University Governance

Catherine Paradeise • Emanuela Reale
Ivar Bleiklie • Ewan Ferlie
Editors

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Western European Comparative Perspectives

Springer

Editors
Catherine Paradeise
Université Paris Est/ LATTS and IFRIS
Cité Descartes
France

Emanuela Reale
CERIS- CNR, Rome
Italy

Ivar Bleiklie
Rokkan Centre for Social Studies
Department of Administration
and Organization Theory
University of Bergen
Norway

Ewan Ferlie
Department of Management
King's College London
UK

ISBN 978-1-4020-8637-3 e-ISBN 978-1-4020-9515-3

Library of Congress Control Number: 2008944309

Printed on acid-free paper

springer.com

Acknowledgements

This book is an outcome of the SUN (Steering of universities) project developed under the aegis of the PRIME European Network of Excellence

Contents

Chapter 1
The Governance of Higher Education Systems: A Public Management Perspective*

Ewan Ferlie, Christine Musselin, and Gianluca Andresani

European higher education (HE) systems experienced major changes, and many publications have already proposed to assess and analyse this evolution. But looking at the state of the art on this issue, as will be done in the first section of this introduction, it appears that none adopted a public management perspective and considered wider patterns of public sector 'reforming' and how they have been applied to higher education systems within the EU. Although most HE systems in Europe, but also in the US, are publicly funded, admit the highest share of students and, by contrast with the US benefit from higher reputation than many private institutions, HE has rarely been studied as a public policy or management topic, so has not been one of the traditional areas covered by generic political scientists or public management scholars.

'Bringing in' more generic concepts from political science and public management more fully into the study of HE institutions (HEIs) is a promising avenue to explore academically, and may re-invigorate the study of HEIs. Often the HE sector is seen as a 'stand alone' sector, which is not directly or easily comparable with other types of organization, even within the public sector. The ideology of academic and institutional autonomy as described by Merton, which is so well developed within the HE sector supports this sectoralist approach. There may be some evidence to support this notion of difference even at the organizational level: for example, UK universities retain more self direction and less central control than

E. Ferlie
Head of Department of Management, King's College London, London, UK

C. Musselin
CSO, Sciences Po and CNRS, Paris

Gianluca Andresani
University of Hull, UK

* The three main points developed in this introduction are directly reproduced from the "governance paper", the three authors wrote for the HELF project, a Forward look project of the European Science Foundation (ESF). It is reproduced here with the agreement of the ESF.

C. Paradeise et al. (eds.), *University Governance*,

some other UK public sector settings, such as the National Health Service (the very name describes a national rather than a local service). Yet at a more fundamental level, the organizational similarities with other professionalized public sector settings such as health care are more important than the differences: European universities are largely dependent on the state for financing; the state is concerned to regulate their behaviour as they influence citizens' life chances significantly; they contain a mix of professional and bureaucratic elements and they operate within strongly structured institutionalized fields. There are many fundamental similarities with other public service settings such as health care. Within organizational analysis, they fit well with the more general archetype of the professionalized organization developed by Mintzberg (1979).

Part of this wider approach enables us to reconnect the micro world of HEIs with developments within the macro world of the state. In this introduction we will also argue that there has been a move away from the traditionally Mertonian concepts of HE autonomy: the state is now seeking to shape HE systems more actively. The use of more generic perspectives is evident in some recent studies of HE (Hood et al., 2004; Reed, 2002; Maassen and Stensaker, 2005): we here add to it through an analysis of system level steering which draws on two distinct narratives of public management reforming: the New Public Management on the one hand and the Network Governance narrative on the other.

Within this conceptual framework, this book focuses on the transformation of the "steering" of HE systems in seven European countries: France, Germany, Italy, the Netherlands, Norway, Switzerland and the UK. It is the first publication issued from a research project called SUN (Steering UNiversities) undertaken by the authors and other colleagues within PRIME,[1] a network of excellence funded though the EU.

By 'steering', we here mean the externally derived instruments and institutional arrangements which seek to govern organizational and academic behaviours within HEIs. They are usually but not always emanating from the state. This book will highlight the role of the state in seeking to shape increasingly strategic HE systems towards national policy goals through the use of reformed 'steering' systems.

We will therefore argue that the state increasingly seeks to govern and 'steer' HE systems as it does for its other publicly funded services. These steering patterns vary considerably from one European nation-state to another, reflecting attachment to alternative narratives, conditions of path dependency and localized reform trajectories.

More precisely, we will analyze these national situations and how they evolved since the 1980s in the light of the two main narratives of public management reform

[1] Within the sixth framework, the EU developed new instruments to foster research activities at the EU level. Networks of excellence were one of these instruments. PRIME has been selected among the many projects which applied for EU funding on this basis. It concerns more than 40 research groups in Europe working on Policy for Research and Innovation in the Move towards the European research area.

mentioned above which apply to HE subsystems as well to other public service subsystems. Before describing them and looking at how they can be applied to HE, this introduction will start with a brief overview of the research previously led on the transformations of HE systems, and highlight how the recent changes they experienced can be related to broader evolutions of European public services.

1.1 How Higher Education Governance Has Been Analyzed

During the 20th century, HE was generally studied as a specific sector of state intervention. Education and research being considered as public goods, the recourse to specific policies and instruments by public authorities was justified.

On the one hand, an important part of the literature (developed in Section 1.1) focused on HE public policies in terms of reforms and decision-making, in order to qualify (and also often prescribe) what the role of the state should be on this specific domain. Within this range of the literature, one conception long prevailed. According to it state intervention is expected to be limited: the understanding of science as an autonomous sphere argued in favour of a "Republic of Science" (Polanyi, 1962), which leaves steering and governance in HE first of all in the hands of academics. But two alternative conceptions have more recently developed.

On the other hand, another part of the literature (addressed in Section 1.2) rather tried to identify the (collective) actors involved in the HE sector, to describe the relationships they have one with another and to qualify the mode of regulation prevailing among them. Studying public policies and their content is then less important than discovering and understanding the policy network[2] or the policy regimes[3] producing them. These approaches much more focus on the description of HE systems, and are more interested in routine or day-to-day practices and relationships within them.

1.1.1 Three Conventional Conceptions

When looking at HE public policies and state intervention in this sector, a first conception is strongly related to the Mertonian sociology of sciences, which considers that the role of the state, if any, is to ensure the autonomy of HE (or science more precisely). The HE subsystem is here characterized by a high degree of

[2] The notion of policy network is used here in its descriptive heuristic meaning (following Rhoades and Marsh for instance) and not as an alternative model to pluralism and neo-corporatism to think the state–society relationships (as suggested by Lehmbruch 1995 for instance).

[3] As defined by Bleiklie (2000: 54): "the network of patterns of influence that are particular to a policy area or an entire polity."

autonomy and insulation from governmental steering,[4] despite its dependence on the public purse. Some authors characterize this as "policy for science" (Rouban, 1988) or "regulation by the community" (Paradeise, 1998). The German idealist tradition built around the Humboldtian model and the American functionalist sociology of professions[5] both idealized this conception. Academics are described as producers, users and owners of an esoteric knowledge whose quality or costs can not be assessed or controlled by "profanes" (public authorities, members of the civil society, etc.). Academics therefore receive a monopoly from the state to exercise their function. The state accepts to protect them from the external influences, as long as the academic community implement norms, values and practices preventing an abusive use of their knowledge. This conception relies on an ideology of academic freedom and strong faculty control over key work practices in both domains of research and teaching. This has long been the dominant analytical and normative framework.

The British HE system until the end of the 1970s provided a good example of this conception: the state allocated a public budget to the UGC (University Grant Committee), a purely academic body which then distributed it to highly collegial HEIs (Halsey, 1992; Shattock, 1999; Kogan and Hanney, 2000).

One result of this perspective is that organizational and governance reforms are conceived as endogenous to an autonomous HE subsystem and not as related to wider public policy goals or reform processes.

A second conception attributes to the state an important role in mediating the interests of the society and orienting the development of HE. The state is expected to drive scientific activities, to command and control them. This happens when there is increased suspicion of the performance of traditional publicly funded service systems by publics, politicians and policy makers. The HE system, like any other, is vulnerable to capture by producer dominated interest groups (here academics and scientists) so that government may need to exercise its countervailing power to counter excessive endogeneity or to champion powerless consumers. From this perspective, HE is no different from other publicly funded services (e.g. health care; criminal justice) where the state may put pressure on publicly funded providers to meet broad public policy goals (for example) to cut costs, improve quality or ensure social equity (Van der Meulen, 1998).

The role of the state is also likely to be stronger when the HE subsystem becomes bigger, more expensive, politically more visible and economically more strategic. This is what occurred in many countries over the last decades. As the HE system massifies, so these external and governmental pressures on the HE subsystem

[4] At the national and at the international level: Mallard (2006) for instance shows how some scientists in the US claimed an academic international control over nuclear research after the Second World War, but finally lost their battle.

[5] We agree with the distinction by Bleiklie et al. (2000) between the idealist and the functionalist approaches, but in this chapter we want to stress their convergent conceptions about the role of the state.

may be expected to increase. Within the knowledge based economy, the connection between the HEI subsystem and policy goals of economic growth become sharper. The invention and diffusion of new science based technologies (e.g. recent emphasis on clinical genetics technologies), which brings together university science, venture capital, hi-tech forms and government is a critical arena. The interventionist state may often be more concerned with Big Science than wider HE policies, and this has led to an emphasis of the role of public authorities in big equipment, etc.

A third conception has stressed the role of the market in HE governance (Dill, 1996). The idea that teaching and research may be commodities rather than public goods gained attention and developed while academic freedom has been redefined and the image of the scientist protected from the world in an ivory tower condemned.[6] In the literature on HE governance, this is most of the time presented as a rupture with the "command and control" conception and as a drift from interventionist to "evaluative" governance (Neave, 1986; Van Vught, 1989, 1995; Neave and van Vught, 1991, 1994): from dirigisme to supervision, from ex-ante control to ex-post evaluation, from rules to regulation (Amaral et al., 2003). This conception therefore does not claim a reduction of the state but for a state expected to achieve one or both (depending on authors) of the following missions: stimulate the strength of market forces on the one hand but also detect, prevent or repair market failures on the other. The first mission would encourage students to start to behave more like consumers. Such consumer pressure would in turn act as a helpful spur to greater quality, and competition among HEIs would increase. The role of public authorities is here to facilitate the development of a market and this may be difficult, given the weak market orientation of many HE systems and lack of effective competition (historically there is no market entry or exit and strong planning systems). About the second mission, the state is expected to set and defend broad principles (equality of access for instance) and to intervene if threatened by the increase in market-forces.

Whatever the prevailing conception, the academic works interested in HE public policies and the role of the state on this domain mostly focus on two types of issues. On the one hand, they describe the measures included in the reforms and qualify the nature of the change at which the objectives of these reforms are aiming (for instance: is this reform a move towards the evaluative state?). Good examples of such approaches can be found in Goedegebuure et al. (1993), Teichler (2005a, b). On the other hand, they consist in implementation analysis in line with the studies led first by Cerych and Sabatier (1986). Recent studies on the impact of the reforms led in Europe are representative of this perspective. The comparative study recently edited by Kehm and Lanzendorf (2006) on four European countries, for instance, relies on a powerful analytic scheme (see also de Boer et al., 2007) aimed to

[6] This includes politicians and university reformers but also the tenants of the "strong programme" (among many others: Bloor, 1976; Latour, 1987; Lynch, 1993, etc.) who fight against the idea of science as a different activity and of scientists as a group outside the society.

describe and assess the degree of changes experienced by national HE systems. This scheme[7] distinguishes five major components (state regulation, stakeholder guidance, academic self-governance, managerial self-governance and competition for resources) and can thus provide a visual representation of change for each country and of the impact of the implementation of the reforms.

But, by contrast, few studies carefully reconstruct how such policies arrive on the agenda, the political entrepreneurs and the interest groups involved,[8] the way the problems are defined and constructed, how solutions are developed and the narratives attached to them (Radaelli, 2000; Stone, 1997). In brief, they rarely address the wider political economy of HE 'reforming'.

1.1.2 Higher Education Systems as Policy Networks

Looking now at the literature which is interested in the description and understanding of HE systems, it aims at qualifying the type of policy networks they are alike and at identifying the nature of the relationships within them.

Most publications analysing how HE systems work and are transformed, pay exclusively attention to the state–universities relationships. As a matter of fact, the content of recent public policies most likely consist in reconfiguring the status, internal structures, governing bodies, field of responsibilities, decision-making processes, and scope of action of HEIs (Braun and Merrien, 1999). Moreover, there are trends towards the devolution of more institutional autonomy to universities and the constitution of more governed, accountable and responsible institutions.

Nevertheless HE systems, like other public sectors such as health and justice, have the specificity of consisting in institutions and a profession. However less attention is paid in the literature to how this affects the relationships between the state and the academic profession although in many European countries, public authorities may still have an impact on academic careers (cf. for instance Enders, 1996, 2001 or Musselin, 2005), thus influencing the nature of the link developing between each academic and his or her institution.[9] Moreover, in some countries (like France, or Italy) the state has developed stronger relationships with the representatives of the academic profession than with HEIs. This model, which prevailed

[7] These five components are very close to the mechanisms suggested by Braun and Merrien (1999).

[8] In their analysis of the transformation of the British HE system, Kogan and Hanney (2000) provide an interesting analysis of what they call the "co-opted elite", i.e. mostly academics who are recognized as interlocutors by the political and ministerial actors and contribute to the definition of the forthcoming reforms.

[9] In a comparison between academic labour markets in France, Germany and the US, Musselin (2005, Chapter 7) argued that French universities first of all work as shelters for French academics, while German universities (at least until 2001 and the progressive introduction of merit salaries) behave as investors betting on their professors when they recruit them, and US universities are engaged in a employer-wage earner relationship.

(or still prevails) in countries influenced by the Napoleonic model, lead (leads) to a co-management of the system by the ministry and representatives of the profession (Musselin, 2001, 2004). Considering state-academics as well as state-universities relationships therefore leads to reframing the coordination triangle developed by Clark (1983) and to analyse the type of coordination in use to manage the academic profession as well and as much as the type of coordination which prevails to manage HEIs with.

To conclude with this state of the art, it should be noticed that few studies mix the two broad perspectives of analysis we described in this first section of the introduction. The correlation between, on the one hand, the type of policy network/regime (which exists in each country and characterizes its HE system) and, on the other hand, the type of public policies (in terms of content and impact) and state intervention prevailing in this country, is hardly discussed and analysed, with a few exceptions (Kogan et al., 2000; Musselin, 2001, 2004).

1.2 Three Possible Redefinitions of the Nation State

One further characteristic of the literature mentioned above is to look at HE per se, to consider it as a singular sector, distinctive from other public sectors, despite it strongly relying on public funding. However comparing the reforms and transformation experienced by European HE systems and those affecting the European public sectors, it is clear that what is described as the recent redefinitions of the state in the public sectors can be applied to HE. We can thus develop the argument that European nation-states are increasingly seeking to steer their HE systems, along with other key public services, in directions which are consistent with national policies.

There are three possible redefinitions of the role of the nation-state evident since the 1980s, which may play out differently in different jurisdictions. In this second section, we will describe how concrete changes identified in many other public sectors are also observable in HE.

1.2.1 A Stronger Management of the Public Sector

A first redefinition consists of the transformation of the public sector into a more restricted and managed sector. In the UK, where this redefinition had a large impact, it might be called the *New Right or Thatcherite reform strategy*. But, even if at a lesser extend, such a trend affected all European countries and led to reforming the public sector and to depart from the preceding period. Between the 1940s and 1980s, a number of European countries substantially increased the size of their public sector and welfare states (de Swann, 1988), for example, expanding social security, health care and education programmes. The massification of HE was one

part of this wider trend, usually financed through public taxation and free to the student. At this point, the Mertonian concept of HE autonomy in some countries and the interventionist conception in others, remained strong. From the late 1970s onwards, however, political pressure to reduce the burden of taxation associated with the large Welfare State led to concerted efforts to reverse this long term pattern of public sector expansion and to ensure greater value for money, privatize nationalized industries, reduce trade union power and to increase productivity in the extended public sector. There was now a political desire to shrink the size and power of the public sector. Given the presence of well organized producer interest groups within the public sector (trade unions; professional associations), these changes were strongly resisted and led to a strong top down and confrontational management style. In almost all countries, large reforms of the public administration have been launched (see Bezes, 2001, 2005a for France for instance, Pollitt and Bouckaert, 2004 or Page and Wright, 2006 for a comparison of diverse European countries) in order to improve its performance and efficiency.

High profile student unrest, the post 1968 'long march through the institutions' of Marxist groupings and trade union strikes put universities firmly on the radar screen. Efficiency, value for money and ensuring strong management were concerns for politicians and policy makers in the university sector as in the other public services. universities were asked to increase their productivity, to develop new missions and in particular to achieve a leading role in technology transfer and innovation, to reduce their operating costs, to improve their drop-out rates, to match the demands of the job market, to pay attention to the societal needs (Dill and Sporn, 1995), etc. Increasing the autonomy of more strongly governed universities has repeatedly been affirmed as the best option to reach such objectives. Reforms (such as those led in the Netherlands, de Boer et al., 1998; de Boer and Goedegebuure, 2001) therefore aimed at reinforcing the executive leadership of universities and reducing the power of deliberative bodies and collegial governance (Braun and Merrien, 1999; Braun, 2002; Stölting and Schimank, 2002) while universities were equipped with managerial instruments (strategic plans, audits, etc.), tools (management software for instance), indicators (Cave et al., 1991) and practices.

As can be seen, the effects of these 'reforms' led to significant changes in the balance of power within the HE sector. Senior management and non executives' power bases were strengthened. On the other hand, public sector trade unions and rank and file faculty lost power. The state intervened more actively in the HE system and in a more self confident manners. Supporters of such reforms would also argue that the use of market like mechanisms increased consumer 'voice' and challenged public sector producer capture of the institutions.

In parallel, the role of the state in the provision of HE has been redefined in various ways. In some countries, like Portugal, the development of the private sector has been encouraged in order to cover the lack in HE and many private institutions have been created. In others, reductions in public funding occurred (in 1981 for instance, deep and very visible cuts were made in the budgets of some UK universities as a national policy decision to shock the system into radical change), leading to reducing the number of academic positions despite the increase in student numbers

(in Germany for instance, according to Enders [2000], the number of students rose by 232% between 1975 and 1995 while the number of academic positions rose by 130%). This led universities to search for other forms of funding, while some countries (the UK again, but also Germany and Austria for instance) stimulated the participation of families by increasing or introducing fees. In almost all countries finally, the balance between the ministry and HEIs has been modified in favour of the latter.

This redefinition of the role of the state in providing and funding HE has been accompanied by attempts at transforming the modes of action of the ministers. As highlighted by IBleiklie (2000), the traditional tools did not disappear: governing by rules remain current in HE and many countries (Italy and Norway among others) for instance decreed the introduction of the Bachelor–Master scheme in their universities. But many new instruments of governance also flourished. Some of them aim at delegating decision-making to new kind of bodies: this lead to the creation of intermediary bodies such as agencies of all kind. Others, like contracts for instance, aim at introducing ad-hoc negotiations. Still others consist in abandoning ex-ante control in favour of ex-post evaluation: this provoked the irresistible expansion of assessment/evaluation bodies all over Europe (Campbell, 2003; see Schwarz and Westerheijden, 2004 for a complete panorama of this trend on 20 European countries).

This movement is sometimes described as a disengagement of the state. But it rather reflects a new form of state engagement in HE. Universities are being increasingly identified as "key actors" (as knowledge diffusers, research producers and innovation inducers) in "knowledge societies," European governments have never been as attentive to HE and research than today. Universities are on the policy agenda in every country and governments search for means enabling a less expensive and more efficient management of the sector.

1.2.2 The 'Hollowing Out' Thesis

A second redefinition consists of the '*hollowing out*' *of the nation-state* (Rhodes, 1997; Pierre, 2000; Frederickson, 2005). Even if most of the literature on this evolution is more recent than the literature on the stronger management of the public sector, evidence can be found in the past and developed in parallel with stronger management. In this account, the nation-state is losing functions, legitimacy and authority to an increasing range of alternative actors and national borders are blurring. In particular, functions move from the nation-state upwards to the EU level (including the Lisbon process) or downwards to 'strong regions'. In many countries, the regions received more prerogatives through decentralisation acts. In France for instance, two laws, the first in 1982 and the second in 2003 reinforced the scope of action of the *régions*, the *départements* and the cities in many domains (social services, vocational training, etc.). As a result, the number of public actors directly involved within the management of a public sector increased. Furthermore,

routine service delivery functions are contracted out to a range of non state providers. Political parties are in decline; but social movement organizations (such as Greenpeace and Oxfam) grow. Legitimacy deficits lead state actors to consult with non state actors and to form coalitions to secure political support. Command led control systems give way to network based forms of management.

While in many European countries, the post-Second World War period has been characterized by quasi monopolistic relationships between the national authorities and their HE systems, profound changes occurred in the 1980s and upwards. Higher education is one important function which may be devolved from the national to the augmented regional level, but which also operates at a EU level. The role of regional/local public authorities in HE increased.[10] This move has been allowed either by the devolution of prerogatives on HE to specific territories (UK and Spain), by an increase in autonomy on these issues to already decentralized units (Germany[11]) or by the voluntary action of some local actors to be recognized a say[12] (France).

The implication of supra-national actors in HE is somewhat more complicated as the European Commission formally has no competence on this issue. Nevertheless, as clearly and precisely shown by Corbett (2005), it does not mean that there exists no European policy on HE (cf. for instance the Erasmus programmes, the creation of the ECTS (European credit transfer system), etc.). Furthermore the European Commission has competence over research and has developed, for more than 20 years, Framework Programmes, which impact on European universities through the funding of collaborative research projects. Last, but not least, intergovernmental initiatives such as the Bologna process, even if not led by the EU,[13] affected the national systems of the signing countries (Alesi et al., 2005; Krücken et al., 2005; Witte, 2006; Musselin, forthcoming) and can not be ignored by the national education ministries. To these rather direct influences, one could finally add the more indirect role of actors such as the OECD (Organisation for Economic Cooperation and Development) in the development of international benchmark and good practices.

Consequently, HEIs operate in regional, national and international networks simultaneously and have to engage with a wide range of different stakeholder groups. The distribution of power is more diffuse and pluralist than in the reforms

[10] In many countries this recreated the situation prevailing before the Second World War when the development of universities was deeply intertwined with the trajectory of the local territory where they were located.

[11] See for instance Kehm and Lanzendorf (2006).

[12] In France the laws of decentralisation did not concern HE which remains a national issue. But since the mid-1980s, local actors (regions, departments or cities) claim to be involved in decisions pertaining to HE and affect part of their budgets to fund equipments, buildings, fellowships, research projects and even some positions. If HE is still not decentralized, some procedures, such as "Universités 2000" or the contracts regularly signed between each region and the state have offered windows of intervention to local public actors, and to regions in particular.

[13] But the EU, and more precisely the Commission, is part of the process and Racké for instance argues that this process, although intergovernmental, facilitates the (indirect) intervention of the Commission on HE and legitimates the production of "commission papers" on this topic (Racké 2006).

in public management. Indeed the proliferation of different networks may become bewildering, leading to a sense that there is no one actor who can be held effectively accountable. There is no crude concentration of power in the hands of the upper echelons or disempowering of public sector trade unions or academic faculty who remain important stakeholders. The state 'holds the ring' rather than intervene directly within the sector. Further analysis is needed to discover whether some HE network actors are nevertheless more powerful than others: this may be linked to control over finance or the possession of a central or nodal position within the network (networking skills themselves become an important form of social capital). Networks may also be dominated by closed social elites rather than being open to democratic forces.

1.2.3 Democratic Revitalisation

A third redefinition of the state concerns attempts to ensure the *democratic revitalisation* of pathological and over bureaucratized traditional forms of public administration. In many South American countries, for example, writers on the post military governments which have emerged over the last 20 years stress the importance of the democratic basis of the state where the individual is seen as a citizen and not an object (see Bresser-Pereira, 2004 on developments in public management in Brazil). de Leon (2005) sees the development of more participative forms of public management as a strategy for responding to falling levels of trust in government. This argument is close to Manin (1996) who explains the rise of the deliberative democracy through an experience of the limits of the representative democracy.

Consequently, the monopoly on expertise previously recognized to public servants has been discussed and critiqued as well as their capacity to define public interest. This lead to a stress on more participation from various stakeholders in the construction of public decisions. Profane knowledge was recognized as a form of expertise in its own right while new devices were created to multiply the opportunity of participation and deliberation in the direction of larger circles (i.e. not only to politicians, public servants and academic experts). Such trends are observable in comparable public services arenas such as health care where recent public policies have been developed to construct an informed public opinion which can act as a countervailing force to the views of clinicians and scientists. For example, technology assessment arenas in such areas as evidence based health care (e.g. the sophisticated public consultation processes developed by the UK National Institute of Clinical Excellence to supplement the scientific base in relation to explicit health care rationing decisions), consensus conferences (Joss and Durant, 1995), hybrid forums (Callon et al., 2001), and deliberative bodies at the national level (for instance the "Commission nationale du débat public" in France) have all expanded.

Within the university context, this democratising redefinition would suggest strong staff and student and stakeholders participation in the governance of the

institution. This took different forms. Some countries (Germany, Netherlands, Norway, etc.) passed new laws and created university boards (Mayntz, 2002), consisting partly or exclusively of non-university members, expected to play the role of the American board of trustees and to set priorities, approve the budget, valid strategies etc. Others, like the UK introduced non-academic members in their national research councils.

Democratising would also lead to a stress on the social function of the university as a key part of local civil society and strong interactions with local stakeholders. Teaching may be delivered through non traditional modes and research is likely to include a strong applied and 'useful' emphasis. Some authors (Gibbons et al., 1994; Novotny et al., 2001) announced a transition of knowledge production processes from Mode 1 to Mode 2, i.e. (among other things) a drift from research agendas defined by academics according to their discipline to research agendas defined in order to solve multidisciplinary societal needs and problems.

In terms of the distribution of power, the democratic revitalisation redefinition can be seen as distinct both from the stronger management of the public sector and the "hollowing out" of the state. There is here a strong scepticism about according too much power to senior leaders and a demand for traditional forms of democratic accountability (including elections of Rectors). The base becomes more important vis-à-vis the apex. universities also become more connected to influence from their local publics and less endogenous. So power may shift to those with political skills and bases, and those able to engage in acts of collective organization.

1.3 Two Narratives of Public Management Reforming and Their Application to the Higher Education System

In the previous section, three principal redefinitions of the role of the state were described, which can be observed in the public sector of all European countries, and which all affected HE systems as well. Each nevertheless occurred with more or less intensity from one part of Europe to the other. They also differently combined. While the hollowing out of the state often happened along with some concerns for democratic revitalisation, countries more focused on reinforcing the management of their public sector were less affected by the two other types of redefinition. Finally the same transformation may have taken different forms. For instance, the transformation of the public sector has been strongly associated with managerialism in some countries and with modernization in others.

Our ambition in this third section is no more to point at the changes but to identify the rationales which were mobilized to push for these changes and the rhetoric helping to make sense of these changes. In order to make sense of these diverging implementations and qualify the transformations experienced by different countries and their HE systems, it is suggested to link them to two main narratives of public services reform: the New Public Management and the Network governance. They are called narratives because they are not pure analytical and theoretical frameworks

aiming at comprehension (in the Weberian sense): they both mix technical and also political and normative elements (Paradeise et al., 2008). They each tell a policy and management story, which has been more or less influential in each country as well as they can be linked to specific conceptions and theories regarding the relationships between the state and society. Each time, we will describe what the narrative consists in, and the way it can apply to HE will be developed.

1.3.1 The New Public Management

The New Public Management (NPM) is a well known public sector reform wave emerging in the UK under the Thatcher governments of the 1980s but which has also been influential internationally in such jurisdictions as Sweden and New Zealand (Hood, 1991, 1995; Ferlie et al., 1996). The UK has exported some NPM reform instruments globally (privatisation; devolved executive agencies) so the NPM was more than a narrow UK trend. The NPM relies on (1) markets (or quasi markets) rather than planning, (2) strong performance measurement, monitoring and management systems, with a growth of audit systems rather than tacit or self regulation and (3) empowered and entrepreneurial management rather than collegial public sector professionals and administrators (Andresani and Ferlie, 2006). The NPM seeks to produce a smaller, more efficient and more results orientated public sector. It is influenced by ideas in organizational economics such as principal agent theory which stress incentives and performance. There is a concentration on goals of efficiency, value for money and performance rather than democracy or legitimacy. There is a suspicion of monopoly public sector producers (including public sector professionals) and a desire to shift power to consumers and managers. There is a desire to increase the strength of hierarchy, either directly through line management or indirectly through strong contracts within a principal/agent framework. Here the centre sets the strategic framework and governance instruments ('steering not rowing'); and the periphery is given operational freedom to deliver but only within this strategic framework. NPM ideas are often 'owned' by the Ministry of Finance or the Prime Minister's/President's office rather than the spending departments such as the Ministry of Education, and are imposed on public services at the field level in a top down fashion.

There may be some tension between these three underlying principles and different NPM subtypes have emerged (Ferlie et al., 1996). For example, NPM may be associated with principles of 'liberation management' and the enhancement and empowerment of managerial action – as in the Gore Reinventing Government reforms in the US of the 1990s – or alternatively with the proliferation of ex post audit systems (Power, 1997) which led to defensive and risk averse management (as in the UK case). Contrary to the institutionalist view that public sector reforms have only superficial impact, Ferlie et al. found that at least in the sector of UK health care, the impact on NPM reforms on intermediate indicators of organizational process had been considerable.

There is currently a debate about the international breadth of the NPM (is it a Anglo Saxon construct to which many other jurisdictions are averse, or has it diffused more widely?) and its longevity (whether or not we have moved into a post NPM era of network governance). A recent overview (Ferlie et al., 2005) found substantial evidence of NPM breadth and depth and concluded that it would as yet be premature to conclude that the era of NPM was over. Even late comers as France finally adopted NPM reforms, without using this labelling nevertheless: the recent introduction of new public budget procedures (the LOLF, loi organique sur la loi de finances) follows the main principles described above.

In terms of the application of NPM ideas to the HE sector, we would predict the following 'signs and symptoms'. These "indicators" are not only examples of what may happen. They will then be used in the comparative conclusion of the book to determine the importance of the penetration of NMP in each studied country.

(a) Market based reforms:
  (a1) Stimulation of competition for students between HEIs, such as development of real 'prices' for teaching fees as a basis on which trading in this market can take place, introduction of higher student fees to empower students as consumers and drive up teaching quality levels, use of voucher for students or other form of students' support can be seen as a quasi-market based reforms.
  (a2) Market based research funding (for private and public HE and research institutions).
  (a3) Policy stress on diversity and choice rather than integration and planning.
  (a4) Encouragement of private sector providers to enter the market.
  (a5) Market exit of failed public providers is acceptable.
(b) A hardening of soft budgetary constraints:
  (b1) Stress on financial control in state/governmental policy
  (b2) Efficiency and value for money
  (b3) "Commodification" of activities in policies (for instance the introduction of intellectual property rights), and in explicit narrative
(c) Stress on performance: elaboration of explicit measurement, assessment and monitoring of performance in both research and teaching; development of audit and checking systems (auditisation variant of NPM).
(d) Concentration of funds in the highest performing HE institutions (incentivisation of the supply side).
(e) The Ministry and its agencies attempt to steer the system vertically, through setting explicit targets and performance contracts.
(f) Higher education institution governance:
  (f1) In the realm of governance, the development of 'strong rectorates' and non executive members drawn from business
  (f2) Move to appointed rather than elected senior posts
  (f3) Reduction in the representation of faculty and trade unions in HE institution governance

(g) Managerial roles:
  (g1) Stronger overt managerial roles of rectors, deans, head of departments.
  (g2) Development of 'management must manage' doctrines and practices, i.e. who has responsibility for management must have the means and the will to manage (liberation management NPM subtype);
(h) Growth of performance related pay for faculty and private sector style Human Resource Management.

The UK remains a key index case for NPM and an exporter of NPM reforms. Within the UK, specific public services varied in the timing of the importation of key NPM ideas and in the capacity of the centre to impose them on the field. Health care can be seen as an early mover: it was politically sensitive and visible; and the Department of Health had national level control over the system. HE can be seen as a medium mover, following somewhat behind Health (e.g. Griffiths, 1983, on NHS general management; Jarrett, 1985, on strengthening the executive role of the Vice Chancellor) and with a lower capacity of the centre to impose change. Nevertheless, the capacity of the planning council to incentivize and persuade individual HE institutions is considerable and should not be underestimated. Criminal justice was a later mover still, but came on stream in the 1990s.

Nevertheless the influence of NPM goes far beyond the UK. Some of the "signs and symptoms" described above are observable in other countries and some (as the indicator "a" in almost all). Just to take a few examples, the HE system in the Netherlands has been strongly influenced by the NPM narratives and meets at least six of them (b, c, e, f, g and h) and some partially. In a country like Germany, where the NPM narrative had less success, four signs (b, d, e and h) are present nowadays, while many of the measures of the recent Norwegian "Quality reform" meet the NPM symptoms.

1.3.2 The Network Governance Narrative

As stressed in the second section above, political scientists in the 1990s pointed to the 'hollowing out' of the traditional nation-state as functions moved upwards or downwards (Rhodes, 1997) away from the national ministerial level, or had to be negotiated with many social actors within the implementation phase (thus often relying on more deliberative democracy). Understanding and indeed reconceptualising 'implementation deficits' through the development of more bottom up and emergent models of implementation was an early contribution of this literature.

But this raises a governance problem (Klijn, 2005). Given an outsourcing of direct responsibility for production through privatisation, outsourcing and agentification, the state now had to steer through contract, alliance building and partnership and persuasion rather than hierarchy. Contracts could be weak or difficult to enforce in practice. The concept of multi level 'governance' emerged to make sense of these new conditions. 'Governance' was a deliberately looser term than the old concept

of ‘government’ (Le Galès, 1995; Borraz and Le Galès, 2001; Kooiman, 2003). It not only refers to network based forms of organizing but also to allow more balance among the involved actors, more deliberative democracy and, consequently, the co-production of public policies among more numerous, more diverse and more equal actors.

In countries which early adopted a NMP rhetoric, some writers understood the development of the literature on this narrative as a sign of the emergent post NPM organizational form (Newman, 2001). In the UK for instance, this was associated with the Third Way ideas of the early Blair governments and policy level reflection in the late 1990s on the weaknesses and also the strengths of NPM based reforming which should be retained (such as its stress on performance improvement). The network governance model therefore builds on criticisms of the NPM in the recent years. Building linkages across public policy actors in order to deliver complex change is a key theme (Klijn, 2005). There were excessive transaction costs associated with escalating and often substantively pointless NPM driven audit sytems (Power, 1997) which also led to a dangerous disengagement of public sector professionals (doctors; teachers; academics) from the official change agenda.

