, infrastructure and financial resources as ultimately decisive for being able to realize personal research agendas. At present, the situation seems to be such that they manage to compensate for time constraints by working extra hours.

The conclusion from interview findings is that there is no direct link between university management or the policies of providers of external funding and the research agendas of established individual academics in the sense that non-academically-defined priorities would alter their research strategies. The impact of university management and research policy concerns research development at an abstract, macro

level rather than at the level of individuals. An important function of university management is the promotion of existing academic excellence. In addition, university management may organize research activities so as to become more visible to the outside or provide incentives to academics for tendering for external funds. New fields of research may only be developed by the creation of new professorships. The analysis of interviews confirms the finding of other studies (for example Schröder 2003) that the recruitment of new chair holders is a major instrument of university leadership that influences the research conducted at a given institution.

Although no direct impact of university management or the policies of providers of external funding on the research activities of individual academics could be identified, the analysis of interviews revealed a diffuse spread and acceptance of the new standards for research promoted by university management and research policy. The introduction of university management seems to increase the perceived importance of non-academically-defined success criteria for university research such as public visibility and societal relevance. This indirect effect was primarily established through using the amount of external research funds acquired by academics and the transfer of knowledge into practice as criteria for evaluating research performance. Rankings more especially seem to provide an important contribution to the spread of non-academically-defined quality standards for research. This subtle working of reform resembles a self-fulfilling prophecy rather than a process of top-down implementation.

Apparently, academics find themselves with the dilemma of accepting the demands of society to be informed about the development of the research it is funding on the one hand and having to acknowledge that their own quality assurance system cannot be translated into indicators which would allow a lay person to compare differences in research performance on the other. Academics' attitude towards this problem seems to be to superficially accept externally-imposed quality criteria and at the same time assume that traditional disciplinary standards remain untouched and in place within their communities.

For the future, it is an open question whether traditional disciplinary standards will remain intact in Austria and Germany. Early studies on the impact of university and research management in Britain, the European forerunner country in the implementation of new governance structures for universities (see especially Henkel 2000; Harley 2002), have pointed to the issue of new quality standards being implemented through peer review, i.e. by academics themselves. The studies highlight two contradictory developments: their authors observe decreasing ownership of quality standards for research by academics on the one hand and strong commitment on the part of academics in their implementation on the other. Harley's research on the perception of British academics of their involvement in the national Research Assessment Exercises (RAEs) shows that "conscious of the violence done to traditional academic values, they [academics] judged themselves, [...], to be at least in part responsible and, for that reason, felt all the more frustrated, somewhat compromised and just a little bit ashamed" (Harley 2002: 201).

A second aspect relevant to the future of university research is generational change. With externally-defined criteria becoming a regular issue amongst established

academics, they can be expected to become natural for young researchers. Especially with the introduction of fixed-term contracts and performance-related salaries for professors in Germany, new generations of academics in this country might well internalize non-academically defined standards in a similar way as traditional academic ones and develop new types of research agendas tuned to the overall norms set by research policy and university management.