But such analysis should not be misleading. First, this narrative is most of the time developed in opposition or as distinct from the NPM narrative. Moreover the factors associated to the network governance narrative developed well before authors begun qualifying them and labelling them as “network governance”, in sectors with complex or ‘wicked’ policy issues which cross traditional boundaries and demand lateral working (e.g. anti drugs policy). Increased policy complexity may be characteristic of later modern governmental systems (e.g. climate change; food safety). Furthermore, in many countries the network governance narrative developed independently from the reflection on NPM and well before any introduction of some NPM.

Within the network governance narrative, a greater range of actors and interactions emerges, and the central state plays more of an influencing and less of a directing role. It governs with society and not above it (Padron, 2006). There is a shift from vertical to lateral forms of management. There is devolution of power downwards from the centre of the nation-state to lower tiers and also upwards to higher including European tiers. In such systems, coordinating power is shared between social actors, possibly operating at multiple levels of analysis. Knowledge and ‘best practice’ spreads across the network, based in high trust, repeated interactions and a ‘clannish’ culture. There is dense interaction and inter dependency between network partners. The network develops self organizing and self steering capacity. The role of the state is distinctive only as a relationship facilitator: it brings actors together, builds trust, arbitrates and verifies interactions (Padron, 2006; Klijn, 2005). ‘Joined up’ policy needs to bring together various executive agencies and other non governmental actors as co-producers of a complex good. Accountability relationships are a way of ‘giving account’ to local publics and not an ex-post state driven system of checking. This narrative builds on the pioneering work of a number of French and Dutch public policy scholars on network based forms of public management (Le Galès, 1995; Kickert et al., 1997; Klijn, 2005).

Instead of the NPM policy mix of hierarchies plus markets, the public management network becomes within this narrative the prime instrument of coordination. It includes novel concepts of networks, collaboration, diversity, inclusion and devolution. There are some strong similarities with the science policy literature on so called Mode 2 knowledge production (Gibbons et al., 1994; Novotny et al., 2001) which stresses co-production of knowledge between the HE institution and an extended range of non traditional actors. However, some networks form integrated and cohesive 'policy communities' which are captured by a narrow range of powerful interest groups (Rhodes, 1998).

No country appears to be an index case for the network governance narrative, but most countries display evidence for the development of larger networks and for the introduction of new actors in many sectors.

In terms of policy and management implications for the HE sector, the network-governance narrative implies the following "signs and symptoms", which will also be used at the end of the book to assess the level of penetration of the network governance narrative in each country:

(a) Development of networks between HE institutions and between HE institutions and other social actors.
(b) These networks develop substantial self steering and self organizing capacity.
(c) Some networks are designed with the explicit goals of joint problem recognition, joint problem solving, organizational learning and dissemination of 'good practices'/leading-edge knowledge.
(d) External control systems take the form of 'light touch' systems and of professional self-regulation.
(e) Networks play a significant role in governance of the HE system; in these network organizations, governmental and non-governmental organizations of different levels and/or of different functional areas take part.
(f) The Ministry of Education and its HE agencies adopt indirect and shaping role: they 'hold the ring' between many different actors as the ultimate guardians of the public interest; there is a more 'hands off' style of system management at national level, with little emphasis on national level target setting and planning (facilitatory state).
(g) In terms of senior management style, there is an emphasis on softer leadership skills, visioning and networking based approaches; there is an emphasis on distributed leadership and team based approaches rather than the highly individualized management typical of NPM.
(h) Human resources management systems reward high performing teams rather than individuals; there is only limited salary differentiation in order to preserve collective purpose within the network.

As mentioned above, no country can be described as an index case, but some signs can be found in different cases. In France, for instance, three symptoms are present (a, b, and c) and two are partially observable (e and f). In particular, the recent possibility for French HE institutions to join into a common super-structure called PRES (pole of research and HE) is very typical for sign "e". In Germany the

emergence of various accreditation agencies provides a good examples for the development of an increasing indirect role of the state ("f"). And sign ("e") is relevant to most European countries with the development of HE and research policies at the European level and the strengthening of infra-national levels (regions, *Länder* etc.) in many cases.

1.4 Organization of the Chapters

The rationale of this book is to mobilize these two narratives in order to analyse the transformations experienced by HE and research systems in seven European countries, France, Germany, Italy, the Netherlands, Norway, Switzerland and the UK.

Rather than choosing one of the two narratives as one analytical framework, we decided to describe the main changes which occurred in each country and to question what can be explained with the NPM narrative and what can be explained with the network governance narrative. The main underlying idea is that although they are some contradictions and incompatibilities between the two narratives, they are not exclusive and can both develop in the same country. Even more: we expect to observe that both narratives are more or less present in each country and differently combine one with another.

The structure of the book will thus be the following. The changes experienced in each of the seven countries will be depicted and analysed in seven national chapters. On purpose, the internal structure of the chapters is not harmonized. It should rather reflect the specificity of each case and its main characteristics rather than try to respect common issues. Nevertheless, all chapter share two objectives. The first is to identify the respective influence and impact of the two narratives on the steering of universities. The second is study the consequences of this transformations on two "tracers" i.e. two more empirical issues. Both tracers have been chosen because they are present in all of the seven countries and can be affected by the two narratives.

The first tracer concerns research funding. One the one hand, new mechanisms of allocation have been developed, leading to more accountability and follow up, i.e. to more managerial behaviours. On the other, researchers are encouraged to diversify their sources and to build networks of funding.

The second tracer deals with the development of doctoral schools. Universities have been encouraged to formalize and structure doctoral studies. It can be understood as (and justified by) a need to structure and have more control over rather informal forms of training. The objective of producing Ph.Ds in less than 3 years, or of improving the professional insertion of new doctorates reveals a trend towards a standardization of this period of apprenticeship. But these reforms are also threatening the personal master to disciple relationship with characterized doctoral training before and lead to more collective, network oriented forms of organizing.

The aim with these two tracers is to leave the macro national level privileged by the analysis of the reforms in each country and identify some of their impact at the

level of the research units and of the researchers located in universities. Each of these tracers would need a much longer development if one wanted to describe and analyse in depth how they changed overtime in the seven countries. Each chapter will only deliver a brief overview of the impact of the national reforms on them. Further publications and the different Ph.Ds. prepared by doctoral students in the seven countries will provide more detailed and extensive analysis.

The seven national chapters are followed by two final chapters. The first one aims at comparing the seven countries by looking at how closely they meet the scenarios developed above when applied to HE, in terms of designs as well as in terms of their actual impacts, showing that common repertoires of action can well coexist with maintained path dependence. The second chapter has more reflexive ambitions. It draws upon the empirical results and the comparison across countries to discuss how and to what extend the actual role of public authorities is rebuilt by reform. It shows how the two prevalent narratives used by the public management perspective display stimulating analytical possibilities when combined, rather than opposed. It also reflect on how the hybrid forms produced by their varying implementation in the seven countries can provide further theoretical insights for the understanding and analysis of HE systems as well as public services to a larger extend, in Europe.

Chapter 2
France: From Incremental Transitions to Institutional Change

Christine Musselin and Catherine Paradeise

2.1 Introduction: A Changing Relationship Between Public Authorities and Universities and Implications for University Autonomy

French public institutions are often assumed to be reform adverse. This assumption is confirmed by many events in the history of French higher education (HE) and research systems. Quite recently (2003), the government withdrew a project, aimed at increasing the strategic and operational resources of public universities, from submission to the Parliament to avoid students' and academics' unrest. A social movement also developed in 2004 among researchers protesting against awkward manoeuvres by the government to induce more flexibility in the public sector research labour force. Reforms are usually opposed because they might favour differentiation between universities and jeopardize the national dogma of equality of treatment.[1] The 1986 Devaquet act collapsed because it allowed universities to set, within a very restricted frame, their fees. The same happened in 1993 when the Fillon act offered new status choices to universities. They could have replaced the uniform status created by Savary in 1984 by a more managerial one, first created to help developing newly created universities in the 1990s. The unions opposed the proposal as they saw it as a threat against the principle of equality (see Merrien and Monsigny, 1996 or Merrien and Musselin, 1999).

Such past and recent experiences should nevertheless not lead to the conclusion that inertia and conservatism prevail in France. Change has been large and deep

C. Musselin
Sciences Po and CNRS, Paris

C. Paradeise
Université Paris Est/LATTS and IFRIS, Cité Descartes, France

[1] The paradox is that, while enhancing the dogma of equality, the same students and academics at the same time long did not question the very unbalanced national organization along two major divides: universities and *grandes écoles* on one side, education and research on the other.

C. Paradeise et al. (eds.), *University Governance*,

over the last 30 years when observed from a pragmatic viewpoint. The final success in passing acts such as the research pact in 2006 and the university autonomy act in 2007 would not be understandable without this background of recent change.

To make this point, the first two sections of this chapter describe two main transformations of the French HE systems that directly affected the steering of research within French universities. First, we expose the transformations of the relationships between public authorities and universities and its effects on growing autonomy, government and strategic ability of university. As a result, we show how universities developed an increasing appetite for steering research activities independently. The second change deals with the blurring divide between research and higher education institutions (HEIs)[2] that led to the relocation of most research activities and researchers to French universities.

The third section discusses how and how far these transformations directly or indirectly impacted two specific issues: budgets resource allocation processes and budget structures in universities, and the content and organisation of the doctoral studies through the creation of the doctoral schools.

Then we will analyse the impact of new public management (NPM) and network governance with regard to the history of the last 30 years in French HE and research. NPM has not been used as a frame for reforms of the French HE system: French public sector (including HE) reformers, have long simply ignored this narrative. Reforming the French administration and its public services (universities being one of them) was nevertheless on the agenda. Public management was promoted to fight against the rigidities of a bureaucratized administration. Most of these reforms in the public sector included measures in favour of decentralisation and extended the range of actors enabled to participate in decision-making. As a result, the networks of actors involved in the steering of the HE and research considerably increased. But policies remained disconnected from the NPM wave, submerging some other European countries at the same moment. Furthermore, those policies rely on the traditional discourse about decentralisation (versus Jacobinism) than on any explicit move towards network governance.

Before developing these points, a brief description of the French HE and research systems is needed. In 2003, the French HE system is attended by more than 2.2 million students,[3] 1.5 million of them being trained in universities, by almost 90 000 teachers, 57,000 of whom are HE faculty members. In short, this system is predominantly a public system. Up to the 2007 act, salaries were managed by the Ministry in charge of higher education. In 2002 for example, only 20% of the national budget dedicated to universities were managed by universities themselves. Thirty-nine percent of the budget allocated to universities is based on a formula derived from the

[2] These two issues do not sum up all the changes. We could also mention transformations in teaching conditions and organization such as the second growth of the French higher education that more than doubled student numbers from 1988 to 1995, or the professionalisation of the university and the diversification of curricula. But in this chapter, we will focus on changes that directly affected the public steering of French universities.

[3] They were 1,174,000 in 1980.

number of students, and the remaining 61% are allocated through pluri-annual contracts between the universities on the one hand and respectively the Ministry, national research organizations, and Regions on the other (Warta et al., 2003). The French system is furthermore characterized by two main divisions. The first one concerns the separation between the highly selective and renowned Grandes Ecoles training French elites, and the less prestigious sector of universities. A second division results from the creation of national research institutions after World War II, in charge of basic (CNRS) and applied (INSERM, INRA, etc.) research counterbalancing the low commitment of faculty members of French universities as institutions in fundamental research activities.

Descriptions of state–university relationships in France usually focus on centralization. Such a view is obviously incomplete. It neglects the crucial role of the academic profession that co-manages the French HE system with the national public authorities. It oversees the counterpart of this intertwined partnership between the state and the academic profession. For a century and a half, French universities remained weak and irrelevant interlocutors for the HE system as they could not emerge as "institutions". This university configuration (Musselin, 2004) experienced a rather deep transformation in the 1990s. It is therefore worth discussing this evolution and its impact on French universities and on their capacities to develop their own research policies. Yet it would be wrong to describe such changes as resulting from the diffusion and implementation of the NPM narrative on the French HE system. This development was rather a very French process, scarcely influenced by European or international trends.

2.1.1 A Profound Transformation with 4-Year Contracts

A brief historical recall of French HE will help in understanding what has happened during the past few decades. Until recently, the French HE system was mainly characterized by the absence of universities, which were suppressed during the French revolution. Before 1968, strong faculties led by powerful deans appeared as the only relevant levels of decision between the Ministry and rank and file academics. Universities were a weak administrative body, a territorial gathering of faculties under the control of a high civil servant called "*recteur*". In 1968, the Faure Act suppressed the old faculties and favoured the creation of multidisciplinary universities led by an elected president, always an academic. Current French universities are therefore not older than 35 years.

Due to the non-existence of universities, the French academic profession played a crucial role in the organization and development of the profession. While strengthening central administration, Napoleonic reforms promoted a national academic corporation organized by disciplines and led from Paris, mostly by Parisian academics. It created academia as a vertical, hierarchical, centralized profession whose representatives in Paris were able to develop contacts with each other, to influence and even to get positions at the Ministry. The reforms favoured the

development of co-management between public authorities and parts of the academic profession. Over almost 2 centuries, it impeded the emergence of universities as collective actors and relevant partners of the Ministry.

Even the Faure Act in 1968 and the rebirth of French universities it promoted were unable to meaningfully modify this situation. It did not impact the management of the academic profession. It left intact the role of the central bodies in charge of careers. It did not introduce any change within the Ministry. It confirmed the prevalence of the discipline-based logics in the central administration. The same holds true for the Savary Act that replaced the Faure Act in 1984. That act provided French universities with new status, bodies, missions, etc. but did not threaten the co-management practices and the dominance of the disciplines as major actors of the HE system.

As a consequence, universities (re)created by the Faure act were not able to develop as collective actors and to behave as intermediary bodies between national administration and academics. These new universities were poorly managed, better at making no decision than at setting priorities, not recognized as relevant partners by the disciplines, the Ministry or local actors.

In September 1988, 4 months after being appointed as Education Minister, Lionel Jospin announced a change in allocating university operating budgets (which do not include the salaries). A small proportion of university budget would now be allocated through negotiation between each university and the Ministry in the framework of 4-year contracts rather than according to fixed criteria (number of students, square meters, to name two). Among several, two circumstantial reasons have been decisive in introducing this new allocation technique. First, the newly appointed Rocard government announced that education would be its priority: it pushed Jospin to make announcements, but also to be creative, Mitterrand's program for the presidential elections of May 1988 did not contain any reform proposal for HE. Second, Jospin and his cabinet were urged to react as everybody was expecting a second wave of growth in French institutions and university presidents feared students and teaching staff unrest. The relatively good shape of public budget at the time allowed allocating more money to the education system using the contractual process as a policy tool.

At first glance this decision looked like an administrative and neutral technical change in procedures rather than a reform impacting universities as such. Universities would be asked to prepare a 4-year strategic plan and then to negotiate with the Ministry the allocation of a pluri-annual budget dedicated to the achievement of some of the objectives included in this plan. Five to ten percent of the operating budget (outside salaries) would be allocated on this contractual basis. The rest remained based on a student population-based formula and other operating criteria. While universities had almost no leeway on the formula-based budget covering nonflexible operative costs, the very small percentage resulting from negotiation appeared as opening exceptional margins of maneuver.

The Ministry, the university presidents, the media, nor unions foresaw the impact of this decision when announced at the Conference of University Presidents in September 1988. It was even described as the simple continuation of the

contractual policy introduced in 1983 on "university research"[4] budgets. Even Allègre (1993), the then special advisor of the Minister of Education Lionel Jospin, and one of the main political entrepreneurs of these contracts did not consider it as a radical change. External observers also barely identified this decision as an important one: the administrative circular that describes the contractual procedure is, for instance, not considered as a "relevant legislation" or a "policy document" in the Eurydice report (2000).

Three major reasons may explain this lack of attention. First, the Ministry did not label the new procedure as an innovation or a reform. Second, the introduction of contracts looked to central administration staff as an additional procedure that was limited in scope. Third, the word "contract" was not strongly ideologically loaded in France. It was acceptable from opposite points of view. For those longing for neo-liberal reforms, contracts could be seen as a managerial instrument. For those fighting against reforms, contracts could be understood as a weakening of the state fiat and as a way to promote negotiation, discussion, etc. Therefore the very notion of contract enjoyed a high political viability (Hall, 1989). It was seen as politically and ideologically neutral (as opposed to notions like privatisation or nationalization, for instance). As a result, the contractual procedure took advantage of favourable coincidences and raised no ideological conflicts, no interest groups reaction, and no partisan action. It was not necessary to convince, argue, or negotiate in order to implement it. No new "policy paradigm" (Jobert, 1992; Hall, 1993; Surel, 1995) was to be imposed in order to make it acceptable.

Yet this decision had major effects. First, it challenged the discipline-based assessment and procedures within the central administration by introducing institutional logics to the Ministry decision-making processes. In addition to its academic value, the quality assessment of a given project had to consider its relevance for and its coherence with the collective priorities of a given university. In parallel, the Ministry reoriented its relationships towards the university presidents and restricted access to the representatives of the disciplines. From this point of view, the creation of a small share of contractual grants in university budgets strongly departed from the "university research" contractual policy that had reinforced the power of the disciplines and ignored university-level organization.[5]

Twenty years after the 1968 Act which created them, central administration recognized the existence of universities thanks to a new tool that did not fit any pre-existing rhetoric or theory to be implemented. The central bureau, the DPDU (Direction de la programmation et du développement universitaire), which was in

[4] As mentioned in the introduction, national research organizations like CNRS were created with their own budget and staff a few years before and after WWII in order to compensate for the alleged weakness of research led in universities. When located in universities, the research labs which were not affiliated to institutions such as the CNRS, belonged to the so-called "university research". Since 1983, some of them received some resources from the Ministry on a 4-year contractual basis.

[5] According to the 1983 contractual procedure, research labs were also asked to prepare 4-year proposals but the Ministry then directly allocated budgets to each research unit, leaving no leeway to the university level.

charge of this contractual policy, progressively created, improved, consolidated and diffused the norms attached to the implementation of this new procedure. Its members developed a whole "doctrine," arguing that the contractual policy deterred from the traditional practices of the Ministry. They also defined operating norms. For instance they stated that each university should prepare its negotiation with the Ministry by analysing its situation and collectively building a strategic plan setting its orientations and priorities for the 4 coming years. They also insisted that strategic planning required not just adding projects fostered by each department but building a collective proposition. They developed procedures to reach such a shared proposal. They emphasized the critical role to be played in management by the university presidential teams.

A second effect deals with the transformation of the state–universities' relationships. Presidents became relevant interlocutors for central administration (as documented by the increasing influence of the CPU, the conference of university presidents). Developing negotiation changed the nature of their relationships from hierarchical to more symmetrical. It also changed the content of contracts by forcing university transparency and Ministry openness. Rather than a withdrawal of the state, contracts were starting a radical change in state intervention, based on more trust, more transparency but also more control (Berrivin and Musselin, 1996).

A third effect will be discussed more extensively later. It deals with the strengthening of university governments, because contracts were used as an opportunity to foster collective university identity by universities' managers themselves (which thus became allies of the DPDU).

2.1.2 A (Re)Discovery of the Role of Universities in Local Development

At about the same period, local public actors had undergone a rather radical change. While HE was not concerned by the devolution of power to local authorities organized in 1982 by the decentralization law, regions found ways to clearly express interest in HEIs by the mid 1980s (Filâtre 1993), based on the long tradition of intense interactions between cities and universities (Laferté, 2002; Filâtre, 1993), which had faded away after World War II as HE and research became national concerns and the state monopolized public funding.

Local public actors (regions, departments or cities) were concerned by research as well as teaching. On the one hand, each level of local government would become a partner of research organizations as well as of universities, to various extents according to their interest for such an investment. Regions started being involved in the 1980s, thanks to the newly created Region–State 5 Year Contracts (CPER, for Contrat Plan Etat Région). They gained importance in the process of funding, at first with a rather opportunistic approach. It took them a long time to develop structured research or university policies and define their niches among various levels of

government. Some wealthy regions, such as Rhône-Alpes or Midi-Pyrénées, started organizing quite early. Ile de France, the French capital region comprising over 45% of research and education national resources, did not get involved in research and HE before the beginning of the 1990s, and the region did not start building a policy until the mid 2000s, creating new funding schemes and choosing to dedicate 5% of the regional budget to research by 2009.

On the other hand, HE became an issue for local authorities confronting industrial crisis and high unemployment rates. Many middle-size towns tried to develop HE programmes in order to attract firms and inhabitants by creating new opportunities. As a result, new branches of nearby existing big-city universities were created (sometimes without the agreement of the Ministry), offering undergraduate programmes in buildings which operating budgets are funded by the hosting municipality.

The commitment of local authorities to HE and research has been expanded to patrimonial issues. By the beginning of the 1990s, the Ministry launched the "University 2000" policy. It clearly recognized the appetite of the French local authorities (in particular the Regions) by associating them for the first time with the planning and funding of university building policies in each region. The so-called "U3M" (*Université du troisième millénaire*) repeated the same experience by the end of the1990s. In the meantime, the pluri-annual contracts signed between the regions and the state included work-packages on HE and research, further institutionalising the development of regional policies on these two issues. As a result, the HE and research infrastructure policies and funding are now shared between ministries (still bearing a large part of it) and multiple regional, departmental and municipal partners, and very often EU through the ERDF (European Regional Development Fund).

It is important to notice that this renewal of the relationships between universities and public local actors occurred at the institutional level, and thus joined the interpersonal relationships faculty members already had with local actors. University presidents interact as representatives of their institution with the elected executives of different public levels and develop partnerships. This became even truer after the 4-year contracts had strengthened the collective capacity of universities. As shown by recent works (Malifet, 2004; Aust, 2004), local authorities have become non-escapable partners because of their role as "funding bodies". They often have weak bargaining power over the content of the funded programmes,[6] but they have contributed to a shift from a bilateral, hierarchical and central steering of HE and research to a more polycentric and horizontal kind of steering. In this new configuration, universities also appear as relevant actors, interlocutors and partners.

[6] Comparing decision-making processes on university building matters in the 1960s and nowadays, Aust (2004) showed that the university presidents were able to develop collective strategies and become allied of the *recteur d'académie* to impose their views to the regional, departmental and city representatives.

2.1.3 The Institutional Empowerment of French Universities

The transformation of French universities into more collective actors is the third major change that occurred in the French HE system. This growing governmental capacity of French universities resulted mainly from the contractual policy. According to the study[7] by Mignot-Gérard and Musselin (1999 and 2000), four main changes occurred at this institutional level.

First, university presidents became more proactive. They previously (Friedberg and Musselin, 1989) acted as mediators of internal conflicts and representatives of university interests outside the university, but not as managers or leaders. This is no longer the case for most. They now define themselves as managers running projects, defining orientations and priorities, interfering and making decisions. They are not only committed and active, they are also said to be influential or very influential on major decisions made within the university.[8] More generally they stress the professionalisation of their position: it has become a full time job[9] requiring increased competencies (technical, relational, and managerial) and team work with vice-presidents and very often the leading administrators of the university. A university president can no more behave as an "enlightened amateur".

Second, deliberative bodies[10] became more decisive. In the 1980s, they were described as "rubber stamp chambers" and their main style of decision-making was "not to make decision" (Friedberg and Musselin, 1989). Things have deeply changed. About 70% of the non-elected members of deliberative bodies surveyed in the above-mentioned study agree that the three university councils work well. In particular, the university board is considered by 78% of the respondents as "a place where decisions are made" and as "an important body" in 82% of the cases.

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[7] Two large field work studies on university government were organized. In 1998, a qualitative study based on 250 interviews was led in four universities (Mignot-Gérard and Musselin, 1999). Drawing on the results of this first study, a questionnaire was built and sent to 37 universities in 1999. About 1,660 answers were received (on 5,000 questionnaires sent), 1,100 from academics and 560 from members of the administrative staff (Mignot-Gérard and Musselin, 2000, Mignot-Gérard 2006).

[8] Twenty-four of the presidents (65%) of the 37 universities questioned in the above mentioned quantitative study were said by the respondents to be influential or very influential on major decisions made within the university.

[9] Recently, a president who just left his office after a 5 year period (1996–2001), told us that he worked full-time as president while his predecessor (1991–1996) spent 3½ days each week, and the predecessor of the latter (1986–1991) 1 to 2 days a week.

[10] Since 1984, three university deliberative bodies are to be found within French universities. Two of them, the Board of Studies (*Conseil des études et de la vie universitaire* – CEVU) and the Academic Council (*Conseil scientifique* – CS) deliberate on issues that before submission to the third body, the Governing Board (*Conseil d'administration* – CA). The latter is moreover responsible for every issue dealing with resources. These bodies are made of elected professors, assistant professors (*maîtres de conférences*), members of the administrative staff, students and, on the governing board, external personalities. The 2007 act maintains the three bodies but reduces the size and modifies the composition and the election rules for the *CA*.

The qualitative part of this study confirms that current university bodies make decisions they did not make previously (such as ranking the list of teaching positions they ask the Ministry to create).

Third, 4-year contracts promoted better-shared and more collective identities, norms and values within each university. As in other countries (Altbach, 1996), French academics increasingly have a dual commitment, one to their discipline and one to their institution. The elaboration of strategic plans favoured the development of the latter (Chevaillier, 1998), because it enhanced collective debates within each institution, overcoming traditional faculty supremacy in French HE (Musselin, 2004). As a result, contracts eased collective decision-making. In the Mignot-Gérard and Musselin's study mentioned above, 66% of the respondents declared that contracts work as a benchmark for decisions and allocation of additional resources.

Fourth, and as a consequence of the two previous changes, universities now get involved in new issues and develop strategies that were not on their previous agenda. Considerable variations can be observed from one university to another, but most developed "rationalization strategies", i.e. implementation of managerial software,[11] improvement of expenditures follow-up, construction of indicators, and respect of national budgeting rules.[12] They also tried to improve the management of curricula (Simmonet, 1999), a domain revitalized by the implementation of the Bologna process, and in fewer cases to develop teaching quality assessment. Furthermore, they often became more involved in developing and formalising their own research policies. Efforts were led to improve the information on research activities and especially on research contracts. Many institutions tried to centralize their research contracts management. After the 1999 Innovation Act, some created more market oriented transfer technology offices (called SAIC) in order to stimulate patenting and contractual partnerships, for example. As will be stressed in the second part of this chapter, universities demand to be recognized as active and responsible actors in the definition of their research strategies, and are increasingly critical about national research institutions imposing their choices and decisions on universities.

Patterns of decision-making within French universities have thus clearly evolved. They reflect the emergence of universities as collective actors and their increasing institutional autonomy (Berdahl, 1990). It cannot be denied that this autonomy is criticized, that strategic plans are easier to write than to implement, that more decisions are made but that they generally are more incremental than radical or that presidential teams are stronger but often lack support from the deans (Mignot-Gérard and Musselin, 1999, 2000). A recent evaluation of the contractual policy (Rapport Frémont, 2004) also stresses some limits of the contractual policy[13]

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[11] In particular those developed by the GIGUE (*Groupement pour l'Informatisation de la Gestion des Universités et Etablissements*) which became the *Agence de Modernisation des Universités et des Etablissements* in 1997: Nabuco for finance and budget, Apogée for the management of the students (inscriptions, diplomas, statistics), Harpège for human resources management.

[12] Academics sometimes try to escape this constraint and develop alternative solutions for the management of their research contracts, solutions about which the university is unaware or unable to avoid.

[13] Not a minor limit being that the outcomes of the contracts outcomes are not assessed.

and among them the fact that contractual procedures dealing with the university research strategy remain strongly isolated from the rest of the contract.[14]

2.1.4 Trends and Recent Evolutions

As will be argued in the second part of this chapter, the emergence of more autonomous HEIs brought them to position in research and consequently increase their role in the definition and implementation of research policies.

Even if incremental, the mutation of French universities into organizations (Brunsson and Sahlin-Anderson, 2000; Musselin, 2006a) resulted from continuity of recent HE policies. Despite numerous governmental and ministerial changes, their main orientations remained the same.[15] The contractual policy initiated by Allègre and Jospin experienced more or less favourable times: from a period of disenchantment in 1993 due to restrictions in budget to a renewal in 1997 when Allègre became Minister of Education followed by a progressive routinisation of the whole process after the exciting first years. But the contractual part of the budgets steadily increased and no actors tried to revert to the previous system. The Ministry even pushed forward pluri-annual university contracts when the LOLF[16] (a new act reforming the French public budget mechanism toward project budgeting) was introduced in 2006. Allègre argued that universities were already operating in the spirit of the LOLF and were ready to negotiate the indicators to be used in the forthcoming years (Younes, 2006).

More broadly, the contractual policy can be seen as a first move by the French central administration in charge of HE in the direction of a more "evaluative state" (Neave, 1988; Neave and Van Vught, 1991), relying on procedural rather than substantial interventions. Even if command and control types of decision-making remain, more and more reforms and policies are developed according to the "contractual policy model": not acts but a selected number of decrees or circulars; not detailed rules but some broad principles designing the frame within which higher institutions may define their own way; no constraining national schemes to conform to, and so on. From this point of view, the implementation of the bachelor/master

[14] The two procedures were managed separately between 1989 (introduction of 4-year contracts based on university strategic plans) and 1995. The Ministry decided then that 4-year research contracts and institution-based 4-year contracts should be managed at the same moment and jointly. But in fact the directions in charge of research in Paris lead the contractualisation of the research part, with a rather centralized style of steering, while the directions in charge of higher education lead the contractualisation of the more institutional part and promote more the autonomy of each university.

[15] Between 1988 and June 2007, nine different ministers have been in charge of higher education, four from the socialist party and five from the right.

[16] Loi Organique relative aux Lois de Finance. According to this new law, public budgets have to be linked to precise objectives the attainment of which can be assessed with established indicators. The next budget should depend on the achievement of the past year objectives and on the forthcoming new ones.

scheme following the Bologna process, strongly resembles contractual policy: it emphasized innovation within, and differentiation among, HEIs, though at the same time it relied on procedural normalization (Musselin, 2006b).

Slowly but steadily, more autonomy is given to French universities. The new policy enacted in August 2007 to increase "the autonomy and accountability of universities" enlarged the scope of intervention of university presidents by rebuilding their institutional relationship to their scientific and executive boards by transferring to them authority over their technical staff, giving them new responsibilities on recruitment and management of technical and academic staff, as well as decision power on real estate. Altogether, the new policy increases the power resources of individual universities over their internal organization and strategy. Added to Global Funding by Objectives (LOLF) and the contractual policy, it can be expected that this increase in responsibilities will not lead to the withdrawal of the state but rather to the development of new forms of accountability and regulation. It is certainly too early to assess how French universities will reposition as a result of these institutional changes, also how research organizations will themselves evolve in a near future. Nevertheless, one may expect increased diversification among HEIs. At any rate, diversification is highly encouraged by initiatives such as "2008 campus policy", which, as the German *Excellenz Initiative*, backed the ambition to identify ten "research universities" or universities consortia by allocating them 3.5 billion euros on a competitive basis.

It is sufficient here to outline that within the last 15 years, French universities have posed themselves as relevant actors in the French HE system, which they had not been at least since the French revolution. Over the same period, they also succeeded becoming the main places where research activities are located, as will be argued in the next pages.

2.2 An Increasingly Blurred Divide between Research and Higher Education Institutions

The emergence of French universities as organizations can also be stressed by observing changes in the divide between research and HEIs over the last decades. As mentioned in the first section, contractual policy first separated university contracts from research contracts. Moreover, for the latter, the link between the "university research" and the research funded by the national research institutions was (and still is) rather problematic. This largely reflects the legacy[17] of the divide produced after World War II by the multiplication of national basic or applied research institutions (CNRS, INSERM, INRA, INRIA) aiming at counterbalancing the weakness of universities.[18]

[17] We use the phrase 'higher education institutions' in this section and the next one: while contractual policy only applies to universities, the divide under study here holds true both in universities and *Grandes écoles*, those highly selective public or private institutions.

[18] As well as the orientation of the *Grandes écoles* towards the exclusive training of high civil servants, engineers or businesspersons.

The 2004 crisis in the public research sector favoured intensive brainstorming among a large variety of actors of the HE and research system in France (university presidents, academies of science and technology, research organizations like CNRS, Nobel prize winners, members of the Parliament, academics, Ministry of administration, etc.). Amazingly, most published reports share by and large the same vision of which changes should help the urgent modernization need of French research organization; yet, most ignored the deep changes already experienced by French HE and research. They did not perceive the blurring divide between research and HEI.

This section deals with the recent history of the relationships between research and training[19] in HEIs, and principally universities. It shows that disjoint incremental reforms contributed integrating research work within HEIs over the last decades. New segmentations develop in the HEIs and research organizations that overcome institutional barriers. New organizational agendas favour renewed visions of science, research and teaching.

2.2.1 The French Divide between Research and Universities

Until the 1980s, French public research was basically the turf of national research organizations, following the post World War II decision to create a specific institution (the CNRS[20]) dedicated to basic research apart from universities. This first creation was followed by others, each with applied research foci: medical research for the INSERM, agronomic research for the INRA, research on space for the CNES, etc. Although some quite relevant research activity remained inside universities, this division of labour between HEI and research organizations did not help in overcoming the structural imbalance between both (Chart 2.1).

The partitioning of research and teaching institutions was redoubled by a divide between employment statuses in each. Professors were and remained civil servants. Researchers were state employees on permanent contracts. This labour market organization was supposed to allow for career mobility, and it did to a certain extent. In disciplines well staffed in universities, the CNRS was often a first step towards more prestigious academic careers. In other fields, it could be a path to industrial careers. In 1982, after the socialist party came into office, full-time

[19] Training, research and innovation are strongly linked in knowledge-based societies where economic performance depends upon innovation at the borderline of new technologies. See, for instance, in the French case, Aghion and Cohen (2004).

[20] The CNRS, with 26,000 salaried members, including 12,000 researchers, is by far the biggest of the French research organizations. It is an omniscience organization dedicated to basic research. The largest other research organizations are INRA (8000) and INSERM (5000), both dedicated to applied research. A large number of smaller organizations also specialize on specific fields of research, like development (IRD), transportation (INRETS), etc.

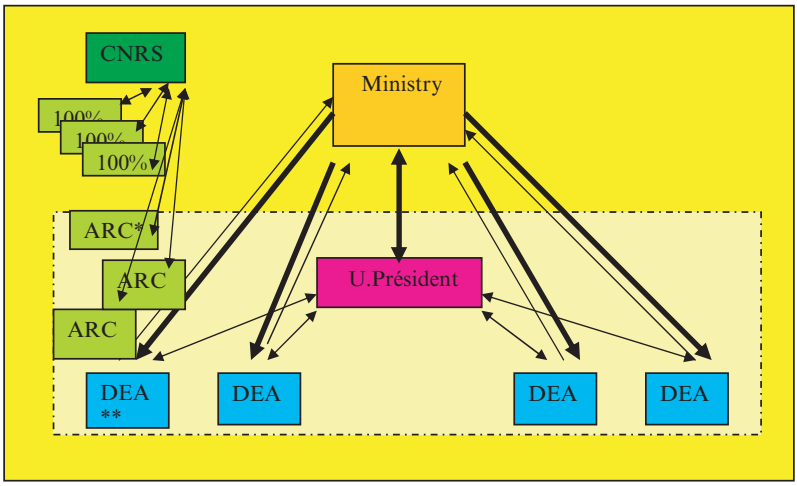

Chart 2.1 The HE landscape at the beginning of the 1980s
*Associate research centre.
**Diplôme d'études approfondies (advanced studies degree, 17th year of education and last year in the curriculum before entering doctoral studies).

researchers became civil servants. As curious as it may seem, reformers argued that this would facilitate reciprocal mobility. Facts showed this would not occur. Actually, the growth of the students' body and its impact on teaching and administrative loads in widely opened and impoverished universities discouraged mobility of researchers and developed relative deprivation among academics. These perceptions were so deeply rooted that, when the Minister of Education tried in 1998 to enhance the mobility rate from research organizations to universities by offering very good career deals to researchers, he could not find more than 30 interested persons in the whole country!

2.2.2 Joint Ventures between Research Organizations and Higher Education Institutions

The divide between universities and research organizations has been perceived as problematic well before the 1990s. In the 1960s, CNRS developed what was to become a large number of "associate research centres" in universities. They were almost a thousand at the beginning of the 1990s, almost half of them in social sciences and humanities. These associate research centres where accredited by the CNRS in consideration of their quality assessment rather than of their contribution to the specific strategy of their hosting university. The research organization allocated them some resources that decreased when their number increased. Altogether,

associate research centres were loosely coupled both to universities and to the CNRS (or to other national research institutions).

One first step to build a tighter link between research and HEIs was taken from the beginning of the 1990s onwards by the CNRS. This huge organization that counted around 12,000 researchers in all basic fields expected a low rate of labour force growth, most resources being absorbed by university growth. Over the last 20 years, research organizations have recruited 1 person when universities have hired 10. Due to the growth of the students' population over the years 1965–1995, the number of professors was booming. The number of equivalent full-time researchers in the 1970s roughly equated those in research organizations and universities (Laredo, 2002). There are today four times more professors conducting research (equivalent full-time[21]) than researchers, so that France altogether counts 50,000 HE teachers against 20,000 researchers. At the same time, CNRS experienced an increasing burden of human resources fixed costs on research flexibility.

By expanding UMR (Unités Mixtes de Recherche), joint ventures with HEIs, the Ministry aimed at taking advantage of massive recruitments of teachers involved in research in universities that were becoming more strategic. This policy generated two joint effects. The dissemination of research centres in universities and to a lesser extent in *Grandes écoles* multiplied almost mechanically human resources, infrastructures, and ordinary budgets by adding various sources of funding. Joint ventures with universities helped to distribute public research centres all over the country, until then largely concentrated in the Parisian area. It also favoured funding diversification by rooting research in political regions and local settings.

Currently, about 60% of public sector researchers are established outside the Parisian region, while 80% of CNRS units are joint ventures with universities or *Grandes écoles*.[22] The net contribution of universities to joint ventures with CNRS is now bigger than the share funded by CNRS. Being part of a research centre, preferably joint with the CNRS (or other national research institutions), has become an academic norm among professors in most disciplines.

As shown in Table 2.1, both UPR (*Unités Propres de Recherche*), research groups that are 100% CNRS and associate research centres decreased in number to the benefit of joint ventures. This growth of joint ventures expressed the changing balance of forces between universities and CNRS. But the overall stability of the total units number shows that both remained unable to select common units according to their relevance in backing their institutional policies. On one side, they often could not preclude local often politically backed resistance against disassociations that was felt by academics and universities as a loss of status. On the other side, universities met intrinsic difficulties matching CNRS national and sectored strategies with universities' localized emerging policies.

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[21] Considering time dedicated to research tasks, a professor is defined as half a researcher in equivalent full time.

[22] Until recently, CNRS was the only national research institution to set common research units with universities and *grandes écoles*. Similar initiatives were developed later in other research organizations, such as INSERM and INRA.

Table 2.1 Evolution of CNRS research centres since 1992 (Labintel, UNIPS-CNRS)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
100% research centres	237	222	204	192	198	190	183	161	136	109	108
Joint ventures	100	117	134	273	385	522	521	624	743	936	1,060
Associate research centres	960	941	928	813	678	529	507	397	291	108	43
Total	1,297	1,280	1,266	1,278	1,261	1,241	1,211	1,182	1,170	1,153	1,211

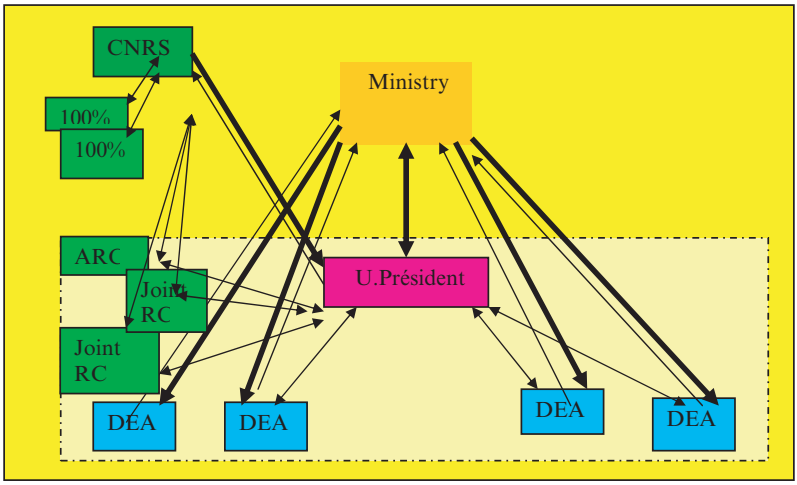

Chart 2.2 The HE landscape after the creation of joint ventures, pluri-annual contracts

The shift of power in favour of universities resulted in their growing call for more involvement in the CNRS assessment and accreditation process of joint ventures. They increasingly refused to be held responsible for the consequences of decisions made without them, insisting to be recognized as relevant actors in the definition of the new research landscape (Chart 2.2).

Such developments help understand further CNRS efforts toward concentration on strategic research in the framework of its own programs. Before 2006, two ways have been explored. The first one focuses on merging units to decrease their overall number. The second one fosters the reconstitution of associate research centres by outplacement of strategically irrelevant units in universities with a simple quality certification, disappearance of joint ventures and recreation of a small number of 100% CNRS centres in strategic areas. Social sciences and humanities are major targets for such actions, since they account for a large number of small-size units, more than a fifth of the overall CNRS labour force, and provide only a marginal contribution to scientific programs currently developed by the CNRS (Rapport Larrouturou and Mégie, 2004).

2.2.3 Pluri-Annual Research Contracts

The increasing interest by universities in research activities can also be observed in the development of 4-year research contracts.

Contractual research policy begun in 1983, that is, earlier than the contractual university policy presented in the first point of this chapter. Its impact on university management was limited because it remained rather centralized and discipline-based. While their contribution to institutional autonomy[23] remained weak, presidents' role on university research strategies were enhanced by the creation of a new tool: presidents were encouraged to withdraw 15% of all research centres budget allocated by 4-year research contracts and to reallocate them to their own research priorities. A few universities went further. They negotiated with the Ministry the right to dedicate part of their vacant academic positions to support their research policy. It was an important and highly controversial innovation. Until then, allocation decisions about academic positions had been dealt by the Ministry using a student population-based formula.

Furthermore, universities pushed for a tripartite negotiation on research in 4-year contracts between themselves, the Ministry and national research organizations, as a way to secure coherence among research strategic plans developed by each institution. As a result the three separate contracts existing by the beginning of the 1990s[24] were progressively linked and were finally merged by the end of the 1990s. Research had become a relevant component of university identities, requiring global and coherent strategies, involving a better fit between the temporalities of research and training.[25]

The promotion of universities' strategies irresistibly push them to differentiate according to the variety of their contextual resources and objectives. Data show increasing gaps according to their share of research. Thus, by 2002, less than 30% of the 85 French universities housed half of the "professors researchers" and researchers of all research units labelled by CNRS, while 73 HEIs (among which 18 universities) comprise less than 10% of the research forces.

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[23] With a few exceptions. In the late 1990s, the Ministry for research made some attempts to develop evaluation procedures that were taken into account in the negotiation. This attempt was limited to some research-intensive universities, which were considered able governing themselves and setting priorities. In such limited cases, a small part of the funds were globalized and directly attributed to the university presidential teams.

[24] The 4-year contract based on the institutional strategic plan, a research contract with the Ministry(ies) of Education and Research and a third one with the national public research institutions like CNRS.

[25] This is truer on paper than in the day-to-day practices. The merger of the three contracts is more symbolic than effective. The procedures and central directions dealing with the institutional contracts remain quite separated from those for the two others. The contracts between the universities and the national research institutions remain quite unbalanced und universities do not feel like being in a situation enabling them to really negotiate.

2.2.4 The 2006 "Pact on Research" and Research Act

Two years after unrest and intensive debate on the French research system started, the "Pact on research" offers new institutional frames that confirm and prolong former evolutions. It bases a diagnosis of decreasing performance in citations and patenting on the obsolescence of the very complex French research institutional structures. Research human resources in micro-level research centers originate from numerous centralized institutions, of which variable perimeter, operational and assessment rules of diversity discourage strategic efforts and wastes human energy and public money. This situation results from institutional crystallization of former missions that have been incrementally redistributed. It has become highly inappropriate to the development of both strategic research and human capital creation in HE that are both major trigger mechanisms for economic growth in knowledge-based societies.

The vision of the desirable future is based on a somewhat idealized vision of other national research and innovation systems (Paradeise and Thoenig, 2005). In the best performing ones, efficiency is rooted into university organizations that form the single envelops for teaching and research activities. Research teams compete for money by answering calls that originate in the national, local, and supranational public sector, usually originating from scientific councils, as well as in industry. Research structures are flexible since they can legally adapt their human resources according to the competitive grants they get.. Management of structures, human resources and money is simplified by the substitution of item budgeting, line accounting and ex ante control by global budgeting, cost accounting and ex post control. Quality of research and training projects and human resources is assessed by single independent evaluation and accreditation agencies. Universities' identities and budgetary structure and origin vary according to the missions they fulfill. Because they are comprehensive organizations, they can fit their own strategy to their contextual resources and constraints.

The Pact takes inspiration in these observations to offer new organizational and institutional frames. In order to create new dynamics without generating paralyzing social unrest, it chooses to superimpose its new offers to the old structures, to develop them on a bottom-up optional basis. It counts on the dynamics of the newly created structures to effect a gradual global rearrangement.

Firstly, it creates three new agencies. Two of them (*Agence nationale de la recherche*– ANR and *Agence de l'innovation industrielle* – AII[26]) concentrate public funding of basic and applied research without discriminating among institutional status of applicants. A third one (AERES – *Agence d'évaluation de la recherche et de l'enseignement supérieur*) is meant to concentrate assessment and evaluation of public research and teaching institutions and teams, whatever their status.

[26] The AII has been recently merged with another national public agency, OSEO.

Secondly, it offers three new optional networking schemes with the ambition to join and sometimes merge research and/or training efforts of different institutions under shared strategies of economies of scale and cross fertilization. Each scheme may be of interest for universities. The first one invites territorial total or partial clustering in teaching and research in PRES (*Pôles de recherche et d'enseignement supérieur*) by offering a new facilitating legal status and some incentives in terms of human and financial resources. Universities, *grandes ecoles* and research organizations are all eligible for this scheme and over ten of them have already been created. The second scheme invites localized and thematic networking on cutting edge research into RTRAs (*Réseaux thématiques de recherche avancée*). They benefit from a high level of funding (state subsidies amounting to 15 million euros on average for the first round of 13 RTRAs created in 2007, plus additional funds provided by founders, buildings, equipments and public salaries of human resources involved), with the ambition to reposition France at the best level in world competition. The last one, "Pôles de compétitivité," fosters territorial clustering of industrial research with applied public research activities developed in universities and research organizations, with financial incentives that vary according to the size and ambition of the clusters.

Thirdly, the Pact offers legal frames and rules of management facilitating operation of such complex new organizations. In particular, PRES and RTRA can create foundations allowing for self-government and rule under private law. A foundation can build its own capital, possess real estate and recruit employees. This opens the way to further transgressions of civil servants statuses. PRES and RTRA can now offer private contracts. They can, for instance, create chairs for renowned researchers offering high salaries and a good work environment. They can offer doctoral and postdoctoral positions on their own programs. They can decide upon their own organization of work, allocating research and teaching according to their own needs and constraints, and to preferences of their scholars.

While it does not reform HE and research organizations statuses, the 2006 Pact deepens and accelerates the blurring of barriers between them. It develops strong financial and legal incentives for research excellence, for clustering and for cross-fertilizing institutions. It does not force any of them to behave according to their standards, but it sends a strong message of what a new dynamic should be. Leaving organization-building to bottom-line actors like university presidents, heads of research organizations, regions, local industry, it reinforces and extends the organizational trend that has been localizing in universities for 3 decades. Doing so, it also gives a hard time to research organizations. It largely deprives them of financial resources by the development of the research council (ANR), and it makes them lose their monopoly on evaluation and accreditation in favor of the evaluation agency (AERES). Finally, the massive development of cluster policies of various kinds, largely territorially-based, makes it difficult for these nationally-based institutions to keep on developing autonomous strategies and impose them to HE actors or local stakeholders.

2.3 The Tracer Issues

Until now, we have looked at the HE system as a whole and tried to identify the changes it experienced. In this section, we put emphasis on the two tracers (doctoral schools and funding of research centres) each chapter of this book focuses on, as showcases for the impact of changes at the system level on the micro-level, looking first at funding mechanisms at the level of research units, and second, at the emergence of doctoral schools.

2.3.1 Funding Mechanisms in Research Units

The fact that research institutions' research centres turned into joint ventures with universities, and thus receive funding from the national research institutions and from universities, did not increase their resources. As a matter of fact, this turn occurred at a time when the overall budget of national research institutions decreased. The "regular" public funding (allocated through the 4-year contracts) is more and more strictly dedicated to fixed costs and is no longer sufficient to cover research programmes. Diversification of funding sources has also become a leitmotif from the central national authorities, while the Ministry and the national research institutions (CNRS, INSERM, INRA) progressively abandoned their "big programmes" policy of the 1990s. As a result, contractual money has increased. More and more, resources must be secured for specific projects through a call for proposals launched by regions, national ministries or the EU, or by firms or foundations. This is reflected in the composition of the budgets of the labs as well as in their co-publications (Grossetti and Milard, 2003). Yet, at the aggregate level, diversification in resources does not mean a significant increase in private funding, even though large variations may be found from one research lab to another. Resources remain mostly public but are provided by a wider variety of public bodies (IGF-IGAENR, 2007). Time and effort devoted to get access to resources seem to have considerably grown. Moreover, researchers increasingly perceive that mixing different sources of funding is required to build ambitious projects. The number of actors involved in the funding of research thus has considerably increased. But the funding instruments also evolved as "big programmes" vanished, and they share two characteristics. First, they foster collaborative research among research groups and also with firms. For instance, at the end of the 1990s, networks for research and technological innovation were launched and required the cooperation of a research lab, a firm and a SME. Second, these instruments favour co-funding: it is either required to show there exists another source of funding to apply for a supplementary one, or they work as "sesame", a first grant opening the doors to other resources. Researchers often complain about the increase in administrative load resulting from such processes.

In joint venture units, the transformation of the funding mechanisms led to contradictory consequences. On the one hand, it increased their autonomy by diversifying

sources. At the same time, it increased their dependence on the universities by imposing their mediation on certain topics that used to be directly dealt with by the national research institutions. As long as both institutions remained distant from each other, joint venture research centres could easily play a double game depending on resource offers of each institution. Double games became more difficult as institutions strengthened their contractual links. Universities' steering and control on research units increased as they developed their own global strategies including research. First, they gathered more information about their research labs (by gaining better access to evaluation reports and by building central monitoring on their contractual fundings). Second, research-intensive universities took advantage of new ministerial or regional sources of funding to select some priority themes and effect their own research policy, thus acting as "intermediary actors" (Barrier, 2006).

The diversification of resources and the stronger integration into universities' policies strongly impact research agendas by profoundly changing the nature of academic work. Researchers must develop abilities in building bridges between different sources of funding, cutting research programmes into pieces that may be funded by different partners, and be part of many networks in order to be informed about all possible opportunities (Barrier and Bovy, 2007).

2.3.2 Doctoral Schools

In the mid 1990s, the Ministry(ies) of Education and Research encouraged the creation of "doctoral schools". At first, it was to be done on a voluntary basis, but around 2000 it became mandatory. Taking advantage of supposed pressure from the EU, the Bologna process helped stabilize this new organizational template.[27] From the very beginning, the implementation of the Bologna process in France was not limited to the bachelor/master scheme but included doctoral training as well. That is why it has been called the "LMD reform" (Licence/master/doctorat reform).

Doctoral schools were defined as the locus of doctoral studies. They were based either on a given discipline, generally across universities, or on a multidisciplinary gathering within a given university. Ministry decision-makers were divided on that point. Considering the contribution of the doctoral schools to universities identities, some believed that they should be located in single institutional settings. Others were reluctant to confront and weaken long established academic networks crossing universities boundaries. Therefore, two different templates came to coexistence, as show in Charts 2.3 and 2.4.

Each doctoral school had to win accreditation in the framework of the pluriannual contracts embedding (joint) research centres and diplomas as components of university strategies. In this manner, they contributed to focusing universities'

[27] At the beginning of academic year 2001, there were 317 doctoral schools in France, disseminated among the 85 French universities, plus 35 other higher education institutions. See Ghys, G. and Louis, F. (2003).

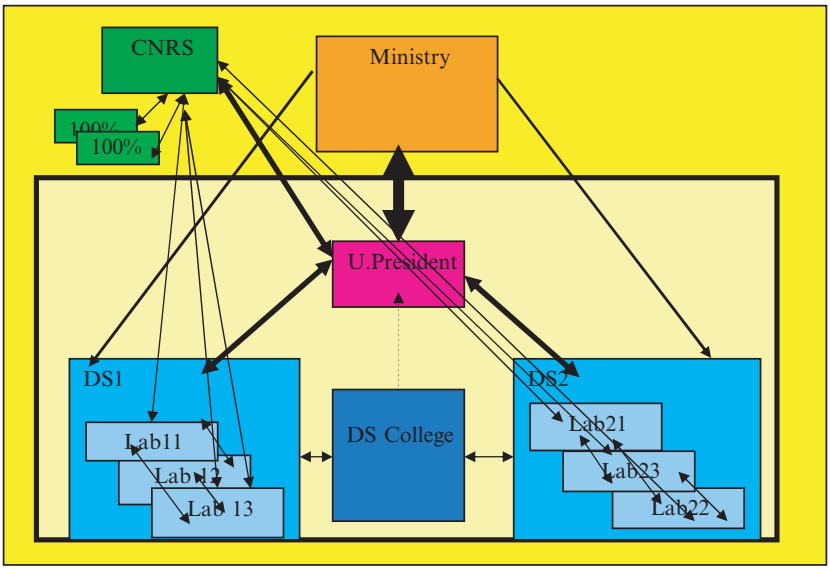

Chart 2.3 The HE landscape after the creation of doctoral schools (type 1)

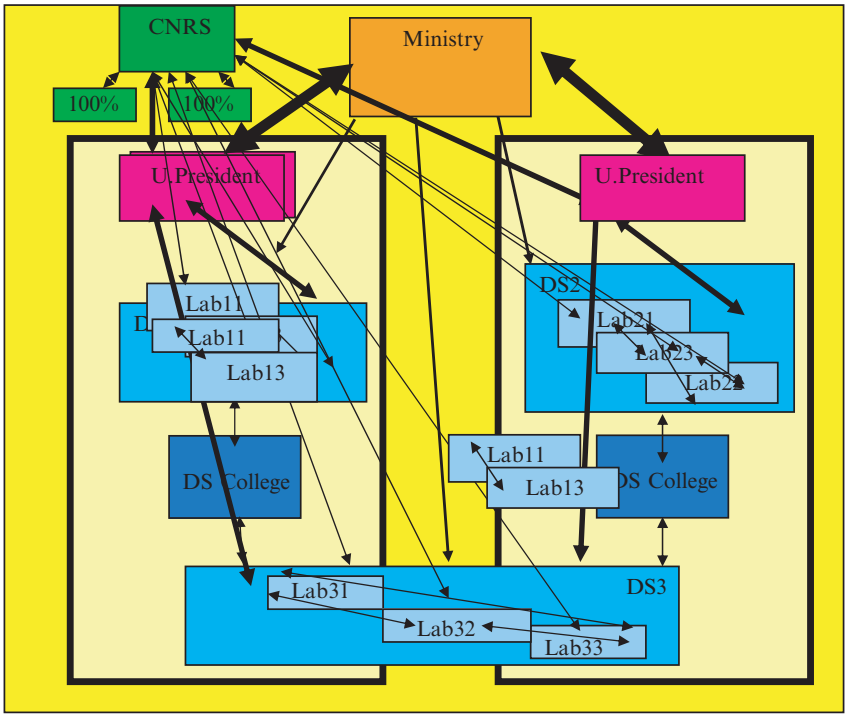

Chart 2.4 The HE landscape after the creation of doctoral schools (type 2)

identities around research and to increasing cooperation on research between universities. They were allocated specific resources in this framework (human resources, teaching budgets, and bursaries). They had to take care of common needs of doctoral students, such as learning foreign languages or computer software, getting information on available careers, helping students to prepare their vitae and give presentations, or building interdisciplinary programmes in given fields. Therefore, they had to generate rules as common allocation routines of scarce resources among actors that might be heterogeneous according to the university or the discipline they belonged. In the former state of organization, each academic in charge of a pre-doctoral degree (DEA) was allocated resources from the Ministry, with no real consideration of its links with research centres. They were dependant neither upon their colleagues nor upon their president. By regrouping research centres' doctoral schools, the Ministry pushed for developing common interests, fostered negotiation and compromise on common purposes and thereby promoted new collective identities within research based universities. Doctoral schools were expected to behave as meso-organizations within the university. Altogether, they enhance new university hierarchies, new partitions of professional groups between teaching and research and new modes of organization of university labour.

Recent developments lead to more specialization of universities in terms of the disciplines in which they are allowed to deliver doctoral degrees. Until recently, in theory, any professor was eligible to deliver a doctorate in any discipline and any university.[28] With the creation of doctoral schools, a first step was taken: professors or researchers had to settled for tutoring doctoral students if established in research centres belonging to a doctoral school. A second step was taken in 2007, when a new decree stated that doctorates in a given discipline could only be tutored by professors of the discipline (of course, it was already rather common although non-formalized) and in doctoral schools accredited in the discipline. This new rule established more differentiation across universities according to disciplines.

In terms of differentiation between universities, such a reform upgrades a template where the locus of research excellence would be placed in strong research-based universities and take advantage of other academics in the same geographic poles, without forsaking any one. Such developments might allow skipping the step of institutionalisation of research universities, with a double benefit. It would avoid formalizing hierarchies between universities with the danger of confronting the national drift towards equality, and it would avoid stressing an institutional model that might soon become obsolete.

This new template contributes to bringing research into universities. Doctoral schools are organized around research centres rather than teaching departments, with a double effect. They stress that professors have not only to be department members, but also have to join research centres and contribute to their programs to be considered "research active". If not, they are not allowed to recruit doctoral students. They cannot apply for state doctoral scholarship now allocated through the doctoral

[28] Fortunately, it was not the case! Medical doctorates are delivered in medical schools and not in social sciences departments. But it was the way to stress the universality of Universities.

schools. Therefore, doctoral schools and research centres focus more sharply on doctoral students. On one side, students are required to meet a relevant number of courses inside their doctoral school curriculum. They have to work on their own doctoral dissertation inside a research centre. On the other side, doctoral schools' resources are available to supervisors under the condition of good integration.

By the same token, in research active universities, these changes favour academic recruitment on the basis of potential contribution to local research units. This movement has started with new position openings based on research profiles. It is made possible by the downturn of student population flows, but hardly understandable by bottom-line academics when they are not themselves involved into research work. The division between "research actives" and others concentrating on training should become more explicit with the devolution of human resource management in universities. Reciprocally, full-time researchers are encouraged to take an active role in monitoring students, which many of them already do. Research centres are invited to integrate students in their programs and to treat them as an apprentice labour force. This distinction is critical, since it may displace the source of academic identities from departments to research centres. The institutional fiction of the "professor researcher"[29] may well not long resist this shift. Such an institutional segmentation of the labour force might be complemented or substituted by statuses setting better recognition of profiles among university professors and researchers with the new 2007 university autonomy act.

To apply for accreditation in the framework of pluri-annual contracts, each doctoral school must stress its coherence and feasibility with regard to its mother institution(s)' policy, explaining how its topic, size and organization contributes to the general university purpose. As shown by comparing Charts 2.1 and 2.3, doctoral schools contributed to increasing "university density" by fostering interdependencies within and between its component subsystems. By the same token, emerging interdependencies enhanced presidents' leadership by substituting negotiated links with the presidents' team for asymmetric relationships between DEAs leaders and the Ministry. Doctoral schools are now well established in universities and other institutions of HE. Yet, decision makers have recently introduced a new proposition to their agenda. They suggest restricting doctoral accreditations within the scientific fields of their accredited doctoral schools. If this step were taken, it would challenge the very definition of professors as self-sufficient supervisors. Yet, in order to use all available human resources, doctoral schools could regroup members on a geographical rather than institutional basis, differentiating between full, partners and associates members. Full institutional membership would be based on the provision of adequate research conditions within a given university, while partnership or association could occur on the basis of individual capabilities of professors.

[29] It was created at the end of the 1970s as a result of the "drift to equality" in the post-1968 French universities. It defined a single profile for university academics, sharing the same teaching load whatever their position in the academic hierarchy and their activity in research. It forged a niche for free riders. It also helped diversifying tasks in teaching departments to face the increasing administrative workload with the multiplication of students and diversification and degrees.

2.4 Concluding Discussion – The NPM and Network Governance and the Evolution of French Universities

Over the last 2 decades, French HE and research underwent rather deep changes. Some of them might at first glance look like implementation of NPM narratives. Others might be related to the network governance model. Yet, in either case, close empirical work shows that it is not the case.

2.4.1 Can the Contractual and the Research Policies Be Labelled NPM?

The transformations described above rebuilt multilevel governance of universities by challenging the discipline-based decision-making processes in the Ministry, fostering institutional autonomy and collective capacity of universities and reorganizing, at least partly, relationships between central levels of government, meso-level of universities and micro-level of research centres, departments and doctoral schools. Should that lead us consider that they result from the implementation of the NPM narrative? We argue below in favour of a negative answer.

At first glance, the French contractual policy shares many features with the NPM narratives. It relies strongly on a decentralized movement towards more autonomous and empowered entities (i.e. the universities). While the Ministry defines a general framework, the decentralized units are asked to develop their own policies that are formalized into strategic plans setting priorities and objectives. They constitute the basis on which the central authorities negotiate equipment, budget and staff resources with each single entity. These features may be seen as a move towards the evaluative state (Neave, 1988; Neave and van Vught, 1991) and towards management by objectives. Furthermore, the doctrine defined by the DPDU insisted on the need to foster evaluation within the universities and emphasized the importance of accountability as a counterpart to the increased institutional autonomy given to each institution and to its leadership.

As often stressed in NPM narratives, decentralisation went along with increased monitoring and greater hierarchy. On the one hand, contractual policy does not express decreasing commitment from the state, neither in financial terms (they were introduced at a time when the economic context was not bad and they were associated with increases in budget), nor in steering terms. It is a "new instrument"[30] that promotes and values institutional autonomy. The Ministry considers it as a means to better manage French universities, improve their self-awareness and self-control on how "it really works" (Berrivin and Musselin, 1996). On the other hand, it strengthens and clarifies hierarchical lines, by pushing university presidents to the

[30] As argued by Lascoumes and Valluy (1996), conventional instruments are all but new. What is new is how frequently they are used.

forefront of decision-making as the only relevant actors on all issues mediating all relationships between the Ministry, university members and entities. Within each university, the presidential team is expected to behave more like managers, to be more decisive, to conceive policies and implement them and to integrate the centrifuge forces of the departments.

Last but not least, while equality and uniformity are strong national values, the contractual policy favoured, recognized and legitimated differentiation, enhancing complementarities as well as competition among universities. Complementarities because universities no longer try to be alike by drawing on uniform and egalitarian rules but look for their own niche, their own identities on specific areas. But competition at the same time, because being different, universities have to better exhibit their differential advantages, their attractiveness, etc. In this sense, contracts might be considered as "market-like" mechanisms promoted by the NPM.

Indeed, contractual policies can be expressed in the NPM vocabulary. But it is an ex post translation of historical facts where the NPM narratives did not play any role whatsoever. First, because it occurred before such ideas reached the French public decision-makers and administration. French reforms developed in isolation, i.e. without observing foreign experiences. They rather tried to find local (i.e. French) answers to local (i.e. French) problems using new resources rooted in 1980s political decentralisation. They revitalized local interest for universities as possible sources of dynamism, prestige, knowledge and economic strength. It is only late in the process, thanks to a late diffusion of narratives through European discussions, that they discovered they shared common experiences with other European universities and that French public administration discovered NPM narrative. As shown by Bezes (2005a and 2005b) the NPM narratives diffused in France in the mid 1990s and became influential after 1995. The empirical study led by Musselin (1995) on the design and implementation of the contractual policy confirms this result in HE. None of the political promoters of this policy and none of the DPDU implementers was linked to the NPM epistemic community or had heard of it at that time. They also had very poor knowledge about what was going on in HE elsewhere in Europe. As shown by Musselin (2004), contracts appeared as a "good" solution more by chance than by choice. They were introduced at a favourable moment and timing and benefited from this positive juncture. They were not part of a more global programme of state reform. They were not implemented to conform to NPM.

Second, in many respects, there is much more distance between the contractual policy and NPM than looks at first glance. Three examples nicely illustrate this point. One, the contracts for their promoters were in fact very distant from market-like mechanisms. They aimed at reducing inequalities[31] within the French system rather than differentiating and developing competition among universities. Differentiation and competition are incremental, emerging results of contractual policy and in no way the produce of an ex ante plan. Two, the contracts were not,

[31] For instance, between the generally rich, old universities and the new ones, usually poorer, or among various regions of France.

and still are not, conceived as management tools intended to allocate funds according to objectives, to assess them and to master expenses. They were seen as "institution builders". Their major role was to strengthen the collective capacity of universities (against the department faculties and individual academics). Three, more emphasis has been put on the preparation and negotiation of the contracts than on their evaluation. Fifteen years after the first ones, assessment remains very superficial and its results do not count for much in the negotiation of the next contract.

About the increased involvement of universities in research strategies, the same observations may be expressed. It is clearly part of the general strengthening of HEIs and their transformation into active actors of their own development; therefore, this evolution also appears in concert with the NPM narratives. But, again, there is no evidence of such an influence. Decisions were made which look compatible with NPM: it favoured the empowerment of decentralized HEIs, relied on the development of contractual relationships, and aimed at better monitoring the development of research within the universities. Nevertheless the NPM rhetoric was never present in the arguments developed by the actors.

Thus, those decisions (speaking nothing of their implementation) cannot easily be expressed in the NPM narrative. As compared to the contractual policy, research organization policies did not clearly deviate from the traditional type of HE steering. Decentralisation, recognition of university leaders as relevant actors, and changes in central actors' style of involvement have not gone so far as they did in training or institutional management. Until the 2006 Pact, Ministries and national research organizations were openly reluctant delegating (even under control) research policies to HEIs. Only some shy attempts were made by the end of the 1990s to authorize piecemeal devolution of resources to the best-managed universities.[32]

As a result, the French reforms, even if they show some similarities with the changes undergone in other countries, are neither the result of the adoption of NPM orientations nor an unconscious or involuntary form of NPM, at least until the mid 2000s. Different conclusions will probably be raised about the introduction and implementation of the new law on national budgets (LOLF) and the creation of the new funding and evaluation agencies (ANR and AERES) in 2006. But up to the recent years, changes occurred without being related to or to forms of NPM.

2.4.2 A Move Towards Network Governance?

The governance narrative is often used to describe the shift from a bilateral, hierarchical and central steering of HE and research to a more polycentric and horizontal kind of steering. Recently, Aust (2004) compared decision-making processes on university building matters in the 1960s and nowadays. No central Ministry is

[32] J.-F. Mela, former head of the *Mission scientifique universitaire* at the Ministry of research, interview.

nowadays able to carry alone any real estate project: co-funding from the local authorities is required. Aust clearly observes the increasing number of actors involved, mostly newcomers from local/territorial bodies. Yet, this new stand does not fit as a pure governance network pattern (Le Galès, 1995): networks have indeed enlarged but the national state remains a strong and dominant actor. The number of stakeholders involved in the universities steering process has increased. Yet central bureaus' control have not loosened or softened even though coordination has developed. They keep enough power at the territorial level to impose their views, demands and controls on local authorities through the active mediation of the *Recteurs d'académies* (representing the state on educational matters at the level of administrative districts called *departments*).

As shown by the different graphs picturing the HE system in France in this chapter, the system is getting more and more complex. It has gone through a clear increase in the number of actors and structures involved. In particular, public authorities and political and administrative actors interested in and concerned by the steering of this system have steadily grown: city, departmental and regional players have become partners (or opponents) of the national, traditional actors, and most of them are interacting at the EU level. Some even use the latter as a resource to weigh on the national scene.

But, again, this incontestable evolution cannot be described as the result of the overwhelming success of the network governance narratives over the French HE landscape. It rather belongs to the very traditional French debates and tensions between the Girondins and Jacobins (both in favor of decentralization) and the financial constraints met by the central state, confronted with a second growth, and also the increasing development of European commission-based or intergovernmental initiatives on HE and research at the European level.

Nevertheless, this general observation on the overall transformation of the HE system has to be nuanced when one looks at specific parts of the sector. The transformation introduced to the funding of research in the 1990s can more easily be interpreted as a shift from a centralized conception (with big programs and national research planning) to a network-based conception. It aimed at introducing a new paradigm, which cannot be interpreted according to the traditional center-periphery French dilemma. Not only should researchers seek multiple collaborations (with other disciplines, countries, and teams) but they should also diversify their funding sources and mobilize a large range of heterogeneous funding partners: industrials, local and national public actors, and European bodies.