References

- Amaral, A./Jones, G./Karsch, B. (Eds.) (2002): *Governing Higher Education: national perspectives on institutional governance*. Dordrecht: Kluwer Academic Publishers. (Higher Education Dynamics; 2).
- Amaral, A./Meek, V.L./Larsen, I.M. (Eds.) (2003): *The Higher Education Managerial Revolution?* Dordrecht, Boston, London: Kluwer Academic Publishers. (Higher Education Dynamics; 3).
- Bleiklie, I. (1998): Justifying the Evaluative State: New Public Management Ideals in Higher Education. In: *European Journal of Education*, 33(3): 299-316.
- Braun, D. (1999): New Managerialism and the Governance of Universities in a Comparative Perspective. In: D. Braun/F.-X. Merrien (Eds.): *Towards a New Model of Governance for Universities? A Comparative View*. London and Philadelphia: Jessica Kingsley (Higher Education Policy; 53): 239-261.
- Braun, D./Merrien, F.-X. (Eds.) (1999): *Towards a New Model of Governance for Universities? A Comparative View*. London and Philadelphia: Jessica Kingsley. (Higher Education Policy; 53).
- Clark, B. (1998): *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford: Pergamon Press.
- Eckel, P.D./Kezar, A.J. (2004): Meeting today's governance challenges: A synthesis of the literature and examination of a future research agenda for scholarship. In: *The Journal of Higher Education*, 75(4): 371-399.
- Harley, S. (2002): The Impact of Research Selectivity on Academic Work and Identity in UK Universities. In: *Studies in Higher Education*, 27(2): 187-205.
- Henkel, M. (2000): *Academic Identities and Policy Change in Higher Education*. London, Philadelphia: Jessica Kingsley. (Higher Education Policy; 46).
- Kehm, B.M./Lanzendorf, U. (2006a): Comparison: Changing Conditions for Research Through New Governance. In: B.M. Kehm/U. Lanzendorf (Eds.): *Reforming University Governance – Changing Conditions for Research in Four European Countries*. Bonn: Lemmens: 187-212.
- Kehm, B.M./Lanzendorf, U. (2006b): Germany – 16 Länder Approaches to Reform. In: B.M. Kehm/U. Lanzendorf (Eds.): *Reforming University Governance – Changing Conditions for Research in Four European Countries*. Bonn: Lemmens: 135-186.
- Kogan, M. et al. (Eds.) (2000): *Transforming Higher Education – A Comparative Study*. London and Philadelphia: Jessica Kingsley. (Higher Education Policy; 57).
- Lanzendorf, U. (2006): Austria – from Hesitation to Rapid Breakthrough. In: B.M. Kehm/U. Lanzendorf (Eds.): *Reforming University Governance – Changing Conditions for Research in Four European Countries*. Bonn: Lemmens: 99-134.
- Leszczensky, M./Orr, D. (2004): *Staatliche Hochschulfinanzierung durch indikatorgestützte Mittelverteilung. Dokumentation und Analyse der Verfahren in 11 Bundesländern*. Hannover: HIS (Hochschul-Informations System GmbH).
- Mayntz, R. (2004): *Governance Theory als fortentwickelte Steuerungstheorie?* Köln: MPIfG. (MPIfG Working Paper 04/1).
- Neave, G. (1988): On the cultivation of quality, efficiency and enterprise: an overview of recent trends in higher education in Western Europe 1986 - 1988. In: *European Journal of Education*, 23(2-3): 7-23.
- Neave, G. (1998): The Evaluative State Reconsidered. In: *European Journal of Education*, 33(3): 265-284.
- Nybohm, T. (2006): Creative Intellectual Destruction or Destructive Political Creativity? Critical Reflections on the Future of European "Knowledge Production". In: G. Neave/K. Blücker/T. Nybohm

- (Eds.): *The European Research University – An Historical Parenthesis?* New York: Palgrave Macmillan: 3–13. (Issues in Higher Education).
- Pechar, H. (2003): In Search of a New Profession: Transformation of Academic Management in Austrian Universities. In: A. Amaral/L. V. Meek/I.M. Larsen (Eds.): *The Higher Education Managerial Revolution?* Dordrecht, Boston and London: Kluwer: 109-130. (Higher Education Dynamics; 3).
- Pechar, H./Pellert, A. (1998): Managing Change: Organizational Reform in Austrian Universities. In: *Higher Education Policy* 11: 141-151.
- Schimank, U. (2007): Die Governance-Perspektive: Analytisches Potenzial und anstehende konzeptionelle Fragen. In: Brüsemeister et al. (Eds.): *Governance, Schule, Politik – Zwischen Antagonismus und Kooperation*. Wiesbaden: VS, forthcoming.
- Schröder, T. (2003): Leistungsorientierte Ressourcensteuerung und Anreizstrukturen im deutschen Hochschulsystem – Ein nationaler Vergleich. Berlin: Duncker & Humblot. (Abhandlungen zu Bildungsforschung und Bildungsrecht; 13).
- Scott, P. (2001): Universities as Organizations and their Governance. In: W.Z. Hirsch/L.E. Weber (Eds.): *Governance in Higher Education – The University in a State of Flux*. London: Economica: 125-142.
- Teichler, U. (2006): Has the Research University in Europe a Future? In: G. Neave/K. Blücker/T. Nybom (Eds.): *The European Research University – An Historical Parenthesis?* New York: Palgrave Macmillan: 165-173. (Issues in Higher Education).
- Welan, M. (1995): Die neue Universitätsorganisation oder die dritte Organisation seit 1945. In: A. Pellert/M. Welan (Eds.): *Die formierte Anarchie. Die Herausforderung der Universitätsorganisation*. Wien: WUV Universitätsverlag: 113-144.