Two intermediary conclusions can thus be drawn from the French case and its relationships to the NPM and network governance narrative. First, each and every change in the public sector should not be too quickly or automatically attributed to the influence of a specific narrative. Even if the results may look close to a certain doctrine, it does not mean that the latter infused the change process from the beginning. In France, the reform of the state and its administration aiming at a "stronger management of the public sector" has been on the agenda for many years, even if the NPM narrative became influential in recent years. In other words: all reforms of the public administration should not be labeled NPM. Second, the influence of

some narratives may be limited to some specific parts of a sector, as shown by the stronger impact of the network governance narrative on the allocation of research funding rather than on the architecture of the all HE system.

There is, therefore, a need to try to distinguish the impact of the narratives as motors of change and the use of these narratives as analytical tools aiming at assessing how far or how close are the changes observed in a country from the ideal-typical model of this or that narrative. In the case of France, the second option is more accurate and shows that the outcome of the change experienced by the French system for some can be interpreted as a move towards forms of NPM and others as a move towards network governance, and they are articulated one with another rather than leading to incoherence amid contradictions.

As argued and documented in this chapter, French HE and research institutions experienced rather important and significant changes over the last decades. But these transformations present specific features. They do not link to very visible reform processes and programmes. They resulted from discrete and disconnected actions with a strong and partly unforeseen impact when implemented. Reformers' action was mostly incremental, using new instruments chained, without being embedded, to ex ante planning. Reform in French HE is an excellent example of the "art of muddling through" (Lindblom, 1959). For that very reason, no specific narrative can circumscribe it, inasmuch as narratives are considered as theories for action. It would be a misleading an ex post facto reconstruction to analyze the observed changes as NPM-inspired. The NPM narrative had no influence whatsoever, nor did the implementation of change follow paths and use tools described as specific to NPM.

One major change certainly resulted from the increasing number of actors involved in the steering of universities over the 2 last decades. Yet, its actual impact remains to be further questioned. It clearly invites us to explore the hypothesis of an emerging governance model. But further investigation is needed to establish what degree of co-construction and co-decision has been reached, how much new stakeholders actually impact universities policies and to what degree the national state has repositioned.

The overall description and conclusions should also be further detailed to account for the diversity of emerging organizations. Joint ventures seem to have different impacts depending upon the part played by research in universities, the balance between researchers and professors in specific disciplines and the importance of large equipment and division of labour in various fields. Pluri-annual contracts do not impact all universities to the same extent. Some use contracts as a resource to enhance internal co-construction of purposes and means and to improve external relations with stakeholders. Others restrict the contract to a formal constraint, collecting claims of departments and research centres without developing internal collective coordination, leaving the selection of ends and means to central administration as in the good old times. In certain places, doctoral schools enhance the collective spirit of innovation, brainstorming on the common needs of students, the building of common rules, and cooperating between departments and research centres. In others, it just means pouring old wine in new bottles, refusing to elaborate common norms and managing to allocate resources according to former customs.

Academic values and norms can resist organizational changes when they provide enough rewards to part of the academic communities. New incentives may remain unseen from many, especially where they do not impact their personal organizational environment. For instance, it does not really matter who decides on state bursaries' allocation in fields or universities that do not care about providing scholarships to students, that have no chance to capture any, or that are able to find other funds for students. The promotion of teamwork may simply not fit in disciplines essentially based on individual work, where the need for rationalization of resources is usually not felt as strong enough to enhance coordination, economies of scale and division of labour. In such cases, organizational costs are not considered worth engaging.

Reforms that have developed during the last few decades clearly foster specific types of local organization that do not fit well in all scientific sectors. They contribute to building conditions for scientific performance that require costly equipment, cooperation, division of labour, and flexibility of human resources, among other things. To a certain extent, they facilitate and rationalize organizational forms that already exist.

They may also help renew organization in sectors that are more reluctant to change in such a direction. What is a necessity in molecular biology, astrophysics or nanotechnologies can also be a resource in the social sciences and humanities. It is very likely that the collective organization of research will change work content and research products in these fields, as in others. Therefore, it may well be that some types of research work just do not fit this pattern. But it may also be that such changes are rejected because they might endanger both free riding and traditional powers based on personal confusion between training and research.

Chapter 3
Germany: A Latecomer to New Public Management

Uwe Schimank and Stefan Lange

3.1 Introduction: The German University System

In comparison with other European countries such as Great Britain or the Netherlands, Germany is a latecomer with respect to reforms of its university system, although complaints about problems started to accumulate as early as the 1960s. Some reforms in the early 1970s did not really improve the situation. On the contrary, for 20 years their failure discredited further efforts of reform and reinforced those who claimed that German universities were basically 'healthy' were they only to receive better funding from the state. Although German re-unification seemed to briefly open a window of opportunity for an overall change in higher education structures through the necessary reform of East German universities, it did not help reform-oriented actors much (Mayntz, 1994). With respect to universities, as in other societal sectors in East Germany, the enormous time-pressure to come to terms with the installation of a working system allowed only the substitution of politically discredited persons; those West-German professors who acted as temporary or permanent agents of renewal did nothing more than implement the West German status quo.

Serious efforts of reform started just a few years ago, thus change is still at the very beginning. Therefore, reliable interpretations of what is happening and predictions of what will happen are difficult to ascertain. We shall nevertheless attempt to give an overview of the German situation. After a very brief description of basic structures of the German university system, reflections on overall societal changes, which brought with them new demands on universities since the 1960s, are given. We then concentrate on the governance regime of the German university system and show that the traditional regime no longer fitted these demands. With regard to the process of attempts to install the 'New Public Management' (NPM) regime, two questions have to be asked:

U. Schimank
FernUniversität Hagen, Institut für Soziologie, Germany

S. Lange
Deutsche Hochschule für Verwaltungswissenschaften Speyer, Germany

C. Paradeise et al. (eds.), *University Governance*,

Will it be successfully and completely implemented in some years, or will it be stopped at a certain point by strong resistance – and if so, what would the mixture of the traditional regime and the NPM regime look like?

Is the NPM regime an adequate way to meet the new demands that universities face in teaching as well as in research – or are critics correct in claiming that it enforces management principles from the economy, which do not fit the public sector in general, and universities in particular?

We shall raise these questions not only with respect to the general governance structures of the German university system, but also with respect to two "tracers" of the effects of these governance changes: modes of research funding and doctoral training.

3.1.1 System Characteristics

With a population of more than 80 million, Germany is the largest European Union (EU) country and one of the leading countries in the world economy. In 2008, in the German higher education system, which has a binary structure, there were 1.94 million students. Of the 391 institutions of higher education, 104 are universities in the proper sense whereas there are a much larger number of institutions of professional education (Fachhochschulen etc.). Nonetheless, about two thirds of the students in Germany are enrolled at universities. These universities employed about 174,953 academics in 2007 of which 21.7% were professors. In 2002, the total finances of the universities made up 1.0% of Germany's gross national product.

Almost all of the 391 institutions of higher education are public and thus their basic funding comes from the Bundesland (in this paper, 'Bundesland' is referred to as "state") in which they are located.[1] According to the German constitution, the 16 states are responsible for all issues of education and culture, and this includes universities. The federal government plays only a subordinated role in financing and regulating the university system. The states coordinate their policies with respect to universities and higher education in general at a standing conference of the respective ministers (Kultusministerkonferenz: KMK); to coordinate the states with the federal government, a joint standing commission for educational planning and research promotion exists (Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung: BLK). Finally, the Science Council (Wissenschaftsrat) is an advisory body in all matters of higher education and science policy with two boards – one consisting of representatives of science, the other of representatives from the states and the federal government.

[1] The 16 German 'Bundesländer' are states inside the federation of the German nation state with own constitutions, own legal powers and public administrations. Moreover they provide the execution of the federal law through their public administrations and courts.

Three intermediary actors between universities, on the one hand, and government, on the other, are especially important in the German system. The German Agency for Research Promotion (Deutsche Forschungsgemeinschaft: DFG) is the most important agency for the funding of projects in basic research. DFG funds make up more than 40% of the German universities' entire external income (Kuhlmann and Heinze, 2004: 53). The states and federal government equally share the financing of the DFG's funding budget. The German Rector's Conference (Hochschulrektorenkonferenz: HRK) is the organized interest group of universities and the German Higher Education Association (Deutscher Hochschulverband: DHV) is the university professors' professional association.

All these actors have a say in university governance; therefore 'network governance' is and always has been a dominant structure in the German higher education system. This is due to the "semi-sovereign"-character of the German state (Katzenstein, 1987) that is characterized by a huge amount of joint-decision-making between the federal government and the 16 states, as well as a high degree of involvement of corporatist actors in the processes of policy formulation. In this sense, Germany had established network governance long before it became fashionable as a new mode of governance in other countries.

3.1.2 Social Pressures for Inclusion

Universities are dual-purpose organizations and as such belong simultaneously to the educational and to the science sub-system of modern society (Braun and Schimank, 1992). With respect to teaching, as well as to research, universities in all Western countries became subject to increasing inclusion pressures from both societal sub-systems in the 1960s.[2]

With respect to Germany during the 1960s, educational policy-makers were convinced that they had to increase the share of students in coming age cohorts significantly so that the needs for academic qualifications in more and more occupational fields could be satisfied. In the German context, this did not amount to the creation of a new sub-university sector of higher education that could have functioned as a buffer for universities against this societal demand. In countries like Great Britain or the Netherlands this path was deliberately taken with the establishment of Polytechnics or HBOs, respectively. Although in Germany too former schools of professional education were upgraded to Fachhochschulen and a number of new Fachhochschulen were founded, the growth of this sector was never sufficient to enrol the masses of new students. In fact, Fachhochschulen were not supposed to fulfil this function. Educational policy-makers as well as employers and professors at universities believed that the quantitatively larger part of the new academic qualifications needed could only be delivered on the

[2] As a useful summary of these developments see also Nickel (2007: 21–46).

level of university study programs. Unions and individuals shared this belief not the least because a university degree guaranteed a higher salary than a Fachhochschul degree. As a consequence, German universities, which by now had excluded the overwhelming majority of the population, were expected and willing to include an ever-growing part of it in future. They were supposed to be transformed from elite institutions in the direction of a "massification of higher education" (Gibbons et al., 1994).

For a short period of time, from the mid-1960s until the mid-1970s, the German university system grew considerably. Quite a number of new universities were founded, and the old ones' were enlarged with respect to study places and academic staff. During this time, the inclusion of increasingly more students was by and large in the interest of universities as organizations and their professors as an academic profession. Their status in an arising 'knowledge society' grew; they did not have to share this status with Fachhochschulen nor give way to them as key players of higher education; and an increasing teaching load accompanied by a worsening student-staff ratio was thought of as merely a temporary phenomenon.

Since the 1960s the inclusion pressure with respect to the research function of universities grew as well. This had to do with a general penetration of more and more societal sectors and activities by scientific knowledge. Not only industrial production, health care and the military were supposed to become more rational by the application of knowledge originating from scientific research, but also political decision-making in for example environmental protection, top athletics and family life. These hopes legitimated politicians to increase the amount of public money for research promotion, and a considerable share of that went into the basic funding of universities. Therefore, science policy-makers felt the need – and public pressure – to make sure that this money was not spent entirely on research merely motivated by criteria of scientific curiosity. In this respect, inclusion pressure meant that university research should become more responsive to societal demands for extra-scientific "relevance". The self-exclusion of university research into the notorious 'ivory tower" was supposed to end.

Universities and their professors once again had to meet this demand primarily for considerations of self-interest. They had to proclaim and to some extent also practice 'relevance' under the heading of, among others, technology transfer. The reason for this was that they anticipated the threat of a possible research drain, from universities to the state-financed extra-university sector built up after World War II and already stronger than in most other European countries. In the end, universities and their professors could possibly lose most of their research function to the Max-Planck-Society, the Fraunhofer Society, the large national laboratories, and other kinds of extra-university research institutes. This would not only mean that university professors would lose that part of their work which has the highest intrinsic attraction to them and gives them their peculiar reputation among colleagues and within the larger society, but also that universities would no longer distinguish themselves from Fachhochschulen. The latter aspect also prevented universities from delegating research focused completely on 'relevance' to the Fachhochschulen. If universities wanted to maintain their position as the ultimate 'home of science'

where basic research without immediate application value had a safe refuge, paradoxically they could not ignore 'relevance'.

In sum, since the 1960s the German university system has been confronted with growing inclusion pressures both in its teaching and its research function, and both pressures were irresistible from the perspective of the universities' and their professors' self-interests. It is important to explain and emphasize this fact because political arguments and actions concerning the reforms of the governance regime of the German university system were and still are often expressed in a voluntaristic manner – suggesting, that decision makers could choose from a broad bundle of options (including non-decision making). Of course, up to a certain point one may ignore changes in the societal environment of the universities and continue business as usual as if nothing had happened. This was indeed the case until the late 1990s, that is for more than 30 years. Changing functional demands do not automatically enforce the elimination of governance structures that no longer fit, nor do they lead to the establishment of optimally adapted structures. However, not only do the costs of sticking to a no longer functional governance regime increase with time; these costs also indicate the direction in which change should proceed. With regard to teaching, both an increase of societal effectiveness, as measured by occupational requirements, and an increase in efficiency, as a better return of investment of increasingly scarce public funds, is at stake. Concerning research, the same criterion of efficiency is combined with societal effectiveness in the sense of increased responsiveness to extra-scientific needs.

There is no immediate, easily recognizable link between certain characteristics of a governance regime of the university system, on the one hand, and its overall teaching and research performance on the other. On the contrary, such effects on performance are subject to ever-new controversial debate. As long as there is no valid empirical evidence from relevant studies, one can only identify the beliefs of relevant actors who guide their argument in debates and political conflicts about university governance and reformulate them into hypotheses, which should guide further research. With this modest ambition, we now turn to an investigation of governance changes.

3.2 The Traditional German Governance Regime and New Public Management

The traditional governance regime of the German university system was described by Burton Clark (1983: 140), as a combination of political regulation by the state and professional self-control by an "academic oligarchy". At the beginning of the nineteenth century, the Humboldtian idea of "solitude and freedom" of teaching and research was granted to universities in return for political subordination of professors by an authoritarian state which also funded them (Ben-David, 1971: 108–138). Despite radical changes in government since the Second World War, the German university system is still characterized by this historical compromise. In legal terms, this is expressed by the recognition of the

dual nature of universities as both public service institutions and autonomous corporations (Kimminich, 1982).

Thus, the institutional autonomy of the university in its relationship to the state was rather low until recently. The autonomy of individual professors, however, in all matters concerning teaching and research was high. With respect to the academic oligarchy, professors were the most important pillars of the German system – a "chair-based organisation" of "small monopolies in thousands of parts" (Clark, 1983: 140).

3.2.1 Traditional Governance Regime

From the chair-holder's point of view, the university and the department to which he belonged was a local corporation of colleagues – the other chair-holders – among whom there was a basic equality of rights and opportunities.[3] This was institutionalized by a peculiar non-use of formal rights. Formally, university leaders – rectors and deans – could not disregard a majority vote taken by the university senate or faculty council. Traditional governance thus limited hierarchical authority. However, issues were generally not even put to majority vote; instead, consensus was sought among representatives of collegial bodies and those who were affected – or who felt themselves affected – by a particular issue. Amongst chair-holders, this practice was understood as 'cooperativeness' (Kollegialität). Each chair holder could normally expect that no decision in violation of his interests would be taken. These implicit non-aggression pacts transformed a formal structure of majority rule into a structure of informal veto-powers (Schimank, 1995: 222–258). The consequences were obvious: decision-making took a lot of time; and the status quo could be changed only when everybody profited, or at least no one suffered a significant loss. Nothing more than compromises were reached, often leading to insufficient solutions or merely to symbolic politics.

These non-aggression pacts stemmed from a number of considerations. Firstly, one sought to avoid conflicts with those whom one frequently meets. Secondly, academic solidarity against external threats – especially from state authorities – had to be maintained. Thirdly, the mobilization of a majority for any one academic's particular interests would have required an enormous effort in the formation and maintenance of a fragile coalition. Fourthly, even if this could have been achieved, each concerned academic would have been aware that others would try the same,

[3] In the beginning of the 1970s, the other status groups (teaching and research assistants, students and non-academic staff) gained some formal rights of participation that were legally fixed by federal framework law (Hochschulrahmengesetz: HRG) in 1976. However, the dominant position of the professors was not shaken and the involvement of more groups in university governance – the so-called 'democratisation' of the universities – only brought about more bureaucracy and never-ending meetings where no decisions were taken at all (Luhmann, 1987).

and no one could always be sure to be on the winning side. Such considerations motivated chair-holders against taking "uncooperative" initiatives. As a consequence, collegial authority exhibited the features of a "receding locus of power": "wherever or at whatever level one applies to the organization, the 'real' decisions always seem to be taken somewhere else." (Noble and Pym, 1970: 435–436).[4]

As long as an organization has no need for change, or if change consists only in the distribution of additional resources, everybody can live with the requirements of consensus. However, as we explained this has not been the situation in which German universities have found themselves in the last decades. On the contrary, arising problems stemming from the inclusion pressures in teaching and research could not be solved. These problems did however accumulate due to the stop of the expansion of resources for the higher education system on the one hand, and the traditional mode of collective decision-making in universities on the other.[5] To list just a few catchwords with regard to teaching: declining quality of teaching, increasing drop-out rates, prolongation of time needed for studies, complaints of employers about qualification deficits of graduates; and with regard to research: declining international visibility of research conducted in German universities, lack of attractiveness for foreign researchers, a fragmented system of quality control, complaints from industry and other extra-scientific users of research results about the unresponsiveness of university research to their needs. Of course, these and other problems were probably exaggerated, but everybody agreed that there were real problems that had to be dealt with.

Whereas universities and professors claimed that the problems were mainly caused by a growing scarcity of public funding, and demanded significant budget increases, the state governments began criticizing this attitude as unrealistic with regard to their financial possibilities and – more importantly – as a diversion of attention from the real causes of performance deficits. The state governments and the federal government became convinced that the central cause of all of these problems was the inability of German universities to reform themselves. This in turn was mainly seen as a result of the professors' unwillingness to change the status quo, which would have meant at least a partial loss of individual and collective privileges. In other words, what the 'resource dependence' and 'population ecology' perspective holds for organizations in general, that they cannot adapt to environmental changes because of their fundamental "inertia" (Hannan and Freeman, 1977; Pfeffer and Salancik, 1978), was now diagnosed by governments

[4] These authors studied this phenomenon in a large British public agency – for the same phenomenon in German universities see Schimank (2001).

[5] The oil-price-shock and a weakening economy made less money available for public expenditure on German higher education since the middle of the 1970s. In 1977 the KMK decided not to react to increasing enrolment rates and stopped the expansion of university infrastructure and personnel. The ministers relied on the false prognosis that enrolment would decline to the status quo ante in the 1980s – this soon turned out to be wrong. Until today, student numbers have kept on growing, but the expansion stop is maintained.

for the universities – this not, however, as an inevitable fate, but as a feature which can and must be changed.[6] After all, from government's perspective, universities should become organizations that are able to adapt to changing societal demands on teaching and research.

3.2.2 The NPM Model and Germany

In other European countries and by international organizations like the OECD, NPM was proposed and debated since the 1980s as a governance regime fitting to generally shape public organizations in the direction of becoming responsive, and even more, efficient performers (Hood, 1991; OECD, 1995; Ferlie et al., 1996; Pollitt and Bouckaert, 2004). In Germany the NPM regime arrived in the middle of the 1980s via model-projects in the Netherlands, to instruct reforms of municipalities. Eventually debates about the NPM regime began to spread around other areas of the public sector until they appeared on the German university scene in the second half of the 1990s.[7]

To understand the NPM model and to compare it systematically with the traditional governance regime of the German university system, five mechanisms may be analytically distinguished in the governance of universities[8]:

- *Bureaucratic regulation* concerns the traditional notion of top-down authority vested in the state. This dimension refers to regulation by directives; the government prescribes in detail behaviours under particular circumstances, for instances, in financial or personnel issues.

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[6] A first political move in this direction can be traced back to the "sixteen theses from Bonn" by federal minister for education Dorothee Willms in 1985. Here, emotive catch words like "competition", "profile building", the desirability of more "third party funding" and "incentive systems" for excellent professors were introduced in the political debate for the first time. However, since the higher education system is under prior legislation of the states all the federal minister could do at that time was agenda-setting.

[7] Two influential proposals of NPM with respect to German universities were Brinckmann (1998) and Müller-Böling (2000), the former author being president of the University of Kassel at that time whereas the latter author was director of the Centre for the Improvement of Higher education (Centrum für Hochschulentwicklung: CHE). The CHE is a think tank initiated by the HRK and the Bertelsmann Stiftung – the latter being a private donation with the mission of an intellectual catalyzer of reforms in German society at large. However, the rise of NPM in Germany was a complicated process in which many coincidences played a decisive role at times.

[8] These five dimensions derive from Burton Clark's (1983) well-known initial "triangle of coordination" ("state", "market", "academic oligarchy"), to which he himself later added a fourth mechanism ("organisation") – see Clark (1998). In addition, the "state" dimension can be further split into two different dimensions ("regulation" and "guidance"), according to Braun and Merrien (1999). For the use of this "governance equalizer" in comparative research see de Boer et al. (2007) and Lange and Schimank (2007). See also the more detailed discussion of the NPM-narrative in the introduction of this volume.

- *External guidance* concerns activities that direct universities through goal setting and advice. In public university systems, the government is usually an important stakeholder, but not necessarily the only player in this respect. It may delegate certain powers to guide to other actors – such as intermediary bodies, independent agencies or representatives of economy and society in university boards.[9]
- *Academic self-governance* concerns the role of professional communities within the university system. This mechanism is institutionalized in collegial decision-making within universities and in the peer review-based self-steering of academic communities, for example, in decisions of funding agencies.
- *Hierarchical management* concerns the role of university leadership – rectors or presidents at the top-level and deans at the intermediate level – in internal goal setting, regulation, and decision-making.
- *Competitive pressure* with respect to scarce resources – money, personnel, and prestige – within and between universities mostly takes place not on real but on "quasi-markets" (Le Grand and Bartlett, 1993) where performance evaluations by peers substitute the demand-pull from customers.

3.3 NPM Implementation in the German System

In all five of these mechanisms, the NPM model differs sharply from the traditional governance regime of the German university system. Traditionally, as already shown, strong academic self-governance featured alongside strong bureaucratic regulation by the state. In contrast, the NPM regime strengthens the hierarchical management by rectors and deans, as well as external guidance by state authorities and stakeholders and also that of competitive pressure. At the same time, the NPM regime implies a marked deregulation in budgeting and personnel management, and in the approval of study programmes. This is what is usually implied by government when it promises greater 'autonomy' to universities. In stricter terms, it promises organizational autonomy – not to be confused with the individual autonomy of professors. Indeed, a reduction of academic self-governance is another explicit goal of the current NPM regime policies in the German higher education system.

3.3.1 Increased Competition

The core issue of the NPM regime in German higher education policies is without a doubt an increase of competition among and within universities for resources, students, and national as well as international reputation. To attain organizational

[9] This could possibly boost new forms of "network governance" and strengthen a more democratic involvement of the taxpayer via representation in university boards as suggested in the introduction – but it could also lead to more hierarchy if participation is limited to elites only.

competitiveness, deregulation is one prerequisite; another is the establishment of an organizational leadership which is able to effectively act on behalf of the university as a corporate actor. A final prerequisite is that greater external guidance is supposed to give broad long-term orientation to a university's competitive strategy. Spelled out in this way, it becomes clear that the NPM regime is not just a bundle of loosely coupled or disconnected changes, but rather an integrated approach that is in strong opposition to the traditional governance regime of the German university system. Therefore, when German state governments increasingly adopted the NPM model the core message was: Weaken the old regime, dominated by a state-regulated profession, for the sake of a new regime, dominated by a market- and state-driven organization![10]

What has actually happened with respect to the implementation of the NPM regime in the German university system? The picture is not only difficult to draw because things are under construction everywhere, but also because each of the 16 states sets somewhat different priorities and accents the same measure differently.

To begin with, there has always been an important element of *competitive pressure* among individual researchers at universities, which has become stronger with increasing dependence on funds from the DFG, the Federal Ministry of Research and Education, the EU, and industry. The share of these funds in the overall university budget has increased steadily and was about one quarter of the budget spent on research in 2002 (Kehm and Lanzendorf, 2006: 140). Still, success rates for applications to the DFG decreased (see next section). Thus, a growing dependence on project money has gone along with sharper competition, which produces more losers than previously. In 2004, in order to increase the worldwide research competitiveness of the German university system, the federal government suggested the creation of "elite universities", which it wanted to support generously with extra money so as to improve conditions for research as well as graduate training. Although the states were in urgent need of these additional resources, they blocked this initiative because they feared it would lead them into a destructive competition and, moreover increase the federal government's influence on the university system – which, together with the school system, is one of the most important competencies of the states. Finally, a compromise for an "excellence initiative" was reached so that now some centres of excellence and some larger research cooperations will profit from considerable additional temporary funding by the federal government.

With respect to teaching, in several states modest – by international standards – study fees were introduced. In January 2005, a coalition of three states won a lawsuit in the federal constitutional court against the federal government's prohibition of fees. In those states, which introduced fees in the aftermath of the court's decision, the use of this additional income by universities is usually tied to improvements of, often miserable, study and teaching conditions. In Northrhine-Westfalia for example, student representatives have the right to check that this is indeed the

[10] Von Wissel (2007) shows that for a long time the discourse about German universities disregarded all organizational matters as something "external" to the "idea" of the university.

case. Fees might result in increased competition for students – but only if universities can earn more money than they need to process the additional student demand, and if so, only for those universities that develop a strongly teaching-oriented profile because in most cases it is not permitted that the extra money be invested in research. It remains to be seen whether this first condition is or will remain the case. Even more doubtful is whether faculties or universities as a whole will declare to offer, above all, top quality teaching to the neglect of research.

Still other measures to increase competitive pressure include a new salary scheme for professors, laid down by the Federal Government in 2002 and allocating approximately one third of the salary according to performance. However, this salary scheme applies only to those who receive their first professorship or to those who change from one professorship to another. Also, the new scheme has to be cost-neutral compared to the old one, which tied salary increases to an upward movement on a seniority scale. More so, those who get appointed to their first professorships start for the first years without the performance-related component, leading to a massive income loss in comparison with the traditional salary scheme. The result is a two-class-system of professors: one class being the well-to-do established professors with strong disincentives to change, because even as top-performers, they can only in rare cases earn more than they already have, and the other class being the impoverished and dissatisfied new professors. Only after considerable time, the generation change will bring about a situation when the new salary scheme applies to everyone.

At last, in most states, part of the basic funding of universities is now distributed according to performance criteria such as the number of graduates or the size of project funds (Jaeger et al., 2005; Leszczensky and Orr, 2004). However, about three quarters of a university's budget is spent on fixed personnel costs; moreover, the possible gains or losses of a university due to performance indicators are usually limited to between 1–5% of the previous annual budget. This prevents weak performers from financial problems. Thus, only a very small part of the budget is used for incentives, and also, their potential effects on motivation are minimal (Minssen et al., 2003; Lange, 2007).

Most of the mechanisms of competition discussed – study fees being an exception – do not have a direct monetary influence of demand on supply. Accordingly, most markets within the system are merely 'quasi-markets'. Evaluations of teaching and research become a necessity in order to ascertain the relative position of a university, a faculty, or an individual professor. All states have started evaluations and in some, in Lower Saxony for example, evaluation agencies have been established (Schiene and Schimank, 2007). Evaluation methods and criteria differ considerably. In most cases, some kind of informed peer review is established, but in most states indicator-based formulae mechanically used to distribute parts of public funding to universities are in favour too.[11] Even now, professors complain loudly about the time needed for the preparation of being evaluated or for participating in the evaluation of others. Since evaluators have to be highly reputed and trusted members of their

[11] However, in most cases there is no nexus between the formula the state uses for the distribution of money to universities and the internal allocation rules of a university.

disciplinary community, an increasing frequency and intensity of evaluation exercises might result in a situation where very good performers have to invest more and more of their time – to the disadvantage of their own research activities – in evaluating the less able performers. Whether the net result of this tendency is positive remains to be seen.

3.3.2 External Guidance

Turning now to *external guidance*, since the late 1980s, the states have set up commissions to assess universities and their teaching and research performance. Such a commission report provided a ministry with an overall view of that part of the German university system for which it was responsible. These reports initiated significant redirections in study programs and research priorities of the universities. Moreover, based on this knowledge, ministries started to formulate more systematic catalogues of general targets since 1998 with respect to their universities' teaching and research portfolio.[12] This was the basis on which 'management by objectives' has become institutionalized in the form of mission-based contracts between ministries and universities (Jaeger et al., 2005; König, 2007; Nickel, 2007). The idea behind mission contracts and target agreements is to boost profile-building activities of universities. In these agreements, state and university together identify weaknesses and strengths of the university with regard to student demand in certain courses and disciplines, teaching and research profiles, internationalization activities, cluster building and cooperation with local extra-university research institutions, etc. Usually the university promises to improve in weak performance areas and to invest heavily in well performing areas.

In this way, external guidance of universities has been established. However, in practice there are still great difficulties connected with this new instrument. In the beginning, mission-based contracts contained mostly vague statements on which both sides could easily agree because they did not commit themselves to anything specific and did not define certain negative sanctions in the case of non-achievement of the agreed-upon targets. When government became aware of this, it often reacted in a manner violating the logic of 'management by objectives'. Mission-based contracts should not contain concrete measures, but only broad statements of what has to be achieved in a defined time span. In practice, ministries often have not granted this flexibility to universities; instead, ministries have reverted to regulation

[12] In 1998 the federal government removed those paragraphs from the higher education framework law that prescribed the organizational structures and internal governance of universities. This gave the states more leeway to try new governance instruments on their own in their higher education legislation. The initial idea of the central government with regard to the cut back of federal legislation was to give universities more autonomy, and not to enable 16 state governments to fill the vacuum with an increase of in-detail-legislations by states. Nevertheless in many cases the latter happened.

under the guise of the NPM regime.[13] For example, instead of formulating the target that the share of female students in certain study areas be increased by x percent over the next 6 years, leaving the actual pursuit of this target to each university, ministries prescribe detailed and uniform procedures as well as organizational structures of 'gender mainstreaming'. Ministries have fallen back to regulation because they began to distrust the universities' willingness to continue in the direction of the agreed-upon targets. This distrust is not totally unjustified because the ability of the university leadership, with whom the ministry negotiates to implement general goals one level below in faculties and institutes, is still rather limited. An additional reason for government's distrust arises from an often practised non-compliance of universities with regard to their reporting duties about the achievement of targets and missions. However, the ministry's behaviour has generated, on the university side, distrust in the commitment of the political side to the proclaimed shift from regulation to external guidance. Thus, mutual distrust has reinforced itself (Schimank, 2006). But as long as nobody believes that the other side believes in mission-based contracts, they remain a facade behind which the old game is continued.

A second, parallel way how external guidance has been installed in the German university system are university boards in which extra-scientific stakeholders are represented and which have certain formal rights vis-a-vis the university leadership (HRK, 2000; Schmidt, 2004). Who is eligible as a member of a university board, what kinds of persons are actually recruited, what tasks and rights a board has, and how it in fact works, varies widely among different states, and within states among different universities (Mayntz, 2002). In general, most ministries made no in-detail prescriptions with respect to the composition of these boards. Besides representatives of industry many other kinds of persons have been recruited, such as media people, trade union leaders, representatives of the local municipality, graduates of the respective university, directors of state-financed extra-university research institutes, and, rectors and professors from other universities. Some boards can only articulate recommendations. Most, however, have more, or less, decision-making powers especially with respect to the election of the rectorate, the strategic plans, the yearly budget plan, and – probably most importantly – the recruitment of professors.

Mission-based contracts, between universities and ministries and the recommendations or decisions of university boards, are major vehicles for an external influence on the profile building of universities. Under conditions of increasing competitive pressure, profile building could go in one of two principal directions (Meier and Schimank, 2002). Either a university attempts to find its 'unique selling point' that is a profile which is attractive to potential customers of its teaching as well as research offers and which it shares with no other university, or with as few as possible others; or it tries to imitate the profiles of those other universities which are generally assessed as especially successful. Taking the first direction is a

[13] See for the case of Hamburg: Nickel (2007: 191–260).

demanding effort in terms of good ideas and internal conflicts to be solved, except for those few universities that already have a unique profile. Therefore, the majority of universities can be expected to turn to mimetic isomorphism (di Maggio and Powell, 1983), which will result in quite a limited number of profile elements that can be found again and again. For instance, many universities went into nanotechnology or biotechnology as research fields, or media studies as a study program. In fact, external guidance by ministries and university boards reinforces this trend towards a factual homogenization of profiles because the comparatively superficial view of teaching and research issues these actors have, is liable to fall prey to all kinds of fads. There may even be cases where a university itself has quite distinct and plausible views on its future profile, but is prevented to pursue them because external guidance forces it to become a cheap copy of some other university.

These considerations sum up the point that external guidance may help, as it is intended, a university to transcend its own narrow perspective from within the organization, and the narrow perspective of the academic profession on teaching and research issues. Especially extra-scientific priorities and criteria, which have become increasingly more relevant with the inclusion pressures described, can be represented in the decisions about a university's profile. Still, this potential positive effect of external guidance requires that ministries and board members make themselves knowledgeable about these issues as well as about how a university, as a peculiar kind of organization, works. Otherwise, external guidance may actually worsen a university's competitive standing and performance.

3.3.3 Bureaucratic Regulation and Managerial Self-Governance

We now come to the preconditions of competitive universities with respect to the other three governance mechanisms. Concerning *bureaucratic regulation* of universities, the situation since the relaxation of the German federal framework law in 1998 is that all states have implemented those aspects of deregulation expected to bring about efficiency gains. They have granted much more flexibility to universities and professors with regard to financial resources by abandoning many features of the traditional earmarked public budgeting (Kameralismus) and introduced lump sum budgeting (Globalhaushalte) instead. The latter allows universities much more leeway concerning the flexible spending of public budget money. This is one of the few features of university reform that is appreciated even by those who otherwise strongly oppose it. Moreover, in a few states, universities can choose their legal status. They may remain public institutions, but can also opt for becoming foundations of civil law. This opens additional room for manoeuvre in financial and organizational matters, even though universities remain bound to the public sector salary structure and its rigid employment categories.

All the measures of deregulation mentioned so far, however, seem to be motivated more by the states' scarcity of finances than by a wish to increase the universities'

organizational autonomy. Under conditions of scarcity, global budgets and financial flexibility mean, above all, that the responsibility for decisions about where and for which purposes money is allocated within a university, is now delegated to its leadership. From the perspective of "politics of blame avoidance" (Weaver, 1986), this is a quite clever move of the ministry.

Ministries are more reluctant to relax regulations relating to the structure and size of faculties and to the appointment of professors. Still, a few states have done away with the ministry's right of approval of the appointment of professors and have delegated the final decision to rectorates of universities or to university boards. Moreover, the approval of study programs has been delegated from the ministries to newly founded agencies of accreditation, where academic peer assessment and quality criteria have a stronger role than before (Schade, 2004). It is still however, up to the ministry of a particular state to decide whether a given study program at a given university fits into the overall higher education plan of that state. This restricts a university's profile-building in teaching considerably – for example, if a university is forced to stick to the training of physics teachers although its own competitive strategy would abandon it in favour of building-up a graduate school in fusion research.

Already in the 1990s, *managerial self-governance*, the second precondition of competitive universities, was formally strengthened. The decision-making competencies of rectors and deans increased in all states. University and faculty leadership could decide many issues without a majority in the university senate or the faculty council. In a number of states, deans now independently allocate those financial and personnel resources that are not tied to a professor's appointment agreement. In addition, terms of office for rectors and deans were extended. Deans who were traditionally elected for 2 years now usually serve 4. In some states, deans now need dual approval – not only from their faculty, but also from the rectorate. Thus, they began to be seen as important in representing not only their faculty's interests to the rector, but in being supposed to implement the rector's policies within their faculty too – if necessary, against the will of the majority within their faculty council. After all, the system is acquiring elements of hierarchy although in reality most deans are not yet familiar with their new role (Nickel, 2007: 185).

3.3.4 Academic Self-Governance

Thus, *academic self-governance*, whose reduction is the corresponding last precondition of competitive universities to be mentioned here, has indeed been weakened formally. It however, continues to more-or-less stay alive in a more informal manner. At the moment, most measures to build managerial self-governance remain incomplete. The prevailing consensus-oriented culture of the academic profession compels many, in leadership positions, to act as if they had no new powers. Thus, formal competencies remain unused, and consensus, among professors at least, is still sought by rectors and deans. One reason for this situation is that those in leadership

positions know that one day they will return to the rank and file, and they do not want to make enemies among their predecessors. Another consideration that follows the same route is that university and faculty leadership know that they need the active engagement of professors in the implementation of decisions. Professors could effectively counter-act almost any decision rectors or deans may make, by practicing 'go slow' with respect to those activities that the decisions require of them. But the most important reason for 'cooperativeness' is that many persons in leadership positions have internalized the traditional organizational culture of consensus during their long academic socialization. So to recruit rectors, especially from outside academia, appears to some reformers as the only possibility to break up this cultural lag, which hinders the change of the governance regime of the German university system.

3.3.5 Overall Analysis

The overall picture of these changes of the five governance mechanisms is still unclear, and as yet, not very reliable. Many measures have been initiated, but most of them are not firmly implemented in the sense that they already belong to the uncontroversial components of a new governance regime. The university system was forced out of its old equilibrium without having found a stable new one. As a result, the picture drawn here might be a snapshot that does not cover events and developments that may happen tomorrow. This holds true in at least three respects:

- The power struggles among reformers, on the one hand, and those who resist reforms, on the other, continue. At present, nobody is able to anticipate how and when it will end. In the reformers' corner are mostly policy-makers, especially from the ministries; party affiliation does not make much of a difference.[14] In addition, quite a number of rectors now belong to the reform camp. Its opponents who defend the status quo, are basically the large majority of professors, many deans in particular, and also many members of the other status groups within the universities. Despite the dissatisfaction of each of the factions of the opponents with certain features of the status quo, they are united in their resistance against the NPM regime. Most probably neither a total victory of the reformers nor of their opponents will occur, but some kind of halfway armistice, partly a negotiated and partly a de facto result. It may well be that this armistice has the character of an enduring 'cold war', with mutual distrust and disrespect and each side attempting to cheat and vex the other wherever possible.

[14] Only the introduction of study fees, the failed abolishment of the "Habilitation" as a prerequisite for a full professorship as well as the degree to which the federal government should have a say in higher education policies have been controversial between the two big political parties. Typically for the German higher education system, in this respect, is that many of these controversial matters will be decided in lawsuits at the federal constitutional court.

- The dynamics of these power struggles work in interplay with the path dependencies inherent to the established traditional governance regime. The opponents of reforms are reinforced in their resistance by the lock-ins of the status quo. For example, how far can a strengthening of external guidance and managerial self-governance go when the 'freedom of teaching and research' is constitutionally guaranteed so that professors can easily appeal to the constitutional courts of the states against many measures of reform? In one state (Brandenburg) professors went to court against the evaluation of their teaching and research performance; the new salary scheme is also a matter of legal dispute. Even if professors cannot totally stop reforms, the ongoing crossfire of law suits with open end restricts the political room to manoeuvre as well as new legal interpretations so that particular measures of the NPM regime look considerably different in Germany in comparison to Great Britain for example, even though the political intentions may have been the same.

3.4 Tracers Issues

3.4.1 Research Funding

This general interpretation of the present situation of governance reforms in the German university system can be summarized in a pointed manner with respect to changes of research funding. As already described, changes of the financing of universities basically occurred in the following respects:

- A reduction of the share of basic funds
- The introduction of an allocation of a part of basic funds according to performance criteria, including part of the salaries of newly appointed professors
- An introduction of modest study fees
- A higher share of project funds and
- A diversification of the sources of project funds, including those of industry and EU

All these changes have brought about more competitive pressure into the provision of financial resources for universities in general, and for their research activities in particular. Interpreted in this way it looks as if the financing of universities has been deliberately shaped according to the NPM model; and this, indeed is what policy-makers say. They claim that they created instruments to use competition for improvements of efficiency and responsiveness of teaching and research.

In fact, the changes of financing are mainly political measures enforced by an enduring scarcity of public money for universities, or reactions to this scarcity by researchers at the universities. The 'Excellence Initiative' as a joint project of federal government and the states might be an exception because in this case additional money is allocated to the universities. Study fees, however, as introduced in Germany,

are simply an enforced self-participation of students in the costs of their studies, as the ministries responsible for the universities do not see any opportunities to receive more money in the yearly budget negotiations – although all German politicians rhetorically claim that a good academic education of the workforce is an urgent national priority. For a number of years the new salary scheme for professors will have the function to spare public money instead of establishing incentives for excellent performers. Finally, the increased competition for project funds from the DFG and other sources was something that policy-makers did not intend but contrarily tried to prevent by giving the DFG additional funds that were nevertheless insufficient. The success rate of project proposals went down from 68% in 1995 to 51% in 2006. This trend was worsened by the fact that with a DFG grant, funded projects could cover less and less of their real costs (Kehm and Lanzendorf, 2006: 165).[15]

With regard to individual research projects other funding resources are available from a number of foundations that supply smaller amounts of money, sufficient to finance a conference, print a book, invite a guest or cover some travelling costs. Usually foundations do not cover staff costs, but will give scholarships to excellent doctoral students. The Volkswagen Foundation is an exception to that rule: It distributes much larger funds on a competitive base for projects that fit into its thematically focused programs.

The third pillar of the German funding scene are the thematically focused and often mission based funding programs of the German federal ministry for science and education (BMBF), the state ministries and the framework programs of the European Commission. This sector puts the German funding scene under adaptation pressure. In the aftermath of an evaluation of its funding processes in 1998, the DFG was criticized for granting funds to small, individual projects and was recommended to concentrate on more thematically focused strong programmes: "In principle, resources should be concentrated on a few thematic fields and on fewer more visible projects" (Kehm and Lanzendorf, 2006: 165–166). In addition to the already existing Large Collaborative Research Areas (SFB), the DFG introduced funding for large decentralized research groups, thematically focused programs and research centres.

The 'Excellence Initiative', as introduced by the federal government and the states, recently reinforced the trend towards a more selective bias in research funding and a preference for big science. In this competition the universities as organizations instead of individual professors struggle for their share in a budget of €1.9 billion from additional public project funds. This budget is spent on successful

[15] This situation is actually changing as the DFG is now allowed to cover a part of the overhead costs of approved research projects as well. Until 2007 the universities had to cover all overhead costs for DFG-funded projects from their recurrent state funding which could lead to severe financial troubles for strong research universities with many DFG approved projects. In the "Hochschulpakt 2020" from 14.7.2007 federal government and state governments declared that they will take first steps towards full-cost financing for competitive research projects beginning with a surplus of 20% on the total amount of money granted by the DFG for an approved project. In the introduction phase (until 2010) this surplus will be covered solely from federal government funds.

proposals for graduate schools, clusters of excellence – implying close collaboration with local or regional extra-university research institutes such as Max-Planck-, Fraunhofer-, Leibniz- and Helmholtz-Centre-institutes – and outstanding concepts for the future development of a university as a whole. Success in the last mentioned category leads to a mass media driven public recognition as a German 'Elite university'. Since the announcement of the results of the second round of the excellence-competition on the 19 October 2007, nine universities hold the "elite" label.

With respect to the funding of research projects some policy-makers have become aware that there might already be a ruinous competition. Because the basic funding of universities has become increasingly more inadequate to the demands of internationally competitive research in many fields of science, researchers cannot but search for more project funds as a compensation; otherwise, they would have to reduce or shift their research activities and in some cases actually to cease doing research. Because this is almost everyone's situation, many intensified their activities to acquire project funds. Especially researchers from natural science disciplines – who are in need of expensive equipment, materials and research personnel – often prefer the mission oriented programs of the federal ministry or the EU framework programs because these funds allow them more flexibility on how to spend the money than do the DFG grants (Laudel, 2006). The DFG grants do not cover costs for basic research equipment or consumption goods. According to DFG policy the latter has to be provided by the universities. In cost-intensive disciplines, this budget is neither sufficient to maintain the expensive laboratory equipment, nor to modernize. As a result, a professor requires external funding to keep his research equipment up to date or to keep the staff working with these apparatus. But although some sources such as the EU have been used more extensively than before, and have increased their funding, the overall scarcity has increased because the aggregate demand has grown much more than the supply from all available sources.

Thus, an increasing number of researchers have become more dependent upon project funds. As a result, these researchers wrote more project proposals that had diminishing chances of success, and even if they were successful the amount of money given for a project was less adequate to cover the costs, or the period of time for which a project was granted was less adequate to do the work necessary to come to the promised results. This 'rat race' is taken to an evidently absurd extreme when such researchers become involved in the search for project funds that they do not really need to conduct their research, but have to show the leadership of their faculty or university that they are strong performers with respect to the external funding indicator, according to which parts of the basic funds they require, are distributed.[16] To mention just three aspects of this state of affairs, first of all an increasing number of professors become 'experts of fund raising' and develop certain

[16] By now such cases seem to be rare in Germany; in countries like Australia, where a strictly indicator-based allocation of basic funds for research was established twenty years ago already, this pattern of behavior is found more often (Gläser and Laudel 2007).

adaptation strategies suitable to different funding sources. Usually the excellent researchers manage a complex funding source portfolio that is necessary to guarantee an uninterrupted flow of grants necessary for a smooth continuation of research activities (Laudel, 2006). Should the funds be received, relatively inexperienced young researchers who are left alone because professors have no time for supervision and advice often conduct the actual research work.[17] Secondly, the quality of research suffers, because inadequate financing and time pressures do not allow better work.[18] Thirdly, not only bad research is eliminated by stronger competition for resources, which is an intended effect, but quite a lot of research ranging from good to mediocre as well. However, modern science rests on a broad basis of unspectacular routine research, certainly in applied fields, but also in basic research. If this kind of research work cannot be conducted any longer the really excellent cutting edge research will suffer.

3.4.2 Doctoral Schools

Another closer look that also brings into focus the effects of governance changes on research can be taken by turning to the situation of doctoral candidates. Although they are just one sub-group of researchers at universities it must be kept in mind that in many disciplines most of the research done at universities is actually the outcome of the writing of a dissertation. For example, many research projects funded by the DFG or other sources are executed mainly by doctoral candidates whose dissertation is a smaller or larger part of their project work, sometimes even identical with it.

Traditionally, there were two ways to write a dissertation in the German university system (Enders and Bornemann, 2001). One was to become a teaching or research assistant of a professor. In this occupational status, part of the working time was formally reserved for the dissertation, or one had only a part-time occupation and was supposed to work – unpaid – on the dissertation during leisure time. The other way was to write one's dissertation without having a formal occupation at a university as an external candidate who did it either on a scholarship or in addition to a regular job in some other occupational sphere.

Both versions of the traditional "master-apprentice-model" still exist, and in Germany quantitatively most doctoral candidates take one of these (Kehm, 2007: 136).

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[17] This has consequences for the efficacy of research as well: As a post-doc in biology stated in an interview, doctoral students and post-docs in third party funded projects have often good results in laboratory work, but lack the experience and skills to publish their results in journal articles. Because there is no one available to support them in these matters, many results are never communicated to peers and public.

[18] What worsens this is the fact that especially the excellent research staff employed in short-termed third party funded projects will leave the project for a better or more secure job while the project is still running.

But in the middle of the 1980s a third way was recommended by the German Science Council and then introduced into the universities: to work as a doctoral candidate funded by a scholarship in a graduate school (Graduiertenkolleg) together with others in a common field of research. Especially the graduate schools funded by the DFG were established in many disciplines on the basis of proposals submitted by a number of professors who together conceived the thematic and organizational framework for a 4–5 year period that can be prolonged for a second period of the same duration. In 2004, there existed 307 of such graduate schools with 14 doctoral candidates on average in each of them (DFG, 2004: 3–4). This new third way of doctoral studies was initiated as a copy of models that already existed in other countries. Almost 15 years later, at the end of the 1990s, in the context of the Bologna process, graduate schools were proposed as the third phase of studies after the Bachelor and the Master phase (Kehm, 2007). Such ideas served as a post-hoc legitimation of this third way, and the Science Council recommended the introduction of so called doctoral schools (Promotionskollegs) in 2002.[19]

There was no direct, intentional connection of these developments to the changes of the governance regime of the German university system starting at the end of the 1990s.[20] However, there have been certain reciprocal effects between the shift towards the NPM regime and the situation of doctoral candidates. We will point out the two most conspicuous effects. The first is a side-effect of the introduction of graduate schools, which supports the governance changes, and the second a side-effect of these changes, which worsens the conditions of work for doctoral candidates in general.

Graduate or doctoral schools are one method of a faculty or a university to create 'critical masses' of research capacity and overcome the traditionally prevalent small-scale research at universities. The extreme cases are the humanities, where it is still the rule that individuals such as a single professor pursue his or her research project, often without additional project funds. These professors supervise a few doctoral students, but they work on topics that are typically only loosely coupled to the professor's research interests. In the other fields such as the natural or engineering sciences, such highly individualized research work has become very rare. There it is often one chair – a professor with a small number of research assistants who are partly on established posts and partly funded by project money and might include doctoral students on scholarships together with diploma-candidates – which makes up quite a small research unit, especially if it does not pursue a common line of

[19] These are supposed to differ from the preceding graduate schools in so far as they shall offer an even more structured course program for doctoral studies (Wissenschaftsrat, 2002). See WKN (2007) and Buch (2007) for descriptive assessments of such new modes of doctoral training.

[20] A more indirect connection of the restructuring of study programs and degrees due to the Bologna process and NPM was that Bologna was an additional legitimation for state governments to enforce external guidance on universities via target agreements or mission contracts, which always referred to the achievement of Bologna goals.

research in a division of labour conceived by the professor.[21] It is one of the declared goals of policy-makers to upscale research units at universities. Especially two reasons are given for the demanded transformation from the traditional 'small is beautiful' to a 'large is beautiful' approach to research. Firstly, policy-makers see an irresistible inner-scientific dynamic towards larger-scaled research activities in principally all disciplines. Secondly, they perceive an equally irresistible extra-scientific dynamic towards 'bigger questions' directed at all disciplines. This is the more important reason because it refers to the inclusion pressures on university research. Both dynamics reinforce each other. Answering bigger questions demands larger-scaled research approaches, and the latter stimulate the former. According to this logic, evaluations of research at universities started to pay special attention to the scale of research units and positively sanctioned visible efforts to upscale, such as building up more coherent profiles of institutes or faculties with respect to joint lines of research; and besides research groups or even special research areas funded by the DFG as well as graduate schools are appreciated as manifestations of such critical masses (Schiene and Schimank, 2007). Performance indicators for research, which are used to allocate part of the basic funds to universities, now also emphasize graduate schools, among other up scaling efforts.

There is an even more general reason why reformers of the governance regime are in favour of graduate and doctoral schools and would like to make them the regular way of writing a dissertation, if they could. This argument goes to the core of the NPM regime and is not as openly articulated. Graduate schools are one device of the larger repertoire of measures by which it is attempted to reduce the high autonomy of individual professors in favour of a stronger collective coordination of the discipline. By participating in a graduate school, a professor commits himself not only to a joint framework of research, but also to the joint supervision of all doctoral candidates in the school. Although finally, one professor is still the formal prime supervisor, all professors are required to engage in discussions and evaluations of all of the doctoral candidates' projects. More so, the organizational work of establishing and maintaining a graduate school requires much more collective coordination and cooperation of professors than they were accustomed to in traditional university structures. Thus, the manifest specific effect of an up-scaling of research activities is accompanied by a more general latent effect of an up-scaling of the academic professions' actor-hood. Of course, if this happened only in the context of graduate schools the consequences would be very marginal, not the least because only a minority of professors participates in such a school. However, graduate schools are just one of many vehicles that transport professors in the same direction.

[21] One of the reasons why the Bologna-process met fierce resistance especially among natural science professors in Germany was the fact that diploma candidates were already valuable members of their research groups. A diploma candidate works 9 months on his thesis, which is sufficient to be involved in a project. Master candidates work 6 months and Bachelors only 3 months on their thesis, so professors fear that these will occupy laboratory space, need materials and instruction time without being able to help produce research results.

Coming now to the unwanted side-effect of the NPM regime on the situation of all doctoral candidates, we reiterate that the competitive pressure especially with respect to funds for research has considerably increased and partly become a ruinous competition. Although empirical data are lacking, it is plausible that the supervision of doctoral students suffers from the fact that many professors have to invest increasingly more time in acquisition activities. For those doctoral candidates who occupy research assistantship positions in funded projects, a lack of supervision combines with the general intensification of the project work loads as a result of insufficient funding; thus, they have less time for their own dissertation because they need to spend more time than formally stated on their project work.[22] This dysfunctional effect of the NPM regime on the overall research performance of universities could well excel the functional effects of graduate schools on the upscaling of the research units mentioned before.

3.5 Concluding Discussion: A Hybrid Model?

Both tracers show that the NPM regime will most probably have significant effects on research conditions and characteristics of research at German universities. These effects will partly be as expected and wanted by promoters of reforms, but will also be partly unforeseen and unwanted.

A development that could bear interesting questions for the future is the introduction of hybrid structures in German higher education governance, combining parts of the old regime with parts of the new under the umbrella of the NPM label. As pointed out in Section 3.3, hybrid arrangements can be found in the attempts of a performance based allocation of resources. On the one hand, this should increase competition between universities. On the other hand, the possible gains or losses in all states are strictly limited to prevent weak performing universities – and in the end the state in its stakeholder-function – from getting into financial difficulties. It is yet unclear if the effects of such a hybrid structure will show up as a conservation of the old financial regime in the future, or as the advent of a really competitive one, which will enfold in various consecutive steps.

What also appears to be a new tendency, is the enlargement of the network structure in German higher education governance. In the past, all experts involved in higher education policies were insiders as referred to in Section 3.1. The new higher education laws of the states now provide the legal framework for the inclusion of external experts in the governance of universities via several kinds of boards. Whether this leads to a more utility oriented opening of the universities for the needs of the greater public or on the contrary to an exclusion of public *and* academics for the sake of a strengthened influence of a small elite of industry and business representatives, remains to be seen.

[22] In many cases third party funded doctoral candidates are even charged with teaching and administration duties as part of the implicit work contract with their professor.

For all these yet unpredictable consequences, further research on governance changes and their effects will be needed as more and more measures of the NPM regime are implemented. We suggest that the implementation is well advised not to proceed in too large steps that run the risk of becoming big mistakes. Here, as in many other fields of reform, a more cautious incrementalistic approach has its virtues.

Annex: The German Higher Education System in Facts and Numbers

Number of Higher Education Institutions in 2008	391
Universities	104
Universities of Applied Sciences (Fachhochschulen)	184
Other	103
Total number of enrolled students in winter 2007-2008	1,941,405
Total amount of Public Expenditure for Higher Education in 2004	€22.6 billion
Total percentage of Public Expenditure on Higher Education in 2004	4%
Total percentage expenditure of Gross National Product on Higher Education in 2005	1.0%
The Annual National Expenditure for Higher Education purposes has grown from €5.7 billion in 1975 to €22.6 billion in 2005.	

Higher education policies are regulated by:

- Federal framework law for higher education institutions (Hochschulrahmengesetz) (from 26.01.1976 to 01.10.2008)
- Sixteen different state laws (Landeshochschulgesetze) regulate the governance of higher education institutions in their jurisdiction

Key actors in the national network governance of higher education:

- Sixteen state ministries for cultural affairs (education, research, innovation)
- Standing committee of state ministers for cultural affairs (Kultusministerkonferenz: KMK)
- Federal ministry for education and research (Bundesministerium für Bildung und Forschung: BMBF)

- Science council (Wissenschaftsrat: WR)
- National joint standing committee for educational planning and research promotion (Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung: BLK); since 1.1.2008 followed by the National joint science conference (Gemeinsame Wissenschaftskonferenz von Bund und Ländern: GWK)
- German agency for research promotion (Deutsche Forschungsgemeinschaft: DFG)
- National association of rectors and presidents of German higher education institutions (Hochschulrektorenkonferenz: HRK)
- Professional association of German professors (Deutscher Hochschulverband: DHV)

Chapter 4
Italy: Local Policy Legacy and Moving to an 'In Between' Configuration

Emanuela Reale and Bianca Potì

4.1 Introduction: Moving to Governmental Reform in the 1990s

The aim of this chapter is to highlight the transformation of the relationship between state and university in Italy following the introduction of autonomy-accountability principles for university governance.

The questions addressed include: how can we interpret the changes in state and university relations in Italy?, or, in other words, what kind of governance model emerged from the reform? Did government policies aimed at reforming the university system break down the existing system of values, norms and practices?, or did they result in slow adaptations to the new environment? (March and Olsen, 1989) Regarding university governance mechanisms, did the policy's legacy constrain reform of the Italian Higher Education system?

In the early 1990s Italy, like many other European countries, began a broad reform process devoted to reorganizing the whole administrative system (architecture, mission, rules, organizational and management models), which involved national and local government and public services as well as schools and universities. The rationale of this reform involved the need to modernize the public administration, to reduce the size of government, to introduce management for results in place of management for process, to establish accountability, transparency and responsiveness as the main driving principles of public management (Bassanini, 2000). The centre-left government, led by Amato and Ciampi (1992–1994) initiated this period of reform in Italy. As the OECD Report outlined, five major governmental policies stand out: (1) reform of the state's intervention in the economy, (2) management and control of the public budget, (3) simplification of the public administration, (4) "reorganization" and management of the legal and regulatory system, and (5) balance between the central and sub-national government (OECD, 2001, see also Rebora, 1999).

E. Reale and B. Potì
CERIS-CNR, Rome, Italy

C. Paradeise et al. (eds.), *University Governance*,

The reform process was further implemented and reinforced by the new centre-left coalition (1996–2001), which launched a general reform of the Public Administration in Italy, with the so-called "Bassanini law" (l. 59/1997). This law decentralized administrative activity following the principle of subsidiarity. The law revised traditional bureaucratic activity, which also affected the higher education system, by enlarging the sphere of action transferred by the State to the universities. The reform also definitively introduced the concept of accountability, as means to guarantee the responsibility and transparency of administrative activity (OECD, 2001).

Looking at the way in which the reform was designed and then applied in the context of the Public Administration, it was noted that law 59/1997 introduced some measures that were part of the New Public Management (NPM) narrative, but only items compatible with the Italian administrative tradition were able to be implemented (Capano, 2003). In accordance with this approach, in Italy the implementation phase of the reform was characterized by a re-contextualisation of NPM concepts and instruments, which were harmonized with existing ones strongly dominated by the principle of legality (law as the basis of the administrative action). So, "the contents and strategy of reforms did not represent a paradigmatic about-turn, but constituted an evolutionary adaptation to external pressures imposed by hegemonic administrative paradigm" (Capano, 2003).

Other authors assume the implementation of reforms largely determined by the features of *regime-type*, affecting the reform capacity of a country (Pollitt and Bouckeart, 2002). According to Ongaro and Vallotti (2008), the Italian regime-type is characterized by a quasi-federal structure of the State, with weak horizontal co-ordination of government and a majority convention in governance, but based on very broad coalitions which make the composition of interests difficult. The culture of governance is highly legalistic, and the possibility of implementing radical, intense, wide and uniform public management reforms is limited. Moreover, the Napoleonic administrative tradition, tending toward uniformity of administrative action, contrasts with the adoption of performance measures. These factors, combined with the low management capacity of the public sector,[1] explained the gap between the rhetoric of the reforms and the effectiveness of their implementation.

We try here to understand if changes in the HE system since the 1990s can be labelled as an NPM shift in government paradigm and if other paradigms emerged, such as the Network Governance System (NG), to counterbalance the push toward NPM. We argue that in Italian Universities there occurred a hybrid path to change, where some NPM ideas were introduced but in coexistence with local practices. Thus we saw strong path dependence rather than overall transformation, and a partial shift from a continental model to a new pattern incorporating some NPM logic. This pattern of change did not pass with the emergence of a network governance

[1] Management capacity is defined by the quoted authors as "the (cumulative) effect of the actual utilisation of management systems (tools), which make the individual public sector organisation more apt … to the organisational environment and more capable of implementing further management reforms" (Ongaro and Valotti, 2008).

model. A large group of traditional and new actors, coordinating their actions through horizontal channels, developing self-steering and self-organizing capabilities, did not come forth, and the state did not assume the role of relationship facilitator.

This work is based on literature related to the steering of the Italian Universities, and on governmental acts (laws and related official documents) which modified the relationship between government and the universities over a 20 year period (between 1980 and 2005). Particular attention is given to funding rules and procedures and doctoral programmes as two indicators of changes in university steering.

The chapter is divided into six parts. The second section describes the relations between the state and the universities in a historical perspective, to better understand the characteristics of the Italian University system. In the third section, the character of the reform process from the 1990s is outlined. The fourth section discusses the change that occurred, on the basis of the most recent analyses of Italy, at national and international level. In this section we highlight how the political legacy affected the application of reform. In the fifth section, we focus on new funding schemes for universities emerging from the 1990s, and their connection to evaluation practice, while in the sixth section university steering is discussed through an analysis of doctoral programmes.

4.2 Changes in the Relations Between the Italian State and Universities – A Historical Perspective

The Italian Higher Education system is organized as a binary system composed of Universities (78 in 2004) and other academic institutions.[2] Universities dominate the HE system in terms of resources invested. They include principally: State Universities (55), some Non-State universities (14) and Polytechnics (3). Universities have different profiles according to age (old or new), size (large, medium and small), location (northern, central and southern Italy), disciplinary specialization (general university, covering all scientific areas *vs* specialized universities, in which resources are concentrated in few disciplinary areas), and history. Although these features shape institutions very differently all universities are regulated by common rules provided by the Government, in accordance with the principle of equality, which assumes the homogeneity of their educational and research capacity. This implies similar governance arrangements a Rector, elected by the professors, and two governing bodies the *Senato*, composed of professors, and the *Consiglio di Amministrazione*, with a mixed composition of professors, student representatives, administrative and technical staff, and external stakeholders.

Universities in Italy are heavily dependent on Government funding (through competitive and non competitive mechanisms of allocation), which represented

[2] HE in art and music, HE in language mediation, higher integrated education, and a few specific fields (e.g. archiving and diplomatics).

67% of total University budget in 2001, and 62.6% in 2004.[3] The role of regional authorities in University organization remains limited. Representatives of local government are included in the *Consiglio*, but this inclusion only rarely produced effective results in terms of funding or institutional innovation, principally when there is a convergence of favourable local economic conditions with the presence of universities boasting innovative organizational assets (such as in Trentino Alto Adige).

Universities interact directly with the Government, but they have also two representative bodies: the Conference of the Rectors (CRUI), which acts as a buffer institution between government and the universities, and the National University Council (CUN), which advises Government on curricula, recruitment of professors and discipline.

In this work we focus on the relations between the state and the universities, which are shaped, overall, through the level of autonomy and responsibility attributed *de facto* by the former to the latter, and by the universities to their internal sub-levels of organization.[4] The concept of autonomy is not a simple one to treat, since it may cover very different meanings. We describe autonomy as the decision-making power given by the State to the university to manage its own affairs (personnel, funding, organization, and internal governance).

According to the "Clark approach", authority may be granted at three main and differentiated levels (Clark, 1983): the basic units (professors, or the collective representatives of professors and peers, such as departments or faculties); the university bureaucratic apparatus and trusteeships, and the governmental political and administrative authorities. Differences in combination of authority's distribution, within the described levels, shape the model of university. The "continental model", which in Europe until the1980s, was characterized by a combination of academic corporation and governmental bureaucracy, while the role of the university-institutional level was weak, because of the absence of trustees and the substantial role played by academic corporations.

Different types of autonomy granted to the universities. The literature (Berdahl, 1990) distinguishes substantive autonomy (such as the power of institutions to determine the content of their activity, i.e. aims, research programs, curricula) from procedural autonomy (such as the power of institutions to define only the instruments for pursuing their aims and programs). Finally, the co-ordination of higher education systems could be described on the basis of the relevance given to the State, the market or the academic oligarchy. In the first case, if the State plays a central role, we can find centralized systems, where Universities are conceived as homogeneous bodies without any autonomy, or, alternatively, the State may play

[3] Other key figures for the Italian Universities in 2003 (academic year 2003/2004) include: €10,474 million of general funding, 1,709,021 students, 164,375 graduates, 54,329 professors and researchers.

[4] Many scholars underlined that university autonomy should be "contextually and politically defined" (Neave, 1988), since it is possible to have a gap between the power accorded by law to the university and the effective room for that power to be exerted.

the role of supervisor, by fixing the general principles for the functioning of the system, leaving the institutions free to regulate themselves (Van Vught, 1993).

Musselin proposed a different approach to studying the relationship between the state and universities, based on "university configurations" aimed at analysing "how three types of collective action – those of universities, the overseeing authorities, and the academic professor – fit and function together". Configurations are a framework within which interdependencies are described, but they are not determining structures, which control the behaviour of their protagonists, nor do they imply a substantive content: they only circumscribe behaviour without prescribing behaviour. This approach assumes the possibility of a high level of heterogeneity in the roles, purposes and functions of academics, universities and the state. The university configurations are subjects of research, which must be based on empirical evidence, to disclose the nature and content of interdependencies which structure a given configuration (Musselin, 2004). The advantage of this approach is that it enables us to understand why countries which share some basic characteristics in the three types of collective action are so different in coordination practices (e.g. there are strong differences between Germany and Italy, although professors in Germany have a position as strong as those in Italy).

4.2.1 The Classical Italian University Model: From 1859 to the End of 1980

The Italian university built its essential characteristics in the period from the middle of the nineteenth century to 1938, through certain government provisions (Capano, 1998; Giglioli, 1979; Miozzi, 1993). The first is the Casati Law of 1859: the university is considered an institution devoted to education of the *élite*, of the future ruling class of the country. Relations with the state were regulated on the basis of a centralized model, and the university had no autonomy at all. Subsequently the Gentile Law of 1929 tried to introduce a certain degree of procedural autonomy within the University by pursuing a policy for the differentiation of universities on the basis of their specific given missions (education, research, professional training). However, the state maintained a strong power of control over the higher education system, but there was an attempt to identify different educational models for diverse kinds of user.

During the 1960s, the Italian higher education system underwent a substantial quantitative expansion in terms of both students and institutions.[5] The same process has been undergone by many European higher educational systems and which led

[5] A few figures are sufficient to describe the phenomenon. The growth of the university students enrolled in the period 1950–1960 was a percentage of 18.3%, the figure for the period 1960–1970 was 136.7%, while in the period 1970–1980 the growth was 37.9%. Furthermore, the ratio students/teachers is 16/1 in 1950, 18/9 in 1970 and 24/2 in 1980 (Capano, 1998).

to a process of institutionalisation of higher education policy (Trow, 1974; Valimaa, 1999; Clark, 1983).

The Government reacted to the phenomenon of expansion by reinforcing existing institutional assets, but a notable enlargement of the teaching component occurred, and this enlargement started to modify the consolidated balance of power within the academic community. While in other European countries new models of organization were experienced to better meet growing social demand for higher education, in Italy, no significant changes affected the relationship between the university and state in facing the problem. In this period all elements of autonomy in teaching activities introduced by the Gentile Law were eliminated, and a completely centralized system of state-university relations took its place.[6]

The 1970s represented the first turning point in European higher education policies. A financial crisis prompted states to enhance the quality, efficiency and effectiveness of universities, and new priorities regarding rationalisation of the existing organization models emerged. The 1970s were characterized by powerful social and political tensions, and by the emergence of terrorism. In the HE system, demands for democratisation and standardisation were accompanied by a further increase in the number of professors.[7] These trends, though calling into question the authority of the academic oligarchy and the governance of HEIs, did not produce substantial structural change. The HE system showed a great ability to avoid change and maintain its key features:

1. The complete identification of the higher education system with the universities, without diversification of institutions to satisfy new higher educational needs. Moreover, the role of the research activity, was confirmed as fundamental for all universities.
2. The absence of differences in academic qualifications in tertiary education.
3. The absence of procedural and substantive autonomy in the universities, justified on the basis of the interpretation given to the basic principle of the equality of rights.

The principal consequences were: (a) the absence of differentiation between universities on the basis of their specific missions and their territorial embedding (Reale, 1992); (b) the assumption that the quality of educational programs offered by Italian universities should be considered as equal throughout the national territory – with an implicit justification for the attribution of a legal value to university academic qualifications; and (c) the absence of efficiency and effectiveness as criteria for the evaluation of both the teaching and research activities.

HE policy in this period concentrated substantially on solving the problem of the status of the teaching personnel, which grew greatly in number during the1970s.

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[6] The De Vecchi Decrees 1071/1935 and 2044/1935 and Bottai Decrees 1269/1938 and 1652/1938.

[7] Demands for democratisation included increased importance of students in the governance of the Universities, the freedom to follow any kind of course irrespective of diplomas of students and new participatory mechanisms in internal decision making.

4.2.2 A Changing Higher Education System: The 1980s

Beginning in the 1980s, some European countries experimented, to greater or lesser effect, with a shift from higher education policies driven by social demand, to market-driven policies, seeking the correlation of educational supply to the needs of the economic system (Goedegebuure, 1993; van Vught, 1993). The change in higher education governance consisted in giving procedural autonomy to the universities, while the state retained the power to determine the objectives, constraints and incentives which conditioned the room for manoeuvre left to the higher education institutions.

In Italy this process came forth, but brought with it some contradictions. The country ended a phase that had been characterized by the incapacity of the state to introduce a general reform of the higher education system. Decree n. 382/1980 established some important novelties to university organization, aimed at giving a certain level of procedural autonomy, but it was again unable to define structural changes in the higher education system (Capano, 1998; Moscati, 1991).

The mechanism for the assumption of university professors and researchers remained centralized at state level. The only governmental advisory body for higher education policy was the National Universities Committee (CUN), whose members were elected by the professors, and represented the disciplines and not the universities. These features confirm the so called "corporation principle" which conditioned relations between the State and the universities in Italy: a powerful control of the State over the university budget alongside the substantial power of the professors, who organized themselves as an inter-institutional, horizontal corporate body (the so called *baroni*).

The governance of higher education in Italy remained linked to the "continental" model elaborated by Clark (Clark, 1983): rigorous centralisation of power in the hands of the state, which retained formal control over funding, the status of personnel and their careers and the curricula. The power of the national bureaucracy (which handled legal control over administrative procedures) comes with the absence of any authority granted to the University level, and with the weakness of the intermediate levels within the universities (faculties for co-ordinating the different disciplinary areas, and the departments for management of research activities). As many analyses pointed out, universities were dominated by professors, who had under their control the whole organization of the primary functions of the institution, that is education and research (Giglioli, 1979; Clark, 1977; Moscati, 1993; De Francesco and Trivellato, 1985; Benadusi, 1997), and used this power to augment individual privileges of the academic profession.

This asset of academic power was a common experience in European countries. The Italian peculiarity is the persistence of this model over 20 years, and the absence of structural changes in the face of important transformations affecting the social and economic demand on higher education (Capano, 1998). The compromise between central bureaucracy and the academic guilds composed of professors did not end with the standardisation of the university, even some factors of change may be identified:

– The increase in the number of professors and the establishment of different levels in the academic career, with the professors at lower levels asking for a representation on the university governing bodies. This implied further fragmentation in the distribution of power.
– The addition of students' representatives to university governing bodies, as well as representatives of trade unions, who are supposed to work to limit the power of professors.
– The scarcity of resources given by the State to the universities, which have to cope with a growing demand for higher education.
– The subsequent reduction in the productivity of the university system (in terms of the ratio between students enrolled and students graduating).

The aforementioned elements contributed to erode the institutionalized norms and practices, considered by a growing number of professors, stakeholders and policy makers as inadequate to the changing environment. The concept of autonomy as new principle for regulating this relationship emerged only in the second half of the 1980s, and it was introduced for the first time with Law no.168/1989.

4.3 The Turning Point of the 1990s and the New Autonomy-Accountability Principle

If the 1960s and 1970s were characterized by the phenomenon of "standardisation" in higher education, which added force to a deep transformation of the system, changes in the 1990s were mainly driven by efficiency-effectiveness principles and by the social demand for a greater accountability of universities. The importance of institutions' autonomy and flexibility improved, enhancing the competition amongst them. Major trends identified were: heterogeneity of mission and functions, decentralisation of responsibilities and (sometime) powers and marketing. The State tended to modify its position by assuming steering from a distance "setting the legal and financial boundaries and using instruments of quality control" (Enders, 2000).

4.3.1 The Reforms of the 1990s

New values, norms and practices emerging at the European level, as well as overcoming reduction in State funding and the substantial enlargement of the HE system,[8] produced an effect even in Italy. Law 168/1989 passed, introducing important structural changes

[8] A few indicators show the quantitative change in HEIs: in 1980 University R&D expenditure was €842 million (1995 prices), the number of professors 42,033 (full time or equivalent) and the ratio Student/Teacher was 26/7. In 2000 the quoted figures were, respectively, €3,361 million, 55,230 professors, 33/7 students per teacher (source: Istat).

in the higher education sector in terms of the distribution of authority, the degree of autonomy of the institutions and mechanisms of co-ordination.[9] Firstly, the establishment of the Ministry for Universities and Research (MURST, later becoming MIUR, now MiUR), as the principal State authority for governing and funding the national research system; secondly, the acknowledgement of the autonomy (procedural and to a large extent substantial) of the universities which should go with the setting up of an evaluation system. Thirdly, important spheres of power remained in the hands of the state, such as the design of the rules for staff recruitment, status and salaries, the contents of the national curricula and the discipline for doctorates, several constraints on the possibility of attracting external resources (i.e. a ceiling on tuition fees), as well as on the power to decide limits on access to degree courses.

The reform was fundamentally supported by the desire to make the university system more flexible and competitive at both national and international levels, thus starting a new phase in higher education policy. Political debate emphasized the need for regulatory reform in Italy, and informed Law 168/1989 as well as the reforms of the1990s aimed at breaking the previous status and public administration.[10] The government considered substantial autonomy and accountability the instruments to achieve those aims. However, limitations on the realisation of complete autonomy served to reassure the academic oligarchy that some fundamental features of the system (collegiality, bureaucracy) would not be threatened.

Law 168/1989 did not immediately produce effects, because its internal ambiguity regarding the scope of power transferred to the universities, because of the absence of a specific regulation circumscribing the room for action left to Universities, and because of the resistance it met from the administrative bureaucracy and professors to its implementation (Cassese, 2000). Despite the likelihood of resistance, both external and internal factors forced changes. Such external factors as the Bologna process drove universities to modify curricula, by differentiating them according to existing educational needs, attempting to eliminate dropping out and reducing the number of students not graduating promptly. Internal factors include the fact that HEIs were progressively more involved in European programmes for research and student mobility, with substantial improvement of the internationalisation process in some disciplinary areas.

In the mid 1990s new rules provided for the implementation of Law 168/1989. The budget laws for 1994 and 1996[11] defined the basic discipline of university

[9] The initiative was taken by Antonio Ruberti, a University professor who acted as Minister for Universities and Research in two left-of-centre government coalitions led by Ciriaco De Mita (1987–1989) and by Giulio Andreotti (1989–1992) respectively, and who greatly influenced the HE reform process.

[10] Some authors spoke of the "fortuitous" approval of law 168, being due to a "favourable political conjuncture, with the opening of a policy window which a policy entrepreneur … was able to capitalise on" (Capano, 1999).

[11] L. 537/1993 and l. 549/1995.

financial autonomy. These provisions established the responsibility of universities for the allocation of resources given by the State (a change from line-item budgeting to lump-sum budgeting). Furthermore, the universities became responsible for decisions over the composition of its teaching personnel (the number of teacher needed, qualifications requested, distribution by professional level and recruitment policies). The State pursued the effectiveness of autonomy-accountability with a new entity, the *Osservatorio* of the Universities, responsible for the evaluation of both teaching and research functions, and by the establishment of "Units of Internal Evaluation" within each University whose aim was to provide cost-benefit analyses to assess the efficiency and effectiveness of university teaching and research expenditure. Although, these provisions implied a limitation on organizational autonomy, the universities remained free to determine the composition (which competencies, which members and how many) and the positioning of the Units within the internal organization.

Osservatorio tried to develop the assessment of the Universities by applying quantitative parameters for measuring the functions performed. Some authors underlined limitations affecting and reducing the effectiveness of its activity. First of all, *Osservatorio* was in charge of evaluating the whole University system, without commitment to the evaluation of individual institutions (Finocchi and Mari, 2000). Secondly, evaluation was not conceived as a means of enhancing competition among universities, or as an instrument for steering the system, but as a way of improving awareness and knowledge of the results obtained, basically ineffective in terms of modifying of the behaviour of protagonists (Boffo and Moscati, 1998).

Reform of the universities was further implemented at the end of the 1990s. Two different levels of degree (*Laurea* and *Laurea specialistica*) were introduced, as well as a revision of the contents of curricula, definition of the credit system along with the Bologna process, the provision of minimum standards requisite for the activation of each course, and regulation of doctoral courses.[12] Recruitment of professors was decentralized to university level. Furthermore, the *Osservatorio* for the evaluation of universities was transformed into a National Committee for the Evaluation of Universities (CNVSU),[13] a technical organ attached to MiUR, in charge for the evaluation of the higher education system. Government rationale held that evaluation should become a compulsory duty for universities, which should, on the one hand, accomplish evaluation procedures set up by the CNVSU (i.e. student satisfaction, Ph.D. course assessment) on the basis of a top-down approach, on the other hand, universities ought to adopt internal schemes for assessing the efficiency of both teaching and research activity and results. The CNVSU mission was clarified in many respects. In each university a *Nucleo di Valutazione* (NUV) was established, replacing the Units for Internal Evaluation, both for overall performance assessment as well as supplying data, information and analysis to the CNVSU. Universities were committed to modifying their Statutes to

[12] L. 127/1997.

[13] L. 370/1999.

comply with their obligation to introduce this new body into their organization. Administrative responsibilities were largely transferred by the central administration to universities for their internal management.

The rationale of these regulations was deeply influenced by the NPM narrative, where State rhetoric stressed the need for universities to develop their management capacity towards efficiency and effectiveness in the use of public resources, to become more entrepreneurial to win resources from external sources of funding, to attract students, and to competitively provide services and knowledge useful in economic and social development. Meantime, those powers remaining with the State (i.e. rules for recruitment, salaries of the professors, ceiling for tax on students and for the expenditure on personnel, and basic rules for the HEI's government bodies) were not transferred to the universities, and inadequate additional financial resources support the reform process. Thus, government action tended to further limit the organizational room for manoeuvre of universities, and relations between the two remained more linked to a command and control policy scheme than to one of self-regulation as would have been expected. Resistance to reform came not only from academics (see Section 4.4) but also from the State, because the paradigmatic about-turn in the way public authorities were organized and in their culture did not occur.

4.3.2 The Twenty-First Century and New Steering Instruments

In the first years of the twenty-first century, the new right centre government led by Silvio Berlusconi (2001–2006) reinforced this last tendency. The NPM discourse was strengthened, with a forceful request for efficiency, effectiveness and accountability, as well as the market orientation of universities. An external drive profoundly affecting government decision-making was the launch of the Lisbon strategy, the 3% Action Plan, which supplied the rationale for further policy implementation. More recently, the elaboration of international university rankings affected both the government and HEIs, by increasing competition for visibility abroad.

Formal links between the performance assessment of teaching activities and resource allocation have been settled upon.[14] The funding model was transformed, new regulations for connecting university performance in education with funding[15] established, and new competitive instruments for research funding introduced (see Section 4.5). All universities and public research agencies were subject to the first National Evaluation Exercise for Research (VTR), launched by the Government, and managed by the National Committee for the Evaluation of Research (CIVR). Following the example of other European research assessment systems, the Government's aim was to draw up a new, robust, general assessment of the quality of each disciplinary

[14] Decree 115/2001.

[15] Decree 165/2001.

area, as well as ranking institutions according to a scale of international excellence. The results of this exercise, which ended in 2006, were supposed to influence the Government's funding allocation, as well as providing information for the further structuring of research evaluation. However, its impact on resource allocation was modest.

Further, the minimum standard requirements for courses were revised,[16] and a set of rules was established for the formulation of a university 3-year plan.[17] The possibility for universities to obtain core funding from the state now depends on the government's positive judgement of the plan. Also, the authority to recruit personnel is linked to acceptance of the plan's provisions, and is subject to a specific budget constraint: the total cost of university personnel should not exceed 90% of the General University Fund total.

To summarize, policy rhetoric stressed the introduction of managerial principles, but all the reforms embarked on by government in this period reveal a position in which the state wants to play the role of controller of public action rather than that of supervisor or facilitator. A model for steering at distance was not in place, and there emerged a trend toward the restoration of centralized powers with a top-down approach in relations with the university system. The attempt at centralization entails Government more in improving means of ex-ante control (standards and minimum requirements) than pursuing effectiveness of ex-post evaluation practices.

4.4 National Policy Legacy and Changes in Governance Mode

Despite the implementation of the reform policy, from the 1990s the effectiveness of the autonomy-accountability principle remained weak.

On the one hand, from the mid-1990s, the university acquired new room for manoeuvre, i.e. the choice of curricula content, credit attribution to attract external funding, determination of research programme content and internal allocation of financial and human resources.

On the other, inconsistencies in government policies did not result in significant differentiation between the universities in terms of mission, organization and governance, but only slow adaptation to the changing environment. Inconsistencies included: (a) the decentralisation process, which excluded important aspects of the academic regulation, (b) the set of incentives implemented by the Government to steer the university behaviour, and (c) the effectiveness of evaluation outcome on resource allocation.

Moreover, these uncertainties did not characterize one government. On the contrary, despite changes in governmental coalitions there is clear continuity in the minimal capacity of the state to implement what it decided. This feature, which

[16] Decree 15/2005.

[17] Law 43/2005.

contributes to shaping the Italian University configuration, can be explained by the permanence of the strong influence of the academic oligarchy, and by the lack of adaptation of the administrative and political protagonists actions to the new principles and rationale, which are the content of the NPM reform.

Some empirical controls have been carried out on the basis of the University Statutes approved following the introduction of the new regime of autonomy (Finocchi, 2000; Fassari, 2004). The Statues are mainly devoted to designing the internal system of government of the universities, the distribution of power and competence among different organs, and the basic rules for internal performance assessment. The analysis of contents shows that both the decisional processes (government bodies, nomination to high level positions, and criteria for the election of the faculty heads and of the departmental directors), and the structure of organizational areas (autonomy of the basic units, evaluation systems, and external relationships), are characterized by a high level of compliance with the government model recommended by the state (vertical isomorphism), and by imitative processes between different universities (horizontal isomorphism), which generates strong homogeneity of the Statutes (Fassari, 2004, see also Powell and Di Maggio, 1991). It was argued that this result depends partly on the legal constraints, which determined some compulsory content to the Statutes (Cassese, 2000). The same author emphasized also that the room for manoeuvre of universities – which comprises all items not regulated by the State – is significant. Thus, the scope for autonomy left to the universities was large enough, and the Statutes could, if properly designed, represent a useful means to the end of university differentiation.

However, breaks in continuity from the past, in terms of diversification of functions and organization, can be detected (Fassari, 2004). The students' representative and researcher components in the government bodies were strengthened, the *Consiglio di Amministrazione* (Administration Board) and NUV often include the participation of stakeholders or external members the NUV's position and role within universities was definitively institutionalized, and new organs (TNO, ILO, etc.) were created to facilitate the exercise of those new functions transferred to universities (monitoring, relationships with society, technology transfer, evaluation of research results, professional training, students services, etc.).

Nonetheless, a series of provisions regarding decision-making mechanisms and internal organization are lacking (decentralisation of power to the internal basic units, self evaluation processes based on autonomously established procedures, integration of specialized competence and specific tools for university management). The analysis, developed on the basis of a sample of statutes, to better understand the characteristics of internal governance (Paletta, 2004), highlighted the functional specialisation of the two principal governing bodies, the *Senato Accademico* and the *Consiglio di Amministrazione*, the former representing, mainly, academia, the latter the stakeholders.

In practice, a large scale isomorphism in composition and functioning of the two bodies may be observed, as well as growth in the complexity of university management, and the need for more effective co-ordination, to reduce the overload on central

decision-making. Furthermore, innovative models of governance appeared in rare cases. They tended mainly to reduce the number of components of both the *Senato* and *Consiglio*, or, in other cases, to initiate experiments for decentralising power, or for forming a model based on a network of different disciplinary branches of the universities.

Basically however, the majority of universities did not introduce substantive reforms of governance. The evidences collected revealed the prevalence of a position of compromise by universities in their relationship with the state, together with a limited capacity or, in some cases, willingness to assume a central and proactive role in the market of knowledge production (Mari, 2000; Fassari, 2004).

As regards the teaching courses, the aim of the reform was to support diversification of educational programmes to meet different user requirements. However, it has been noted that universities applied the new provisions by greatly enlarging their educational supply, and by avoiding two essential requisites: transparency for applicants (information about what to choose) and real competition among institutions (deriving from the absence of external pressure). In this case, internal decision-making tends to reproduce "the distributive mechanism", which is one of the key features of Italian universities (Capano, 1999).

Some authors (Luzzatto and Moscati, 2007) consider different factors negatively affecting the reform of teaching courses: the "elitist attitude" of the academic staff with respect to tertiary education, which impeded genuine transformation of the courses; the lack of experience of academics in the collective design of curricula; the lack of co-operation between disciplinary fields; the continuance of a professional comportment based on "reciprocal non-interference"; and, last but not least, the absence of an institutional framework able to support the reform process.

The State intended to introduce the NPM model also through funding policy, but even in this the effectiveness of results obtained was unsatisfactory (see Section 4.5).

A final point should be made about characteristic of relations between the state and the universities in Italy that is the role of networks as a potential vehicle of policy change.

Since the 1990s, the State has acted to retain control of certain key aspects of the academic profession (recruitment, levels of salaries, and incentives), and it university autonomy in determining the content of curricula through the provision of minimum standards for activation of any course. This power is centralized in the MiUR, and there are no bodies to which government delegates as an intermediary to put policies into action. Only evaluation activities were granted to specialized committees (CNVSU and CIVR), which assumed different roles.

While the former operated as a government technical body for university assessment (by providing studies, analysis, reports, monitoring activities etc.), the latter interacted between the State and the universities as an intermediary organ, trying to mitigate the possible negative effects of the Government's top-down approach. This behaviour was evident when the Committee elaborated guidelines for research evaluation (CIVR, 2003) and in the starting phase of the VTR. In both circumstances, CIVR carried out wide consultative processes with many

organs,[18] to harmonize their varying needs and demands with the Government's aims. The result was successful. The universities' acceptance of the VTR scheme was a key factor in permitting the development of the national research evaluation process.

Other bodies played buffering roles between state and the universities: CUN – as the representative of the universities disciplinary fields and, indirectly, of professorship interests; the National University Students Committee (CNSU) – as the advisory body of the students; and the Conference of Rectors (CRUI) – which assumed a leading role in representing the institutional university position on problems related to academic life.

The importance of CRUI, increased over the period under consideration, and its activity was generally devoted to maintaining the sphere of autonomy given to the universities by influencing the contents of the legal provisions under the control of the state and by assuming, in matters such as evaluation, a leading position at the cutting edge of CNVSU. Anyway, the actors handle a government power for steering the higher education system. Thus, horizontal co-ordination that might characterize the evolution in terms of networking does not seem to come forth in the governance of the higher education system, even if traces of a trend towards "shared governance" may be detected within the internal organization of some universities (Minelli et al., 2005).

Also, local-government, the regional authorities, and external stakeholders, did not, in most cases, play a substantial role in the emergence of the new paradigm of university governance. Their actions were in some cases relevant within universities, for collaboration, funding and networking with institutions, but their influence did not seem to be a force of change in the higher education system.

To summarize, in Italy reforms were driven more by ideological than by changes in the constellation of power of the protagonists. The effects of reforms were not as important as they were intended to be, because the state did not cede power and responsibilities linked to key aspects of the higher education system, but adopted an "in-between" solution in applying NPM principles that, on the one hand, impeded the creation of a quasi-market environment, and on the allowed professionals in higher education to maintain most of their privileges and sphere of influence.

If we look at the events of the last 10 years, we note a powerful dynamic of push and pull in relations between state and universities. The former tried to push toward a rationalisation of the system expecting the HE system to deliver key social and economic goals as part of public policy, but its activity was characterized by numerous contradictions. The latter resisted state steering, trying to maintain their room for manoeuvre and their traditional organizational model. The consequences are: (a) the higher education system is still identified with the universities, and there is not yet a differing range of institutions operating at the tertiary educational level;

[18] Consultations were carried out with CUN, CRUI, with a large number of universities, with representatives of the main public research agencies, associations of industries, and other stakeholders. After the Miur decree, which launched the VTR, CIVR enters in touch with each university for other consultations on aims, structure and practical aspects of the evaluation exercise. The results of these consultations impact the subsequent Committee directives for the VTR development.

(b) the mission of Italian universities is the same for all the institutions; (c) specialized profiles of activities related to different institutional functions (education, research, professional training, and a third mission) did not emerge; (d) the legal value of academic qualifications persists, and is equal, in its effects, throughout the national territory, whatever the qualitative level of the university; (e) the rules for professorial recruitment are established at the central level. Thus, policy legacy has proved a serious restraint on setting up the new government paradigm.

In the meanwhile, changes in internal organization occurred in some Universities. Empirical evidence highlighted cases where institutions experimented with innovative management models, an evaluation process of teaching and, more recently, research being institutionalized (Minelli et al., 2005), and the strengthening of the leadership rectors (Turri, 2005). Some Universities showed a capacity for self-reform in answer to different *stimuli* such as, international and national competition, external target-setting, and an emerging managerial and professional culture (Azzone and Dente, 2004). In these cases, the university became a relevant organizational level in setting up strategies, choosing alliances and networks with other bodies, implementing policies and, lastly, organizing collective resistance to external intervention.

However, such changes occurred in a few universities, where a combination of internal factors (leadership, strategic governance, and the interdisciplinary and international attitude of the scientific community) and of environmental context (local government playing a key role, strong international connections) were favourable to transformation, permitting a move away from the continental model. More generally we see only slow adaptation to comply with the new rules which leave, almost intact, the existing system of ideas, practices and habits. The presence of such "proactive" universities demonstrates the existence of a growing number of professors within the academic community that does not feel comfortable with the existing system and wants it radically modified.

Thus, a forceful role for the State, through coherent policy design and an enduring political will, is vital to sustain and accelerate the path to a new paradigm of governance (Ferlie et al., 1996). Apart from coherence and continuity, another feature of the national higher educations system seems to be the lack of trust[19] between the state, as regulator, and the universities, as regulated units. Thus, the implementation of means (such as, the Three-Year Plan for University development) suited to state-university interaction, could be a method bridging gaps between the two.

4.5 Tracer Issues

NPM within the higher education system implies a push toward the modernisation of university management, based principally on the transformation of funding rules in accordance with the autonomy-accountability principle. Various higher education

[19] In this case we refer to norm-based trust, such as shared values and norms supporting collective actions within uncertain environments (De Boer, 2002).

funding methods have been applied in different countries: input based, output-based, performance-based, contract-based, etc. According to the steering models adopted by the country (state-supervised model or state-controlled model), we find diverse effects of funding on university autonomy, which depend on the context in which the university operates, and is conditioned by the nature of the autonomy (Neave and van Vught, 1994).

We will now discuss the government university-funding model (Section 4.5.1) and then the research-funding (Section 4.5.2), because, they are related, they follow different rules and reform processes.

4.5.1 The Government Funding Model

The new funding rules for the universities were introduced for the first time in 1994. The law[20] established four funding channels with differing aims: the *Fondo per il finanziamento ordinario* (FFO) for general university funding,[21] the Building Fund (FEU) and the Fund for the Development of Higher Education (FPS). Finally, a specific competitive fund was devoted to university research projects of national relevance, presented by the professors (PRIN).

The goals of the new system can be summarized in the following items:

(a) A shift from line-item budgeting to lump-sum budgeting to guarantee the simplification of administrative activity and greater room for manoeuvre for the universities.
(b) The establishment responsibility of universities for the budget covering their expenses, including the cost of personnel. Prior to the reform, universities asked state authorisation for recruitment. Following authorisation, the State transferred financial resources to cover the additional cost of new personnel. The reform modified this, with the university becoming responsible for ensuring that the budget covered all expenses linked to their decision-making, the cost of personnel included.
(c) The transfer of financial resources from the state to the universities on the basis of parameters linked to educational and research activity in accordance with a "formula" funding model.
(d) The provision of a mechanism for balancing the existing unequal distribution of FFO between universities, on the basis of their effective costs (*quota di riequilibrio*).
(e) The introduction of incentives for the accomplishment of priorities and objectives determined by the Government.

[20] L. 537/93.

[21] FFO accounts for approximately 90% of the resources transferred from the state to the universities, but this ratio has tended to be reduced in the last three years. At the same time, a growing ability of universities to attract external source of funding emerged.

The model involved a large number of participants (MiUR, NUV, CNVSU, University government bodies, other internal bodies), with differing levels of commitment in ensuring the accountability of the allocation process. The buffer organizations (CRUI, CUN and CNSU) play a key role, for they have a set of advisory tasks in representing different interests existing at university level: decision-makers, academic staff, and students.

The aim of the new system was to enhance university competition, by guaranteeing to all institutions the same initial opportunities (through the *quota di riequilibrio*). Evaluation was the means to guarantee quality. It should produce internal feedback (in terms of self-evaluation capacity and *moral suasion*) and an external feedback (in terms of resource allocation, rewards and penalties).

An initial assessment of the effects produced by the new funding system, carried out by the CNVSU in 2003 (CNVSU, 2003a) identified some weak points.

First of all, adequate financial resources were lacking. The introduction of evaluation procedures to be linked with resource allocation required the availability of growing funds to sustain both the physiological enlargement of the higher education system, and the introduction of incentives schemes. Table 4.1 shows that the FFO remained stable in nominal terms, and this circumstance influenced the effects produced by the new funding system as well as the way in which it may be evaluated.

Second, the national objectives linked to special incentives changed too frequently, and institutions did not have enough time to adapt their behaviour to the new priorities (Osservatorio, 1998; CNVSU, 2003a).

The rationale for the Government's implementation of the funding system was the construction of a quasi-market environment in the higher education system. Some fundamental requisites were identified by the CNVSU to this purpose: the introduction of mechanisms for the accreditation of degree programmes, the client's guarantee of choice between different producers, the producer's autonomy in combining different production factors, the establishment of a standard cost for students, which aids the student's choice between various educational service providers (Catalano, 2003). These requirements were not guaranteed.

Some problems were highlighted: the legal value of the higher education degrees, which guarantees the equal value of the degree even in the presence of differing institutional performance, uncertainties over public-private competition rules, student mobility, the absence of an intermediary body, which can represent the client's demands and which can act as a counterpart *vis-a-vis* supply institutions.

Table 4.1 The FFO in Italian universities from 1994 to 2003 (Mur-CNVSU)

	1994	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*
Total	3.548	3.699	4.670	5.065	5.273	5.402	5.743	6.042	6.165	6.215
Yearly variation		151	971	396	207	129	342	299	123	50
Percentage of yearly variation		4.3	26.3	8.5	4.1	2.4	6.3	5.2	2.0	0.8

(Million euro, current price)

The revision of the State funding model was one step toward the quasi-market goal (CNVSU, 2004). The funding "formula" for the FFO allocation was modified as follows:

30% of the FFO should be transferred on the basis of existing educational demand (students enrolled and their characteristics).

30% depends on the results of the educational process (credits acquired).

30% is linked to the evaluation of university research results.

10% is linked to special incentives.

The CNVSU document, delivered as a result of a specific government commitment, on the evaluation method for research results, was based on the definition of the research potential of each university (quantitative estimation of the "active research personnel"), to be weighted using the PRIN success index (see Section 4.5.2), and then corrected utilising the value of university receipts deriving from external sources of funding. A further proposal was made to combine this method with the results derived by the VTR, but the effectiveness of the new system is still low in terms of the amount of resources allocated over total Government funding. Moreover, the effectiveness of the 'formula' was limited to a small quota of FFO, that is the amount exceeding the historical financial transfer from the state. These uncertainties imply low transparency of overall reform aims, and the difficulty of the university in understanding how the system will effectively evolve. As an unintended consequence, the universities tended to assume adaptive behaviour to avoid cuts in their resources. This means that accomplishing the model requirements was perceived as a bureaucratic fulfilment, with no need for substantial changes in the universities' decision-making.

4.5.2 The Funding of Research

One of the changes introduced in Italy in the 1980s[22] was a specific budget for university research activity. This budget was composed of two different percentages, aimed at creating a dual support system. One percentage, 60%, was transferred to the universities as basic rate for research funding. Universities allocate this amount among all the disciplinary areas according to their importance. The second ratio, 40%, was devoted to funding research projects of national interest, proposed by the professors, singly or in collaboration with other colleagues from the same university, and/or from other universities.

After the reform of 1997, the system was modified. The 60% was included in the FFO, and the 40% was transformed into a competitive fund called PRIN, which represents the general method for funding university research, given the low level of the internal resources and the differing ability of disciplinary areas to attract external funds.

[22] Decree 382/80.

Table 4.2 PRIN (1997–2002) (MIUR- CNVSU)

	1997	*2002*
Funding requested by the applicants[a]	270,000	400,000
Funding assigned by the Committee[a]	75,000	140,000
No of proposals submitted		
Inter-university	*1,450*	*2,200*
Intra-university	200	240
Projects funded	450	850
of which interdisciplinary	*110*	*290*
Participation index[b]		26%
Success index[b]		45.5%

[a]Thousands euro

[b]1998–2001 medium value

PRIN discipline was aimed at improving the autonomy-accountability of the higher education system, by putting at its core the ex-ante evaluation process for proposal selection. Before 1997, special disciplinary CUN Committees were in charge of selecting proposals, and funds were assigned on the basis of the distributive principle: low amount of funds for almost all applicants (the so-called "raining funding").

The evaluation process in the new system is charged to a special Committee, which selects anonymous external referees for assessment of proposals, and allocates funds on the basis of the referees' judgements. A percentage of 42% of the total annual PRIN amount available is granted to the best proposals from each disciplinary area. The other 58% is allocated on the basis of a general ranking list of all proposals. The contribution accorded to the winners is a share of the project cost: 50% for intra-university projects, 70% for inter-university projects. Table 4.2 shows the growing importance of the PRIN in the last 6 years (1997–2002) in terms of the number of projects presented (CNVSU, 2003a).

The ratio of projects approved over the total submitted, as well as the ratio of funding assigned and requested, reveal that the new evaluation procedure ensured the selection of the proposals and, as a consequence, the springing up of competition among universities.

Some other interesting phenomena may be observed, confirming the above mentioned points:

- The percentage of interdisciplinary projects grew significantly in the period under consideration, particularly in certain disciplinary areas (biology, medicine, chemistry) and probably as a result of the rule which rewards interdisciplinary applications.
- The participation index (number of applicants/persons who can participate) and the success index (number of applicants funded/number of applicants) confirms the selectivity of the evaluation process, in a context that seems characterized by weak participation in the competition. In any event, selectivity (in terms of projects accepted) is rather lower in 2001 than in 1997.

– The participation index shows limited differences between universities (45 universities out of 61 have an index between 20% and 30%). The success index, on the contrary, shows greater differences between universities: from 60% to 40%.

In order to understand these figures, it is necessary to take into account two basic characteristics of PRIN:

– Proposal selection is not driven by priorities or specific themes indicated by the government, but derives only from the evaluation process. Thus, results are conditioned by the size of the academic community in different disciplinary areas, by the ability to obtain other funding (from university or other sources) to co-finance proposals (co-funding capacity), and by the amount of funding reserved to each area.
– PRIN applicants can also participate in other national selections for project funding. In Italy, there is another Government instrument, the FIRB – Fund for Basic Research, which also supports free project proposals presented by individuals and which are evaluated individually in order of presentation. It has been estimated that in 2002 over 3,500 professors participated in both the competitions (PRIN and FIRB) and about 40% were funded through both instruments, for very similar project proposals (CNVSU, 2003a).

To summarize, PRIN is operating as a mean for realising the autonomy-accountability principles in the higher education system, enhancing differentiation processes among universities. The weakness of the instrument results mainly from the low level of available funds[23] and the lack of co-ordination with other funding instruments which could undermine the results of the evaluation process. Both the cited weaknesses reveal that the will of the state to steer the higher education system came with investment inadequate to existing demand, and with some uncertainty over the rules of the game, which produced great distortions in the effectiveness of the reform results. Universities, in fact, reacted rationally putting in place opportunistic behaviour.

An additional point higher education institutions have been encouraged to seek alternative sources of funding because it is generally considered one of the best guarantees of institutional autonomy. Even in Italy this process is going to be strengthened. Figures on Italian university research budgets by source of funding, show that in 2003 the share of research funding coming from MiUR is 26%, PRIN included, and from the universities internal allocation 21%. That coming from external sources, namely the European Union, public research agencies, and other public or private bodies, is 47%.[24]

[23] In 2002 and in 2003, PRIN covers a share of 2% of the total Government funding to the universities.

[24] CNVSU data. In 2001–2003 funding from the EU represented 10% of the total research budget, and 24% came from external sources. The quoted figures outline the growing importance of internationalisation for the Italian HEIs (CIVR-VTR data).

The experience of other countries shows that the effect of funding on university autonomy depends on the context in which the university operates. In some contexts, government funding causes less interference than funding from industry or student fees (in the UK for instance), and "the good will of government, shown in releasing unnecessary regulation for universities, can be more decisive than the matter of funding in enhancing university autonomy" (Li-Chuan Chiang, 2004). Diversifying the funding base by attracting money from external may not have an effect on university autonomy in a state-controlled system as directly as in a state-supervised system. There is no strong evidence in Italy on how the ability to attract external resources impacts the autonomy of institutions, but the imperfect realisation of autonomy could undermine positive effects, leaving the potential for unintended negative consequences[25] originating in the growth of the share of external funds outlined by the economic literature (Geuna, 1999).

4.6 The Steering of Doctoral Programmes

The second indicator for exploring the steering model of the Italian higher education system is doctoral courses. The doctorate, as a post-graduate educational level for the training in research activity, was introduced in Italy great delay in comparison with other European countries.

The first regulation came in 1980 (l. 382/80), and the cycles begun in 1983. The general aim was to improve the scientific education of the graduates by training them in research activity.

Regulation was modified in the 1990s (l. 210/1998) in accordance with the autonomy-accountability principles which informed the reform process of the higher education system, and also in step with the reform of primary academic degrees, which were split into two levels (*Laurea* – 3 years, *Laurea specialistica* – 2 years, Ph.D. – 3 years). A new vision emerged, which signalled, as a general aim of the doctorate, not only training *for* research, but also training *through* research, to develop competence also for work other than in the academic profession.

The organizational model selected by the Law of 1980 conceived the doctorate as a course divided between educational activities and seminars. Doctoral students should also develop a research programme and publish their results. However, no dominant model was applied in Italian universities. The autonomy of the institutions in organizing doctoral courses was very broad, and in some cases doctorates were organized as a period of research activity on specific selected themes, without any educational activity. The two models (with and without education) are very different in their objectives and attainments, and also in the number of participants. While in

[25] The unintended consequences observed by Geuna are: concentration of resources, short-term research endeavour, conflicting incentive structures, and cumulative and self-reinforcing phenomena (Geuna, 1999).

the first case we found a large number of participants, the second model might also be directed to a single participant. Available data on the number of doctoral fellowships suggest that the first model should be the prevalent one in the Italian experience (CNVSU, 2004c).

The 1988 reform adopted the course model *Osservatorio* elaborated some criteria for the doctoral programme assessment, established minimum requirements for each course (professors, structures, competence, collaboration with external bodies for the students *stages*, and the prevailing commitment of the student to research activity) and the evaluation procedure.

In 2002, CNVSU carried out the first evaluation process on the basis of the NUV Reports. The analysis of data and information show a large fragmentation of courses between areas and disciplinary sectors (in 2002 there were 1,124 doctoral courses and 5,354 fellowships distributed among 67 universities). This means that universities used their autonomy to organize courses by applying the same distributive principle among disciplines which informed the whole reform of the educational activities.

The participation of external agencies in funding courses was modest, except in certain areas; the number of foreign students and agreements with foreign universities or local agents were sparse. The principal characteristic was wide differentiation of courses (teaching activity, amount of resources, infrastructure for research, number of professors involved, collaboration, and scientific productivity of the students), and the low capacity of courses to attract students from other universities.

CNVSU recommended universities assume a different role, become more responsible for the organization of the doctoral courses, and develop evaluation procedures on their outcome. It also suggested seeking external sources of funding, and improving both collaboration with other universities and student mobility. Finally, the Committee suggested the creation of doctoral schools to prevent fragmentation of courses (CNVSU, 2002; Ratti, 2003; Schmid and Stefanelli, 2003).

In 2003 new criteria for the Phd funding were established,[26] which linked the transfer of resources to certain parameters: existing potential demand for doctoral courses, the number of doctoral recipients in any given year, and the consistency of NUV Reports with MiUR recommendations (CNVSU, 2004c). The subsequent evaluation exercise revealed a general attempt to adapt Ph.D. courses to the suggested priorities, but results were not significant in overcoming the fragmentation of the courses. Data show that, in the Italian universities in 2003, there were 2,100 doctoral courses, with 1,660 different titles, of which 34% did not meet the MiUR minimum requirements. This, basically, was due to the fact that many Universities avoided Government recommendations, by putting into action reform, without addressing substantial change. On the other hand, the NUVs' commitment to evaluation was substantially improved, because of important action taken by the CRUI to stimulate the universities to the quality of educational supply at all levels (Fondazione CRUI, 2003).

[26] Decree 301/2003.

Another reform was passed in 2004.[27] A decree gave universities the possibility of creating doctoral schools on a voluntary basis, and provided specific incentives for their start-up phase.

Italy experienced few cases of doctoral schools (five cases), which presented different features.[28] Apart from the adopted model, some common aspects of the existing Schools have been highlighted (CNVSU, 2005):

- Overcoming of course fragmentation through the aggregation of those already existing
- Improving attractiveness of university by opening doctorates to external contexts
- Supporting internationalisation either through student mobility, placing student within an international research network
- Developing relationship with the local socio-economic context

The Schools should aim to improve the transparency of the educational content, to exploit courses characterized by scientific excellence, to facilitate relations, collaboration and networking with external agents, and to create the prerequisites and conditions for introducing doctoral students into the workforce.

Government steering of doctoral courses was characterized by a high level of deregulation, which left universities and the academic community more room for manoeuvre than did funding policies. The role of buffer institutions (CRUI and CUN) was essential, in improving university internal evaluation capacity, in co-ordinating efforts at national level, and in interaction with the state, representing the university interests. Doctoral Schools a great opportunity for Italian universities, because in principle they are directed to strengthening the institutional level while tending to limit academic power. Universities have large autonomy in designing their internal organization, since no constraints have been agreed by the state. Thus the question is: given the current system of governance within Italian universities, and given the academic tradition in managing doctoral programmes, is it realistic to predict real change in doctoral school management?

Some empirical evidence (Ferlie et al., 2007) show that there are factors facilitating and forcing change in doctoral courses, namely individual leadership, determination, commitment, clear incremental and communicative strategy inside the University, scientific attitude to change (the ability to address inter-disciplinary matters, and international openness). However, putting in place incoherent or negative rules may block institutional determination for change. In a bureaucratic system a lack of law might be better than State restraint for involved institutions.

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[27] Decree 262/2004.

[28] The applied models are: the *Scuola Unica* (all the doctoral courses are organised by the School, which is also responsible for educational and training content, fund management and all related activities), the *Scuola di Area* (the School organises doctoral courses on common themes and distributes funds, but does not manage all activities), and the *Scuola integrativa* (which has a complementary role in the organisation of common activities or specific aspects that could be better managed by a different body, i.e. the internationalisation of the activities).

4.7 Concluding Discussion – A Late Mover to an 'In Between' Configuration

The HE system was affected by series of changes in the last century, which influenced relations between state and the universities. During the 1970s, standardisation of the higher education system was in most countries the determining factor of change. Standardisation implied substantial expansion of the system, diversification of institutions, strengthening of their organizational complexity, and a new awareness of society's role (government included) as the principal source of higher education funding.

This meant that society, and moreover the state, gained a moral justification to steer the national higher education system (Valimaa, 1999), and the traditional disciplinary principles, which governed university internal organization were progressively challenged by the new practical orientation of institutions, and by the differentiation of their clients (Clark, 1995).

From the 1980s, the steering of higher education in Europe began to shift from a centrally planned model to a more self-regulated model. Governments used economic incentives in pursuing the development of more competitive behaviour at institutional level. This process should also imply parallel processes of differentiation and diversification within the higher education sector, which government viewed favourably, as it would strengthen the capacity of the system to cope with different social needs and expectations (Goedegebuure, 1996). These developments require the ability to make strategic decisions at the institutional level.

Italy did not participate in the described processes until the 1990s. In the last 15 years, the state, in accordance with the emergent NPM narrative, tried to shift from a centralized model to a steering-at-distance model, but this process was neither coherent nor linear, and kept the country connected to a sort of "in-between" configuration. The universities generally responded by slowly adapting their behaviour to comply with government rules, but existing internal governance structures did not adjust to the new requirements. The resulting asset guaranteed a large degree of self-government to the institutions, but reinforced the tendency of professors to view the autonomy of universities as the freedom of individuals from schemes, rules, results and restraints (Simone, 1995), and left the whole system dominated by powerful dependency (Capano, 2008). Although decentralisation processes occurred and new protagonists participated in academic governance, the ability to create horizontal networks handling steering powers did not come forth. The NG model did not characterize the HE governance system, and even the role of the buffer institutions requires clarification in numerous respects.

These features limited the development of real competition and institutional differentiation. Thus, the diversification processes based on strategic choices and organization of some HEIs had limited market effects, in terms of attracting clients. The policy's legacy tended to guarantee a certain level of homogeneity of results, which did not reward virtuous behaviour.

Italy seems more an example of local conditions and path dependence overwhelming reform ideas, than a country where tardy and only partial modernisation occurred.

The HE reforms appeared as an extreme case in the general trend of Italian public management reforms of the 1990s, because the state itself does little to implement them on the basis of coherent and continuous policy design.

Nevertheless, it is true that changes occurred and the implementation of reform was different within some universities, although they were acting under the same political conditions. Available empirical evidence showed that localisation in strong regions, participation in international networks, and internal factors linked to the leadership capacity, internationalisation and the presence of interdisciplinary research, were determining factors for these HEIs to escape, at least partly, the limitations imposed by national steering. These exceptions to the general trend are a sign that factors other than the State can play a major role in shaping university configurations under certain conditions.

Chapter 5
Netherlands

An 'Echternach' Procession in Different Directions: Oscillating Steps Towards Reform

Don F. Westerheijden, Harry de Boer, and Jürgen Enders

5.1 Introduction: Modes of Coordination

The annual procession in the Luxemburg town of Echternach is famous for its laborious manner of reaching its end: two steps forward, one step back. In this paper, we will maintain that the policy of the Dutch government over the period of *c*.1982–2007 resembles an Echternach procession in reverse: every time it took two steps back from control over higher education, it took one step ahead again. It was not a random oscillation between the two extremes NPM and NG, but the trend certainly was not linear either. We address policy developments in Dutch higher education and research in the last two and a half decades in order to explore shifts in governance of universities. Our aim is to elaborate upon the consequences of such shifts on doctoral training and on research funding for universities, for which extensive treatment of the general reforms in higher education and research are necessary. Based on the two concepts of NPM and NG, and as a result of the Echternach-like movements from one policy paper to the next regulation or the following instrument mix, concrete societal sub-systems or policy fields can now be understood as mixtures of the two.

In turning to the governance of university systems, we make use of already existing typologies of basic dimensions of the modes of coordination of this societal sub-sector. In the following, and in more detail than the two main ideal types that structure this book, we distinguish five modes of co-ordination: state regulation, stakeholder guidance, academic self-governance, managerial self-governance, and competition.

State regulation concerns the traditional notion of top-down authority vested in the state. This dimension refers to regulation by directives; the government prescribes (in detail) behaviours under particular circumstances. Regulation refers to the promulgation of an authoritative set of rules, usually legal rules. It implies

D.F. Westerheijden, H.de. Boer, and J. Enders
Center for Higher Education Policy Studies (CHEPS),
Universiteit Twente, Enschede, the Netherlands

C. Paradeise et al. (eds.), *University Governance*,

controlling an actor's behaviour through monitoring, standard setting, inspection, warranty approval, certification, arbitration and so on.

Stakeholder guidance concerns activities that direct universities through goal setting and advice. This mechanism concerns the provision of general objectives and procedural rules; they set the framework within which universities have room to manoeuvre. In public university systems, the government is usually an important stakeholder, but is certainly not necessarily the only player in this respect. The state may delegate certain powers to guide to other actors, such as intermediary bodies or representatives of industry in university boards.

Academic self-governance concerns the role of professional communities within the university system. This mechanism is institutionalized in collegial decision-making within universities and the peer review-based self-steering of academic communities, for instance in decisions of funding agencies.

Managerial self-governance concerns hierarchies within universities as organisations. Here the role of university leadership in internal goal setting, regulation, and decision-making is at stake. University rectors or presidents form the top-level of managerial self-governance; in the intermediate level, deans are increasingly seen as important figures. Let us stress that the distinction with academic self-governance lies not in the office holders' backgrounds but in the answer to the question to whom is reported. Office holders elected by their academic peers and who continue to teach during their term of office or who normally return to teaching positions count as academic self-governance, while appointed office holders who report to higher-level managers or external boards count as managerial self-governance even if they originally hail from the academic profession.

Competition for scarce resources – money, personnel, and prestige – within and between universities takes place mostly not in 'pure markets' but in 'quasi-markets' where performance evaluations by peers substitute the demand-pull from customers.

These modes of coordination are different empirical combinations of elements from mainly two dimensions: the dominance of certain actors (or locus of power) and the preferred mix of steering instruments. With regard to actors, as in Clark's (1983) view, state, society and the higher education 'oligarchy' are seen as the major parties. With regard to the higher education community, as we just mentioned, we distinguish between the academics proper and the administrators or managers. Concerning steering instrument mixes, different ideas exist about the effectiveness and desirability of instruments. To some – limited – extent, such views may be informed by social scientific insights, but for another – probably much larger – extent they depend on ideological convictions. A basic distinction with regard to steering instruments is whether they are constraining or enabling (Jenniskens, 1997).

Obviously, elements of all five modes may co-exist, though in a certain period one or a few modes may predominate, or may be seen as a striking feature of an epoch or a model for good governance. NPM approaches of good governance usually stress, for example, the role of 'hierarchies' and 'markets'. According to our five dimensions of coordination, this would imply a clear role for the state to play. Whether this role would be a much more a regulatory one or a guiding one seems to be contested between 'hard' and 'soft' versions of NPM. In the latter case, NPM

would overlap with certain ideas affiliated with NG. In NPM, the role of academic self-governance should be rather marginal. Academics are of course of great importance in the delivery of research and teaching, but under the notion of 'every man to his trade' these knowledge workers should do what they do best: discover and transmit knowledge. At the same time, we may argue that managerial self-governance and competition would obtain high scores in an idealized world of NPM.

In contrast, NG stresses ideas of self-governance and self-control in societal sectors, such as higher education where coordinating power and control are collectively shared between the major 'social actors or partners' at all levels of the decision-making system. According to our five dimensions of coordination, this would imply 'hollowing out' the capacity of the state to direct public services organizations. Stakeholder interaction and guidance, including the state, as well as academic self-governance would score high in an idealized world of NG. Cooperation via organisational networks will be stressed rather than sharp competition for scarce resources. Organisational self-control and networking may, however, rely on well-functioning capacities for managerial self-governance. In this case, NG would overlap with certain managerialist concepts implied in NPM.

Our basic tenet will be that, at least in the Dutch case of higher education, NPM and NG are not to be seen as alternative models underlying efforts to change the modes of coordination, but rather as *complementary* explanations or narratives. This means that we will contend that reform was inspired by an NPM narrative mainly while the 'Dutch polder model' of NG, as it plays out in higher education, still has a role to play. Moreover, the balance between the narratives to some extent keeps changing in response to developments in political power balances and in ideological insights. This does not imply that cross-national policy convergence is impossible, but it does warn against predictions of rapid cross-national uniformisation.

5.1.1 The Dutch Higher Education and Research System in a Nutshell

In 2003, the Netherlands had 16.3 million inhabitants and a Gross Domestic Product (GDP) of approximately €454 billion, which represents around 4.7% of the total European Union GDP. Because of the open character of the Dutch economy, it is under constant pressure to invest in improving its competitiveness and in knowledge intensification and exploitation. The Dutch higher education and research system is expected to play a significant role in innovation as well as in education and training. In recent years, the importance of higher education and research for the (Dutch) knowledge economy has been referred to frequently, partly because of the Lisbon declaration and the Dutch ambitions in that area.

The policy tradition in higher education in the Netherlands is a mixture of French, German and Anglo-Saxon elements, combined with unique Dutch components such as the 'pillarisation'. French influence can be discerned amongst others in the first national legislation on higher education, introduced just after Napoleon's

time (1815 '*Organiek Besluit*'). German influence can be observed in developments that followed the unification of Germany in 1871, including aspects of higher education and of the academic culture (Rupp, 1997). The ideas of Von Humboldt, whether myth or reality, had a large impact on Dutch higher education and research. Finally, the influence of Anglo-Saxon elements on Dutch higher education can traced through both the mercantilist North Sea culture dating from before the nineteenth century and in the changes in the world order after the Second World War (Maassen, 1996; Rupp, 1997). Especially in the last 2 decades of the twentieth century one can observe a strong Anglo-Saxon influence on Dutch higher education. Neave (1998), discussing the rise of the evaluative state in the 1980s and 1990s, argued for example that the Netherlands followed the market driven reform ideologies from the United Kingdom and the United States to reorganize its higher education.

Dutch higher education currently is organized as a binary system, consisting of 13 universities and 54 institutions for higher vocational education (referred to below as 'colleges', or in Dutch *hogescholen*). There is also an Open University (OUN) and a number of other state-funded and non-funded institutions providing higher education. The main aims of colleges and universities are formulated in the national Higher Education and Research Act of 1993 (Dutch abbreviation *WHW*). Whereas the aims of the colleges mainly relate to the application and transfer of knowledge with respect to specific professions, the aims of the universities also refer to the autonomous performance of scientific research activities and to the universities' responsibility for providing a number of official services to society. The thirteen universities carry out most of the basic research in the Netherlands. Besides basic research, the Dutch universities are also engaged in strategic and applied research. In 1999, the universities spent about 26% of the national R&D budget. Hogescholen in recent years have emphasized their role in applied research and in 'valorisation' of knowledge more than before especially through their *lectors* (a new, research-directed position). In the remainder of this report our focus will be on the university sector, as our tracers of doctoral training and (basic) research funding affect only this part of the Dutch higher education system.

The 13 universities in the Netherlands do not constitute a single, institutionally homogeneous group. If we distinguish them by their historical origins, we can identify four different groupings:

Four old, classical universities: Leiden (1575), Groningen (1614), Amsterdam (1632) and Utrecht (1636)

Three broad-ranged private, but state-funded universities: the Protestant Vrije Universiteit Amsterdam (1880), and the two Catholic ones in Nijmegen (1923) and Tilburg (1927), which were all founded in the context of pillarisation

Four mono-disciplinary institutions, viz. three technical universities in Delft (1842), Eindhoven (1954) and Twente (1961), plus the agricultural university of Wageningen (1876)

And two (relatively) new universities with a not quite full-blown, yet more general profile: Rotterdam (1973) and Maastricht (1976)

Naturally, each university has its own distinctive profile with respect to programme offerings, student population, etc. As said, however, due to among other things the fairly strong nature of government regulation, at least until the 1980s, and the general focus in Dutch society on equality, the variety in the quality of teaching and research is (supposed to be) relatively small. Only since about the mid-1990s has stratification along these lines become an issue.

The universities defend their common interests through their representative organization, the Association of Co-operating Universities in the Netherlands (Dutch abbreviation *VSNU*), which is also one of the main partners in the national policy network with respect to higher education. Regarding the aim of this study, two other important organizations at the national level should be briefly mentioned here. First, the Netherlands Organization for Scientific Research (*NWO*) is the most important intermediate organization in the field of fundamental and strategic research. It plays a major role in allocating public research funds. Second, the Royal Netherlands Academy of Arts and Science (*KNAW*), which besides quality control in the area of doctoral training, advises the government and the university sector, solicited and unsolicited, in all fields of science.

In the Dutch research infrastructure outside the university sector, we can discern non-university research institutes (among which some owned by the Royal Academy KNAW), the para-university institutes and the colleges. And of course a substantial amount of R&D takes place in the private sector, which spends about 50% of the total R&D expenditure. The quality and productivity of Dutch university research is high, according to international benchmarks (*Wetenschapsbudget*, 2004).

In the national government (other governmental authorities such as provinces and municipalities do not play a significant role in higher education), higher education, research and R&D policies have been divided among ministries and within ministries; there is clear compartmentalization. R&D or technology policy, for instance, belongs to the realm of the ministry of economic affairs, whilst higher education and research belong to the ministry of education, culture and sciences (Dutch abbreviation: *OCW*). Within the ministry of *OCW* higher education and science policies fall under different directorates-general. This can be illustrated when we look at the strategic policy documents of the ministry of *OCW*. The Higher Education and Research Plan (in Dutch during the period under study abbreviated to *HOOP*) despite its name by and large restricts itself to higher education. The government's plans regarding scientific research are published in the Science Budget ('*Wetenschapsbudget*').

5.2 The Prelude to the 1980s

After the Second World War the involvement of the national government in higher education intensified. This was considered inevitable given higher education's enormous and rapid quantitative expansion. Moreover, the 1960s and 1970s exuded

an atmosphere of rock-solid faith in the possibilities of the national government to design and steer society, including the higher education system. Governmental intervention was regarded as an instrument with enormous potential to steer society in the direction of the modern welfare state. Government interference expressed itself in laws, decrees, procedures, regulations, and administrative supervision. This intensifying involvement of the national government mainly concerned higher education. At the same time, however, academic matters were largely left to the professionals. In fact, academic self-regulation and state regulation went hand in hand. The Netherlands was in terms of coordination mechanisms an example of 'bureau-professionalism' (Clarke and Newman, 1997).

University research remained untouched by policy. In this system of academic self-governance one could hardly speak of a research policy (Hazeu, 1989: 105; Arriëns, 1970; Spaapen et al., 1988). The autonomous position of the individual professor with respect to research matters was, however, gradually undermined. One of the causes concerned the introduction of a new university governance structure after the 1968 unrests, making the professors share their power over research matters with other groups in the university (de Boer, 2003). Nevertheless, though individual autonomy was replaced by collective autonomy, academic self-regulation remained in place.

In sum, until the end of the 1970s the coordination of Dutch higher education and research was a mixture of state regulation and academic self-regulation. It was also a closed system, a '*Pädagogische Provinz*' (cf. Boin, 2002). Outsiders, or society at large, hardly had a voice. State regulation was, however, not a simple 'top down' decision chain. Because of the nature of Dutch policy-making – characterized in general by 'pillarization' and corporatism – consensual decision-making among technocrats was common. Especially in the 1970s, Dutch higher education had an almost impenetrable consultative structure (van Vught, 1987), ensuring academic influence in the state regulation mode.

5.3 A Turning Point in the 1980s

From the middle of the 1970s, evidence grew that strong and detailed regulation 'from the top' did not produce the intended outcomes, leading to disappointment in 'central steering'. Moreover, problems could no longer be concealed behind a veil of growing budgets. In this untoward setting, Dutch higher education and research were faced with increasing demands to contribute to the recovery and restructuring of the economy. It was felt that the higher education sector had become too estranged from the rest of society; it should give up its 'ivory tower'.

After the 1968-generation 'imagination to power' left-wing coalition that reigned 1972–1977 (Gortzak, 1978; van Galen and Vuijsje, 1985), in 1978 a centre-right cabinet came to power. This heralded a new era of neo-liberalism and neo-conservatism in the public sector, including higher education. Retrenchment policies were the order of the day, trying (often unsuccessfully) to adjust collective expenditures. The key

changes in higher education around 1980 were, in other words, resource-driven. The national government was decisive, at least in some respects. The policy style in this period was rather straightforward and, for Dutch standards, not very consensual (one prime minister used 'no nonsense' as his motto). In this changing policy environment, research should no longer be 'free of any obligations', but was increasingly supposed to contribute to solving social problems and the national government made its first real attempts to intervene in the 'world of academe'.

After some tentative initiatives, the first white paper with serious impact was published in 1979, i.e. the Policy Document University Research (*BUOZ*-paper). The *BUOZ*-paper put several problems on the agenda, especially the 'university as an ivory tower' and shortcomings in accounting for public money. The government's solution lay in replacing 'unlimited' professional autonomy regarding research by 'freedom in restraint' (Pais, 1978). In the eyes of the government, public research should be (nationally) programmed, at least to some extent, in harmony with social needs; it should be evaluated and accounted for. In a relatively short period the government implemented several measures (see below), mostly aimed at increasing the internal efficiency of science production (Van Rossum, 1987).

In the early 1980s the government promulgated a range of unilateral reforms, in a mode of transition between the traditional *Rechtsstaat* and NPM. At the time 'remedial' or 'corrective' policies, as they were called to disguise that they were (also) cutbacks, dominated the higher education and research scenes. Among the prominent policies was the introduction of 'conditional research funding' to enhance the magnitude, efficiency, and quality of research and resources. In fact, this can be regarded as the first large-scale market-type form of coordination: institutions had to compete for an important share of research grants (treated in more depth in Section 5.4 below). Other examples of the corrective policies are the introduction of the two-tier degree structure for universities (1981; cf. Bijleveld, 1989; Westerheijden, 1997; see also Section 5.5.1), the reallocation of programmes and departments (1981), the mergers of the colleges (1983), the reform of the personnel structure (1981), and a second reallocation and retrenchment operation (1986). They were all directly aimed at offsetting specific mistakes of the past (Teichler, 1989: 171). According to the government, these interventions were necessary to restructure the university sector so that new relationships between the government and the universities could successfully be established; in governmental view it had to pick up the pieces before being able to 'step back'. Decisive restructuring, including financial cutbacks, was seen as a prerequisite to deregulate and devolve central decision-making powers later. In other words, a period of strong steering – close to the NPM narrative – was to give way to an NG narrative later as a conscious policy choice (although enforced by the breakdown of classic bureaucratic control).

The middle of the 1980s brought the fundamental changes promised in the years before, and they had lasting effects on the coordination of the university sector. It was also a time of confusion, due to the fundamental changes themselves, and fuelled by sometimes conflicting signals and policies. On the one hand, there were the government's corrective policies, strongly inciting – close to commanding – the university sector to change. On the other hand, in 1985 the government introduced

the concept of 'steering from a distance', in which firm beliefs in the virtues of regulation, planning mechanisms, and government coordination were 'to be replaced by a philosophy in which the government's role is confined more to setting the boundary conditions within which the higher education system is to operate, leaving more room to manoeuvre at the institutional level'.

This concept of 'steering from a distance' first emerged in the 1985 white paper 'Higher Education: Autonomy and Quality' (Dutch abbreviation: *HOAK*). In this *HOAK* paper the minister presented an explicit vision on Dutch higher education, in which the national government should not be the planner of the system, but instead would be catalyst, coordinator and (financial) facilitator (e.g. De Vijlder and Mertens, 1990). According to *HOAK*, institutional autonomy would be enhanced (deregulation); universities were expected to become more adaptive to their environments. It was argued that this would have positive effects on the quality of the primary processes. The changed role of the government can be regarded as a shift from the interventionary state to the facilitatory state (Neave and Van Vught, 1991). The 'facilitative policies' consisted of a mixture of (Goedegebuure et al., 1993: 210):

Reduction of direct supervision and control of administration and the use of resources.

The development of semi-structured interventionist policies, whereby on the one hand a relatively tight frame exists, but on the other hand freedom is left for decision-making on the part of the institutions.

The establishment of a system of positive and negative sanctions based on a mixture of criteria and procedures, whereby goals are partly defined by the government, partly left open to the diversity of rationales underlying academic evaluation, partly determined by institutional policies, and partly determined by the market.

Detailed input control was replaced by checking afterwards whether the self-regulation of the higher education system led to outputs in an acceptable range. Institutions were given more autonomy if they proved that they 'delivered' quality education and research. The underlying rationale of 'steering from a distance' expressed the government's belief that it would have power to determine the major directions of the Dutch university sector more effectively than in the past. Though it is probably wrong to draw a sharp distinction between the corrective government policies in the first half of the 1980s and the facilitating policies in the second half of that decade, 1985 should be seen as a turning point in Dutch higher education. The *HOAK* policy and the ensuing legislation had far-reaching consequences for the authority distribution in Dutch higher education (Goedegebuure et al., 1993: 196).

The move from directive policies towards 'steering from a distance' did not imply less effort by the government to determine the major goals of the university sector. First, according to the Dutch constitution the government has ultimate responsibility for higher education, i.e. it could not simply turn its back on higher education even if it wanted. Moreover, the government still could affect the outcomes of the university sector by determining the rules of the game. And third, one of the means to operationalize the new steering philosophy was a new planning cycle, in which the national government played an important role. The new planning cycle,

in the mode of 'communicative planning', was based on explicit, regulated, open and cyclic exchange of views and ideas among several parties, mainly the government and the institutions. Besides bilateral talks and general meetings between the minister and the institutions, the distinguishing feature of the plan cycle was the bi-annual publication of strategic policy plans from both the national government and the individual universities in alternating years. In these strategic documents, the national government on the one hand and the individual universities on the other hand were supposed to respond to each other's opinions, views and ideas. This 'dialogue on paper' has been effective in some, but not in every respect. The Advisory Council for Science and Technology Policy (Dutch abbreviation *AWT*) concluded that there was barely a dialogue on *research* policies between the universities and the minister (AWT, 2003). The perception was that the minister is only sparsely responding to the universities' strategic plans and annual reports.

Although the *HOAK* paper exuded an atmosphere of a government 'stepping back' and encouraging competitive behaviour, the desire to streamline the production of knowledge in accordance with social and economic goals remained and actually gained importance over the years. Science should serve national (economic) interests more directly; universities were increasingly supposed, or as academics might put it 'forced', to contribute to the nation's welfare. The programmatic nature of science was increasingly stressed. The researchers' monopoly to dictate the research agenda was no longer perceived as acceptable. The internally defined criteria for research were complemented by externally defined criteria. The research agenda and policies should be determined on the basis of these two perspectives (Blume et al., 1985; Van Rossum, 1987; Hazeu, 1989). Symbolically, in 1988 the national research council was renamed from *ZWO*, meaning Pure Scientific Research (Organisation), into *NWO*, Netherlands' Organisation for Scientific Research – no longer 'pure' (Hazeu, 1990: 113). The change to new instruments with less overt governmental interference in day to day affairs, yet strong steering on strategic issues, makes the *HOAK* policy turn fit into the NPM narrative.

However, the empire struck back, or rather, the network talked back. Academics did not accept these 'attacks' without struggle. The notion of externally programmed research agendas was generally rejected. In their view, creativity and serendipity, inextricably attached to basic research, could and should not be controlled externally. Moreover, who possesses, except the practitioners themselves, the knowledge to programme and assess research anyway? At the end of the day it became clear that despite the efforts of the government, or society at large, to have an impact on the research agenda, the academics' powerful position remained to some extent intact. For example, one of the (by politicians unwanted) effects of introducing national research programmes was that they were used to protect researchers from outside interference. National research programmes, if they reached the basic levels of the university at all, had the tendency to be formulated in broad and vague terms. They left ample room for researchers to do their own thing, especially in the humanities and social sciences, which did not have a tradition of programmed research (Whitley, 1984). Moreover, within the new structure many traditional mechanisms such as peer reviews stayed in place. Consequently, academics

remained at the heart of programming public research and discipline-based criteria still played the major role. In other words, the academic self-governance survived within the parameters set by external stakeholders (admittedly, the parameters were tighter than before); continuity and change at the same time.

Besides, the impact of external parties has been present ever since the 1980s. In 2003, for example, many Dutch researchers thought that research themes in the Netherlands were determined to a significant extent by non-academic parties (NOWT, 2004: 154). Yet many researchers have the feeling that research will flourish if researchers are 'left alone'. Researchers apparently still cherish their professional autonomy concerning the selection of research themes (de Boer, 2003; NOWT, 2004).

The new governmental steering philosophy opened the door to more pronounced competition. Universities were expected to display more market-type behaviour. They should establish distinct profiles; mission statements and strategic planning 'suddenly' became common and universities were stimulated to create their own niches. For several reasons they were 'invited' to intensify their efforts to increase private funding. Both in teaching and in research, universities increasingly tried to sell their services on 'real markets'. And indeed third party funding has grown since the mid 1980s. Nowadays no single Dutch university would survive without it. However, by entering new markets the universities faced new competitors. The rules of the game, which used to be determined by the government and the academics, were increasingly affected by a completely different regime, i.e. the market and its logic of looking at the bottom line of results.

One of the most profound effects of the shift in governance has been the increased importance of the central institutional management. This level in the higher education system was traditionally very weak in the Netherlands. In the *HOAK* paper and related documents the minister clearly stated that institutional management had to be strengthened for universities to be successful in a competitive world. Moreover, drawing up institution-wide strategic plans legitimated a more active role of the central management. The formal authority distribution within the university, however, did not substantially change, although the balance of power gradually shifted in favour of the executives within the universities (see de Boer, 2003). The real tilting of the balance of power within the universities would happen in 1997.

In sum, in just 1 decade the modes of coordination in Dutch higher education had changed profoundly. With respect to state regulation one observes deregulation, even if its degree or effectiveness may be questionable. The government's focus had shifted from detailed *ex ante* measures to *ex post* evaluations, from input to output control. At the same time, numbers of stakeholders and levels of competition increased; the research agenda was no longer determined by academics only, and universities intensified their market behaviour. And first steps were set towards strengthened institutional management for enhancement of institutional autonomy. 'Management self-regulation', as we have called this mode of coordination, was emerging. Academic self-regulation was on the decline, which does not mean that academic self-regulation had ceased to exist. Academics still had the upper hand in decisions regarding teaching and research, but increasingly they had to take note of others. This situation is not easily captured in terms of NPM *versus* NG. In short,

it seems that an effort to introduce a more NPM-oriented steering philosophy into the higher education system led to a strengthening of network governance, but with new players in the network gaining power, i.e. the institutional level. It may be argued that the emergence of this new layer was an intended effect of the policy-makers behind the HOAK ideas. In that perspective we may wonder whether policy-makers were trying to follow an NPM agenda or trying to move towards more network governance – *if* they saw those as different narratives. Given the strong emphasis on management of the higher education system and economic aspects (incentives, competition, etc.), from the outside it would seem that their narrative was related more to NPM.

5.4 Continuing Along the Same Lines: The 1990s

Whereas the 1980s can be regarded as a decade in which, after some relatively severe interventions, the Dutch government introduced new steering philosophies, concepts and rule structures – the *rise* of the evaluative state (Neave, 1988) – the 1990s can be seen as the further advancement of these concepts, including greater market orientation towards and in the university sector. This decade in the Netherlands could be typified as the *institutionalisation* of the evaluative state. In the 1990s, further restructuring took place, by and large – often explicitly – in keeping with *HOAK* paper vision. However, this does not imply unchanged modes of coordination. And a new dimension is added: Europeanization. A new player, abstractly called the European level, increasingly seems to affect the game of higher education and research, either through the national government, or by stimulating competition among institutions.

During the preparations of a new national bill for Dutch higher education in 1992, the minister argued that a *selectively interfering* government was a more appropriate description for the new steering approach towards higher education in the Netherlands than ‘steering from a distance’. His notion was not meant to ‘bring the state back in’, but to stress that the government did not intend to be sidelined. Besides setting the parameters for the university sector, the government would intervene if necessary. The government remained responsible for the quality of Dutch higher education and research, as required by the Constitution, but it tried to meet this objective in a different way.

In the *HOOP*-document 2000, deregulation and self-regulation of the universities were stressed time and again. In the same document though, it was briefly suggested that the future relationship between the national government and the universities could be characterized more as a contractual relationship (*HOOP*, 2000: 37). This idea of a contractual relationship was enlarged in the next *HOOP*-document, in 2004. Here the minister has expressed her desire to establish a system of performance-based agreements between the ministry and the individual universities. This bilateral, contractual approach was new in the relationship between government and the university sector in the Netherlands. In this contractual view, the individual

university is the minister's 'point of application', not the cognate sector as in *HOAK*. This underscores the increasing importance of the institutional level in the higher education structure. The minister argued that such a revision of the steering philosophy required a new higher education and research act (*HOOP*, 2004: 55). At the same time the *HOOP* 2004 document still exuded a *HOAK* atmosphere. The relationship between government and universities was characterized as a policy-driven dialogue just like before. The performance-based relationship between the national government and the (individual) universities was not completely at odds with the *HOAK* steering philosophy. This philosophy, amongst others, stood for output control and evaluation *ex post*. Performance indicators were part the government's initial plans for a new quality assurance system around 1985; in that sense we were 'just' facing implementation of 20-year old policy ideas (for a previous attempt, which first had failed because of opposition from the higher education institutions, see Dochy et al., 1990).

In 1997, the Dutch parliament passed the bill on Modernisation of University Governance (*MUB* is the Dutch abbreviation), which marked the end of an era of participatory modes of internal university governance. The internal governance reform can be regarded as one of the final comprehensive institutional changes in the light of the *HOAK*-philosophy. One thought behind the reform was that universities needed stronger institutional management, especially at the central and middle levels. Another reason was related to the constant criticisms and perceived shortcomings of the then existing structure dominated by democratically elected councils representing all groups of staff (academic and non-academic) as well as students (who held 33–50% of the seats depending on the type of council). According to the new Act, executive leadership was strengthened, power concentrated, and representative bodies stripped from their main responsibilities.

Prior to the 1970s, Dutch university governance had been in the 'continental mode', where state bureaucrats and academics dominated internal decision-making (Clark, 1983). Authorities of academic and non-academic affairs were separated in different bodies. This co-existence of bureaucratic co-ordination and academic self-governance was called *duplex ordo*. At the universities the nation state was represented by a Board of Curators, responsible for upholding laws and regulations, for administration of the university finances, and for personnel policies. The other pillar in this pre-1970 structure was the Senate, made up of all full professors, which embodied academic self-governance.

During the 1960s, concerns grew regarding the effectiveness and efficiency of traditional forms of internal university governance, caused by the unprecedented growth of participation in Dutch higher education. These concerns were overshadowed by demands for (more) democratic participation. This democratic movement fermented turmoil in Dutch higher education, especially after 1968, and resulted in 1970 (extremely quickly) in a new, democratically-oriented Act of University Governance, *Wet op de Universitaire Bestuurshervorming* (WUB). The WUB-Act attracted criticism from the beginning, but constituted the formal backbone of universities up to 1997.

The 1997 Act 'Modernising University Governance' (*MUB*) indicated a substantial change, though the magnitude of change in reality is debatable (e.g. de Boer et al., 1998;

commissie-Datema, 1998). The new governing system concentrated executive and legislative powers. All members of the crucial governing bodies – the supervisory body (*raad van toezicht)*, the central executive board (*college van bestuur*), and the dean (*decaan*) – are appointed by the body from the 'upper level'. Appointments replaced elected representatives. The structure was centralized in several ways. For instance, the organization's third layer, Clark's 'basic units', the previously powerful departments (*vakgroepen*) were abolished. Since 1997, the dean had the authority 'to arrange the faculty's organization' (which might but need not include departments). Also, ultimately the dean decided about the research programme of the faculty, which of course was not necessarily the same as that the dean determined the contents of research. From a formal point of view, the role of the dean regarding the strategic aspects of the primary processes increased at the expense of the academics.

In this respect the MUB Act can be regarded as another decline of academic self-regulation. The 1997 Act was characterized by (vertical) integration, coherence, hierarchy, centralization and concentration of powers; all at odds with traditional values in academic self-governance, which seems to indicate a further turn towards NPM. However, in practice old habits only die slowly, if at all. We should not underestimate the continuing influence of academics on institutional decision-making, as achieving consensus remains important for smooth operation of Dutch universities. Thus formally the 1997 Act clearly embraces the management self-regulation as a mode of coordination, away from academic self-regulation and state regulation; informally academics still have a role to play.

The MUB act is at the same time an example of enhancing institutional autonomy (deregulation, strengthening the network component), since universities have been given more discretion to design their own structure, although the government's legal framework remains rather directional. Finally, in terms of our modes of coordination the new 'constitution of the university' promoted 'lay' outsiders to prominence, as they make up the *raad van toezicht* (supervisory board). Much knowledge about their actual functioning and impact is not at our disposal. They remain mystery guests for many, also inside the universities.

Another example of outsiders inside the university form 'expert councils', which may advise for instance concerning research. Such councils are not legally obligatory, yet several universities, both at the central and the faculty levels, use them as sensors for developments in their environment. This lay influence is not (necessarily) a consequence of the MUB. Expert councils have been around for some time, though their number seems to have increased recently.

In sum, recent developments remain ambiguous regarding their interpretation in the NPM *versus* NG debate. Partly, the interpretation depends on which level is chosen as the researcher's focus. The MUB and associated changes since the 1990s from the work floor level seem to entail a continuing decrease of autonomy, although as we maintained old habits die slowly if at all, as university managers depend on the loyalty and commitment of the work floor. (Remember that universities are notoriously 'bottom-heavy' organisations.) Looking from the other end, i.e. the national government (selective) intervention has been stressed more than in the 1980s. Yet, by taking the institution rather than the cognate area as the main object for policy,

the government gave more power to its most potent 'opponents' in the system. Thereby it gave more power to this class of players in the network, for the higher education *system as a whole* leading to increased network governance.

5.5 Tracers Issues

What conclusions can be drawn from this general picture of changing steering of universities in the Netherlands for the two tracers in our study?

5.5.1 Doctoral Programmes

Developments regarding doctoral programmes are closely related with the general statements we made about steering of higher education and research. The starting position, until the early 1980s, was the traditional, German-inspired apprenticeship model of the individual *doctorandus* doing her (or more often: his) research under the guidance of an individual *promotor*, who at the same time usually was the direct hierarchical superior of the candidate. Moreover, especially in the humanities and the social sciences (which were only establishing themselves as disciplines after the Second World War) the dissertation was often seen as the *opus magnum* of (half) a lifetime's work as a university *docent*. The next career step, in most cases upon indication of continued research activity but without further formal requirements, would be the doctor's gaining a chair, which would give the (life-long) right to the title of *professor*. By the early 1980s, change started with new entrants into the academic staff of universities could be appointed as 'research assistants', with a temporary appointment enabling them to research for a dissertation to be completed in 4 years' time.

More significant changes came with the reform of the two-tier degree structure in the early 1980s. The main effect of this policy was shortening of university study programmes for the *doctorandus* degree (master's equivalent, according to the law) from around 5 down to 4 years, with exceptions for medicine *cum annexis* (remained 6 years) and, after more than 10 years of debate (Goedegebuure et al., 1993a), engineering and natural sciences (back to 5 years). More important for our tracer was the introduction of a second tier. Selected students who had finished their first degree would be given the option to enter the second tier, consisting of (1) professional courses of about 2 years' duration, (2) teacher-training courses for 'senior high school' teachers, or (3) research fellowships (Bijleveld, 1989: 34). Research fellows or 'assistants-in-training' (*AiO's*, in Dutch), just as their immediate predecessors, the research assistants, would be appointed as temporary university staff, with the focused task of doing research to finish a dissertation within 4 years. New was that they were expected to do formal *coursework* during the first year, especially in research methodology (Bartelse, 1999: 95), as such competences could no longer be expected from the 4-year graduates. At the same time this gave the government an argument to reduce their salaries compared to the research assistants, who were already cheap in comparison with the entry salary until the 1980s.

Focusing on the second tier, debate in parliament concentrated on its selectivity: parliamentarians wanted a generous amount of places for first tier graduates (40%, later compromise proposals mentioned 30%). The minister did not make concrete promises. By 1988, there were about 2,500 research fellowship positions (Bijleveld, 1989: 43). It remained possible to gain a doctoral degree outside of the AiO-system, for instance for the 'backlog' of university *docenten* who had not obtained a doctoral degree before, and also for dissertations written by persons working outside the university system.

The second main step in reorganising doctoral programmes was the introduction of 'research schools' or 'graduate schools' in 1991. Formal courses for AiO's had mainly developed during the 1980s in the natural sciences (where they were a tradition arising from the disciplines' autonomous developments). In some disciplines, loose inter-university co-operations called *AiO networks* had come into being, but mainly 'the AiO-system … did not provide adequate mechanisms to shape the second tier of higher education in a satisfactory way' (Bartelse, 1999: 98). The minister of education in 1990 opined that there were three main reasons for a next step (Bartelse, 1999: 98–99):

For AiO's to be successful in 4 years, structured and well-supervised training is needed.

Under increasing internationalisation, it will become increasingly necessary to attract top-level researchers, for which establishing centres with critical mass is necessary.

Current policies did not allow the selectivity needed to assure quality of research, researchers and research training.

Accordingly, the research schools that were aimed at would have more functions than just doctoral training. Collecting 'excellent' researchers to gain international attractiveness was an important second goal, and in the government's paper the order was reversed: research schools were defined as centres of high quality research in which structured training was offered to young researchers (as quoted in Bartelse, 1999: 100), for excellent research training needed an environment of high quality research. Research schools were expected to emerge in all fields of knowledge ('breadth strategy'). They were firmly grounded in the existing disciplines; there was no agenda of stimulating new, interdisciplinary fields of study.

The minister proposed a three-stage process for establishing research schools. In a bottom-up fashion, academics were expected to take initiatives for research schools in a disciplinary area, with backing of a university board to establish the school legally (e.g. as a research institute). The second stage involved recognition of (an undefined number of) research schools, with criteria focusing on programme and composition regarding senior researchers. Recognition was necessary for funding. The third stage concerned selection of a very small number of top-level research schools for additional funding ('depth strategy').

The Royal Academy of Sciences, KNAW, hosted the new, independent committee for the recognition of research schools, *ECOS*. ECOS worked through seven sub-committees, each covering a broad cognate area. Recognition, if given, was for

a limited period of 4 years, after which the ECOS procedure had to be repeated and recognition – hence funding – could be lost. In fact, this recognition process was the first instance of accreditation in the Dutch higher education system.

The reception of this new doctoral training institution differed across academe. In natural sciences, it was perceived as unnecessary relabeling of long-existing practice. In humanities and social sciences, there was much hesitation about this radically new idea; a linguist saw no indications for the need for a research school in this field (quoted in Bartelse, 1999: 102), moreover it involved much complicated bureaucracy to gain cooperation of departments, faculties and boards across universities. Nevertheless, gradually the utility of research schools not only for doctoral training but also for strategic research purposes prevailed amongst academe and the number of recognized research schools grew in all disciplinary areas (see Table 5.1).

Table 5.1 shows that some areas established research schools immediately (natural sciences, engineering and health sciences), but the big leap took place after 2 years, when the total number suddenly increased from 24 to 62. Social sciences and humanities contributed much to this 'explosion' in 1994, but the largest increase occurred again in the natural sciences. Probably, then, the large increases in 1994 (and 1995) not only had to do with growing acceptance of the research school in the different cognate areas, but also with the time ECOS and the institutions needed for the recognition procedure. Besides the recognized research schools, unrecognized ones continued to exist; in Law, for instance, there were six unrecognized ones in 1998.

It seems, then, that the research schools gained legitimacy quickly across all areas of knowledge. However, participation rates of doctoral candidates differed much across fields. Moreover, ways of acceptance of research schools in the disciplines were different. Bartelse (1999) provided examples of full acceptance of this innovation but also of resocialisation, i.e. giving a twist to the policy instrument to suit the purposes of the actors in the universities. He concluded that 'the relative prosperity of the system of graduate schools in the Netherlands is a result of its relative open way of exposing the innovation to the system: schools can be established at the initiative of the university, and disciplinary differences can be accommodated' (Bartelse, 1999: 207). The explanatory factors, Bartelse found, were Levine's general factors for success of innovations: profitability and compatibility.

Table 5.1 ECOS recognized research schools (total number in existence) (Bartelse, 1999: 103)

Area	1992	1993	1994	1995	1996	1997
Agriculture	0	1	2	5	5	5
Economics	1	1	1	1	2	3
Health	5	6	12	13	15	15
Humanities	1	1	6	11	14	14
Law	0	0	0	1	1	2
Natural sciences	7	8	21	25	27	28
Social sciences	1	2	10	15	17	18
Engineering	4	5	10	15	17	22
Total	**19**	**24**	**62**	**86**	**98**	**107**

We add one remark from another perspective that is relevant in this paper: the research schools were among the first structures governed on managerial principles in Dutch universities, pre-figuring in this respect the MUB changes for the universities as a whole.

The introduction of research schools for doctoral training provides an example of the intricacies of steering universities. The initiative lay with the government, which tried to steer universities in a certain direction. The success of the policy depended on the co-operation of the academics, however. Resocialisation indicates that 'the essence of institutions can frustrate sticks and carrots […] but sticks and carrots can work!' (Bartelse, 1999: 206–207). There was a balance, apparently, between governmental steering and self-regulation (both academic and managerial) that explained the dynamics of this policy.

5.5.2 Research Funding

The funding model for universities has seen a lot of acronyms and changes over the years. The current understanding in Dutch higher education starts from distinguishing three 'streams' of money:

The *first stream* is the standard governmental grant.
The *second stream* concerns the research councils' award of projects on a competitive (peer review) basis.

The *third stream* includes the contracts with third parties, usually for applied research or contract teaching.

Due to the third stream's mixed character and little bearing on fundamental research, we shall concentrate on the first and second money streams. The sizes of the three streams are widely different, the first one being by far the largest. Table 5.2 shows data for 2002.

The models used for the first stream were a major element in the Ministry's steering efforts. The ATOOM model used between 1960 and 1977 correlated funding with the number of students, including research funding. 'The main message of BUOZ [of 1979] is that the universities should be motivated to pursue their own research policy' (Hazeu, 1990: 79). Then came, after the short-lived ITT and BUOZ models,

Table 5.2 Sources of funds of universities and colleges, 2002 (*CHEPS* [based on information from Cfi])

Source of funds	Universities	Colleges
Block grant and other core funds (first flow)	66%	74%
Research council grants (second flow)	5%	–
Contract teaching, contract research (third flow)	23%	8%
Tuition fees	6%	18%
Total	**100%**	**100%**

the PGM model in 1983 (related with the Conditional Funding to which we come back in the next paragraph), HOBEK in 1993, STABEK in 1997, PBM in 2000 and BAMA since 2003. Since 1983, there has been a stronger link between funding and output.

The introduction of the system of conditional funding in 1983 aimed to programme a part of academic research in all knowledge areas, and to reward good research programmes with funding. Both research programming and differentiation of funding based on quality were until then unknown phenomena in Dutch higher education. Under conditional funding, the government would only grant (a proportion of) academic research on the basis of research programmes that were positively appraised by external, disciplinary-based committees. Five years after its introduction, Spaapen et al. (1988) concluded in their evaluation report that professors still had substantial influence on their research. In many cases, the individual interests of professors determined the composition and implementation of the conditional funding research programmes. Especially in the first years of the system of conditional funding, university executives and professors formed coalitions to develop 'common sense' programme proposals at short notice. In many cases negotiations were unofficial talks or took place in committees where professors exercised their power based on their expertise and subject knowledge, the crucial prerequisites for the design of research proposals.

Moreover, the peer review process introduced by the government and organized by the Royal Academy, resulted in bland results: the peers refused to judge any programme as 'excellent' and gave only very few grades of 'insufficient', leaving the government very little opportunity for reallocation of funds with well-nigh all programmes judged 'sufficient' (Spaapen et al., 1988). In the second 5-year round, this situation hardly changed.

Conditional research funding therefore failed as a policy instrument to re-allocate research funds, but it succeeded in restructuring the research landscape. All research submitted for assessment was grouped into research programmes: these research programmes became a lasting characteristic in the Dutch research system, covering, at first, already a significant percentage of all the universities' fundamental research, and later practically all university-based fundamental research. 'Even when after two five-year rounds the CF [Conditional Funding] faded away at the national level, most universities kept these research groupings for their internal administration, and they were at the basis of other research policies developed by the Ministry of Education & Science' (Jeliazkova and Westerheijden, 2004: 329).

After this decade of Conditional Funding, research assessment on behalf of the government was changed into a research evaluation on behalf of the university administration, performed by peer teams under the aegis of the VSNU. Quality information became an important management tool inside the universities (Westerheijden, 1997), sometimes leading to restructuring of research groups and their programmes, without any overt governmental intervention. However, the research evaluation information is public, and has been read with great interest by the government, witness the following quote: 'From the research evaluations it appears that inferior research virtually has been abolished [in universities]. Therefore, I [the minister] do not see a motive for governmental policy to make an end to inferior research' (Ministerie … 2003: 9).

This quote shows that the Minister might consider intervening if the occasion arose, although the introduction, subsequent abolishment of the Conditional Funding policy and (partial) replacement by the VSNU research evaluations first and foremost is an excellent example of self-regulation, combining peer and managerial elements (with the managers dominant).

The current funding model is essentially the same as the 2000 one, though the educational part adapted to the newly introduced Bachelor–Master structure. Briefly, we now have a *performance-based funding model*, abbreviated to PBM (in Dutch: *PrestatieBekostigingsModel*). It is a *distribution* model, which means that it is not an 'open-ended' allocation model with fixed prices per student or per 'output'. The parliament determines the total budget for the university sector; the PBM is used to distribute the total sum across the individual universities. In addition to the PBM allocation, universities receive allocations for academic teacher training, for academic hospitals, and for unemployment benefits paid to former university employees. The PBM allocation consists of a *teaching* component (mainly based on numbers of entering students and degrees awarded) and a *research* component. 'Some 36% of the universities' core funds is allocated in relation to teaching activities, whereas 64% is related to research.' (De Boer, 2004). The *research component* of PBM consists of five parts:

(a) A basic allocation for each university
(b) Allocation for Ph.D.s and designer certificates (in Dutch: *ontwerperscertificaten*)
(c) Allocation for research schools (in Dutch: *onderzoekscholen*)
(d) Allocation for top/excellent research schools (in Dutch: *toponderzoekscholen*)
(e) Strategic considerations allocation

Part (a) amounted to 15% of the research component and had some link to student numbers in the BAMA model again (as before 2000). Part (b) was good for around 12%, (c) and (d) 3% each.

Obviously, then, part (e) took up the biggest part, namely 66% of the research allocation in the first stream. With the introduction of the BAMA funding model, the percentage for (e) has been reduced somewhat to make the new model's introduction 'budget neutral' for each institution, but it remains the largest part. The name derives from the original plan that the minister would base his research allocations on the quality of a university's research and an assessment of the relevance of a university's research for society. However, this plan was never realized, partly because of the consequences this would have in terms of reallocations between universities and the ensuing unemployment benefits for academics that would face dismissal. Another important reason was that a reshuffling of research funds would be seen as a major intrusion on the university's autonomy. So far, the universities have been successful in avoiding any re-allocation within this component for more than 15 years, although some (relatively new and expanding) universities have sought to get a higher strategic considerations allocation. These 'strategic considerations' are a source of stability in the division among institutions of the otherwise fluctuating university budgets, and this result shows the power of the university managers in relation to governmental steering.

The performance-related elements in the model (which ostensibly is a performance-based funding model for 100%) are (b), (c) and (d), making up just over 20% of the research budget. The premium (b) is for each postgraduate degree awarded – i.e. Ph.D., or designer certificate – and is based on 2-year averages. The rate for science Ph.D.s is twice that for humanities and social science Ph.D.s.

From the early 1990s onwards, the establishment of *Research Schools* has played a role not only in doctoral programmes (treated in the previous section) but also as a funding element. Part (c), the first of the two components for research schools, is allocated to the universities proportional to the sum of parts (a), (b), and (e). This allocation, which existed from 1998 onwards, is meant to stimulate universities to establish accredited research schools. Since 1999, the minister moreover allocated funding to a limited number of 'excellent' research schools. This is part (d). Six schools, all in natural sciences, receive this extra funding for a limited period. The Minister made the selection after consulting the Dutch research council NWO (not the Royal Academy, KNAW, which was responsible for the recognition defining part (c) of the budget). Although the Minister had planned to extend this so-called *depth strategy* to the social sciences and humanities, he abandoned this policy and introduced instead an Innovation Fund (in Dutch: *Vernieuwingsimpuls*), based on resources freed up by NWO, the first funding stream, and the universities themselves. NWO administers this Innovation Fund and allocates competitive research funding on the basis of proposals from researchers. This makes part (d) a mixture of first and second stream principles.

The first stream money allocations are made to the university's central managements. They are not targeted to faculties or departments. The idea is that the university's central management is responsible for distributing the first flow of funds across its various faculties, programmes, departments or institutes.

In all, the government does not seem to have been very strong on steering its main part of research funding. And to the extent it does, simple rules such as student numbers seem to have been more important than sophisticated strategies. Moreover, managerial self-regulation apparently was a strong governance principle, partly in relation to the HOAK philosophy introduced in the 1980s, but partly sheer inertia seems an equally strong explanation.

Concerning the second money stream, research council (NWO) funds represent around 5% of total university revenues (and 7–8% of the universities' total research income). The 'mixed' element of excellent research school funding mentioned in the previous subsection, part (d), adds about half as much to the money controlled by the NWO. The principles it applies in distributing its funds are those of competition, judged by peer review. The only – though not unimportant – limitations to the academic self-regulation are that not all research project proposals fit equally in the criteria that NWO applies. These criteria amount to research programmes in their own right.

An illustrative case is the programme on *Shifts in Governance* (Van Kersbergen and Van Waarden, 2001), started in 2001 for public administration. NWO invited the academic community to develop and discuss a programme in exercise of academic self-regulation. Once agreed and published, most of the subsequent research projects funded are expected to fit into this programme. Every other year,

NWO also has a free competition for research proposals in the field of public administration that do not fit the programme's aims.

Whether a sign of healthy research climate or of scarcity of funds, the chances of winning an NWO grant are slim. Hard public data are not known at the moment, but common wisdom in the academic community is that circa 7% of all proposals get funded.

The history of research funding through the research councils remains to be written (although there is Hazeu, 1990). We venture to state that its main argument would be that there were several efforts by the government to shift funds from the first to the second stream of funding, but that these efforts largely were thwarted by opposition from the universities; the competitive funding of research schools (part (d) above) in this respect was one of the few breakthroughs. The government tried to insert more competition into the research world. An historical overview would have to answer the question whether this was marketisation in a pure form or rather academic self-regulation instead of the current managerial self-regulation through the institutions? Such a study would probably also come across fear by academics to lose control to the 'higher' levels in the system: NWO has programmes, which are partly informed by policy goals and societal needs rather than 'pure' disciplinary drives, although a counter-example was mentioned above. There might be a tendency of academics protecting (academic *and* managerial) self-regulation against stakeholderism in NWO and direct governmental regulation.

5.6 Concluding Discussion – A Mix of Narratives and Path Dependency

The midst of the 1980s brought fundamental changes for Dutch higher education. In 1985, the government introduced the concept of 'steering from a distance'. Firm beliefs in the virtues of regulation and planning were replaced by a philosophy in which the government's role was confined to setting boundary conditions within which the higher education system was to operate.

This approach embodied a stronger role of the government in the form of *stakeholder guidance*, whilst state regulation lost its naturalness. By means of deregulation and devolving authority, the government promoted self-organisation of the sector, or at least gave that impression. The government's focus shifted from detailed *ex ante* measures to *ex post* evaluations; from input to output control. At the same time, the number of stakeholders increased; the research agenda was no longer set by academics only. The relationship between government and universities may be characterized as a policy-driven dialogue: The universities were explicitly invited to develop their own strategic plans, though within the parameters discussed, or negotiated, with the national government. Along these lines, the idea of a contractual relationship between the government and the universities has recently been put forward. This bilateral, contractual approach may be regarded as a relatively new aspect because the individual university forms the minister's 'point of application' and not the university sector as a whole.

State regulation has, however, not entirely disappeared. The number of rules stemming from the government is still impressive and the national government still imposes reforms through laws and decrees. In exchange for more autonomy, the government regards more accountability necessary to fulfil its constitutional responsibility for the provision of higher education. Attempts are made to give other stakeholders a role in overseeing higher education institutions. Yet, we would endorse the assessment that hierarchical control is still clearly visible (if not dominant). Within this type of control, shifts have taken place from strong direct regulation toward softer forms. Government has also repeatedly emphasized its interventionist capacities in cases of systemic failure or low performance.

At the same time in the 1990s, the tools of government increasingly changed from directives to financial incentives. Performance-based funding became more widely used. More *competition* for students and research funds can be witnessed, though full-blown markets are nowhere near. Thus, a still strong government goes hand in hand with increased competition (more [quasi]market orientation). Universities are expected to display more market-type behaviour and should establish more distinct profiles to place themselves on the market. In terms of research one might think of the competition for research grants and the competition on the markets of 'contract activities'. In terms of teaching, universities compete both for national and international students. And, particularly in the near future, after the baby boom generation retires, the competition for staff will increase due to scarcity on the academic labour market.

Another important change concerns the strengthening of *managerial self-governance* via executive leadership within the universities. The wholesale redistribution of authority throughout the system over the last 20 years has undoubtedly strengthened the position of the university as a whole. The universities have received more discretionary room to draw up their own strategic plans, at least in some areas: lump sum budgeting, administrative and financial control over property and buildings, appointment and management of staff, and internal organizational structure. Particularly, the roles of the executives and managers have been strengthened. This is obvious if we take the new governance structure as an example, but also the number of responsibilities assigned to the central level of the university has increased. In terms of non-academic matters, authority has been devolved from the ministry to the top level of the university. At the same time, compared to the past, academic matters have been 'centralized'; what was once exclusively decided at the basic levels in the universities is nowadays (partly) determined at the institutional and even national levels, without the traditional collegial decision-making e.g. in a senate made up of senior academics.

Academic self-governance is thus reduced, amongst other things, through the introduction of 'conditional research funding', which increasingly pushed academics to program their research. Representative bodies of academics, non-academics and students in universities have become advisory instead of decision-making bodies. In other words, they were stripped of their main authority. By the end of the 1990s, collegial decision-making within universities had lost much ground. However, the academic communities continued to play a serious role through national evaluation exercises and in the development of national research programmes. The establishment of the doctoral schools also illustrates how state-induced reforms were taken up by

the academic community and transformed into new forms of intra- and inter-organisational academic networks.

From a bird eye's view, the Dutch experience can be identified as a mixture of elements of New Public Management and Network Governance. These two are not to be seen as alternative models underlying efforts to change the modes of coordination, but rather as *complementary* models or narratives. This means that we will contend that reform was inspired by a NPM narrative mainly, while the 'Dutch polder model' of NG, as it plays out in higher education, still has a role to play, though partly with different parties at the table. At the same time, *Rechtsstaat* principles have been maintained and were coupled more closely to stakeholder guidance. In other words, the path dependency of the *Rechtsstaat* and neo-corporatist traditions in the Netherlands deflected and constricted the possibilities to change toward hard NPM – if that was the aim. Whenever the academics had to retreat a few steps from their academic self-management, they found a new manner to maintain some of their influence. In the same way, when the state retreated from traditional forms of control in favor of self-regulation of the higher education sector, it stepped back towards control through different steering manners. There certainly was not a linear movement, but rather an Echternach-like procession, with two steps forward and one step back, or a reverse variant with two steps back and one ahead, and most probably there were side-steps to left and right as well for each of the parties involved. It remains to be seen whether this reflects an intermediary state of affairs leading to a more or less pure model situation, or whether hybrids of national-specific configurations with NPM, NG and traditional elements will continue to step in this and that direction as a path-dependent procession of reforms.

Chapter 6
Norway: From Tortoise to Eager Beaver?

Ivar Bleiklie

6.1 Introduction: National Policy Tradition

Previous analyses of Norwegian higher education reforms and their effects on the higher education system have depicted Norway as a slow reformer characterised by localism and incrementalism that makes planned reforms difficult (Bleiklie, 2004; Bleiklie et al., 2000; Kogan et al., 2006). However, with the latest reform, implemented from 2003 on, there are clear signs that policy change is picking up speed and that Norway as a higher education policy maker is in the process of transforming itself into an eager and rapid implementer of comprehensive reforms. It is still early to make a final judgement because of the comprehensiveness and complexity of the latest reform. There are at least three perspectives that may help formulate expectations and possible explanations of the pace and direction of current policies. The first is the institutionalist interpretation according to which policy change tends to be path dependent and slow since new reforms, particularly those that aim at radical changes, need time to be adapted to existing norms, habits and conceptions about appropriateness. This expectation is strengthened when we are looking at the challenges facing reforms aiming at integrating and standardizing a diversified higher education system. Theoretically this institutionalist perspective of policy change tends to portray it as a gradual, incremental affair that may become abrupt only if circumstances create a situation in which existing policies are considered inadequate to sustain institutionalized systems of values, norms and practices in a given policy field (Baumgartner and Jones, 1993; March et al., 1989). The alternative is an actor's perspective where policies are regarded as the product of the actions of major players such as policy makers and affected groups where policies are understood in terms of the preferences of the actors involved in the decision process (Ostrom, 1990; Scharpf, 1997; Tsebelis, 1999). In such a case, the degree

I. Bleiklie
Rokkan Centre for Social Studies/Department of Administration and Organization Theory, University of Bergen, Norway

C. Paradeise et al. (eds.), *University Governance*,

and pace of change depend on the aims of the actors and may be explained either by changing values and aims among actors or changes in the constellation of actors involved. A third perspective is based on the functionalist assumption that structural change tends to be based on evolving needs generated by developing pressures on social systems that e.g. cause them to grow, differentiate, and develop procedures to manage growth and differentiation. According to this perspective, change depends on external pressures and how social systems respond to them in order to remain stable (Ben-David , 1968, 1971, 1991; Parsons and Platt, 1973). The specific organizational forms of concrete universities depend on how society's need for cultural functions is expressed.

In this chapter I shall analyse Norwegian higher education reforms since about 1960 and try to understand the development in terms of the theoretical narratives presented in chapter 1. The narratives shall be used to emphasise and make explicit different change dynamics. Thus the New Public Management (NPM) narrative as it is applied here, assumes the following causal structure of change processes in public higher education systems. Changing ideas about appropriateness of public steering, its purpose, its prominence and its instruments lead to redefinition of the policy problems with which governments are faced and the adoption of reforms that espouse new steering instruments reflecting the new ideas. Thus, the NPM narrative bears a strong similarity to the normative or sociological institutionalist notion of policy change. The Network Governance narrative assumes a causal structure consistent with an actor's perspective. In this case, policy change is the outcome of changing actor constellations that lead to redefinition of policy problems, bring with them new ideas about the content and process of policy reform and adopt reforms intended to address these new or redefined policy problems. In addition to these narratives, a third neo-Weberian narrative is applied in this chapter. The change model borne out by this perspective is of a functional character in that it assumes the following causal sequence of events. Pressures from the environment of higher education, e.g. greater demand, results in growth and differentiation. This makes it necessary for public authorities to implement structural change in order to stabilize the function of higher education provision by controlling costs more efficiently and strengthening the efforts to steer the increasingly diverse sector more tightly. The two former narratives emphasize change away from traditional policy instruments and the adoption of new more market-like instruments (NPM). This may weaken traditional state steering and represents a move towards governance by networks that include state as well as non-state actors (NG). The latter narrative emphasizes continuity. Policy change is interpreted as an expression of the continued strength and versatility of the state. This is demonstrated by its ability to adjust to new kinds of pressures by adopting new policy instruments, yet retaining and strengthening its efforts at maintaining and extending its bureaucratic influence over an increasingly complex and costly higher education sector.

The chapter starts by giving a description of the Norwegian higher education system. Then the attention is turned to the reform history since 1960s and changes in a broad sense, including central government regulation, system characteristics, organization and governance of higher education institutions, degree structure and

study programs that have taken place. The chapter subsequently focuses on how the reforms have affected two specific areas, research funding and graduate education, specifically focusing on how their function and organization have changed. Finally I shall return to the theoretical questions raised above about how the pattern and outcome of the processes of reform and change the last forty to 50 years best may be understood.

6.2 The Norwegian Higher Education System[1]

The Norwegian public higher education system of today (2008) is made up by three kinds of institutions: 7 universities, 4 specialised university institutions, 2 national arts institutes and 24 state university colleges. There is also a private higher education sector. Altogether in 2004 there were almost 209,000 students in Norwegian higher education institutions, of which about 25,000 are in private institutions.[2] The Research Council of Norway funds much of the research in universities and colleges. Although formally separate from the higher education system, it is not possible to understand how the system works without some knowledge of the Research Council.

Until 1976, four universities and eight specialised university institutions made up Norwegian higher education. Traditionally Norwegian universities were regulated individually by separate laws and regulations, by which the central government set the basic framework for the universities. University teachers are civil servants, and until 1990 Parliament made decisions on detailed matters like the establishment of new professorships.

The University and College Act of 1989 brought universities and specialised university institutions under one common legal framework and marked the start of a process whereby a collection of universities, colleges and vocational schools was turned into a higher education system. The Higher Education Act of 1995 went one step further and brought all higher education institutions together within a common higher education system with four different kinds of institutions mentioned above. All institutions within the previous regional college system (like engineering, health subjects, teacher education etc.) are now integrated within the state university colleges. The upgrading of previous vocational schools to higher education institutions has, therefore, contributed substantially to the growth of higher education.

Since 1960, when student numbers reached 9,600, they have been rising constantly. The growth was particularly rapid and large during the two periods between the late 1960s and the early 1970s and between the late 1980s and the mid-1990s (Fulsås, 1993).

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[1] For developments until the mid-1990s this section relies heavily on Bleiklie et al., 2000, chapter 4.

[2] The private sector comprises many institutions, about 25, considering the small student number and the fact that 60% of those students belong to one private business school. About half of the private institutions provide some kind religious education.

The integration of the higher education system was also meant to be supported by the "Network Norway" which was launched by the Minister of Education in 1988 aiming in particular to facilitating student mobility and help institutions develop their profiles by appointing particular institutions as central nodes for all nationally recognized academic fields. One important tool to promote this end was the then Council of Norwegian Universities, a body for co-operation between Universities and specialised university institutions. The Council grew out of the former Rectors' conference and was charged with the co-ordination and promotion of national level initiatives by the institutions. The state colleges similarly established their Council of Norwegian Colleges in conjunction with the 1995 legislation. In 1997 the two bodies merged to form the Norwegian Council of Universities and Colleges. Then in 1998 the Network Norway Council was established as an advisory and co-ordinating body directly under the Ministry of Education as a way of providing more centralized clout behind the "Network Norway" reform. This body in turn was changed into The Norwegian Agency for Quality Assurance in Education (NOKUT) from 2003. The change meant that the "Network Norway" reform was abandoned. NOKUT is an intermediary independent body under the Ministry of education responsible for accreditation and quality assurance in higher education.

The internal organizational pattern of higher education institutions that is developing has a number of characteristics that are common across all institutions. Institutions are organized in three or two administrative levels so that each institution is divided into faculties or divisions. At universities and some state university colleges, the divisions are in turn divided into departments as basic units. Until recently leadership at each level was "shared" in the sense that there was one administrative line, headed by an administrative officer at each level (university director, faculty director or office head) and one corresponding representative elected body (board) at each level, elected for 3 year periods where academic staff was in majority, headed by an elected leader (rector, dean or chair). The supreme body at each level is a representative board. After a protracted process that started with a government initiated reform proposal in 2000, Parliament adopted a new legislation in 2005 that leaves it to the institutions to decide whether they will keep the existing system of governance or replace the existing system of "shared" leadership and elected academic leaders or adopt a new system of appointed leaders with total administrative and leadership authority at each level. At the same time the elected bodies at faculty and department level with decision making authority may be replaced by advisory councils. At institution level the board of 11 members is composed of elected members from academic staff, administrative staff and students and external representatives appointed by the Ministry. The board may chose to change its composition, but the main rule is that no single elected group should have majority. The outcome seems to be a range of varying arrangements often combining elements of the existing and new principles of leadership and governance.

Norwegian higher education institutions are almost entirely funded over the national budget. Student fees are still symbolic. The major changes that have taken place since 1990, with a major change in 2003, is a shift from rule based towards incentive and performance based funding.

6.2.1 The Degree System

From 2003, Norwegian higher education institutions were obliged to introduce a new degree system as part of the national implementation of the Bologna process. The introduction of 3-year bachelor degrees, 2 year masters degrees and 3 year doctoral degrees had varying implications. Whereas master degree studies within arts and sciences were shortened by 1 year, the outcome varied for the professional programs. While some professional programs were shortened (law, dentistry) others successfully resisted change (medicine, psychology). With the new system, a course credit model was introduced throughout the higher education system that primarily affected the humanities and social sciences were the traditional system had survived. The new degree system and the course credit model were meant to serve a major political goal of making higher education more efficient by increasing completion rates and reducing time to degree.[3] At the same time it was declared that "students have a right to succeed" and the introduction of the new degree system was also accompanied by a funding system that puts an increased emphasis on student throughput and better funding levels in order to improve the quality of teaching.

6.2.2 Research Funding and the Research Council

There are two major sources of research funding related to Norwegian higher education. The first source consist of direct grants from the Ministry of Education to higher education institutions as professors and associate professors are supposed to spend 45% of their working hours on research in addition to 45% on teaching and 10% on administrative duties. The overwhelming majority of academic positions in universities are associate or full professorships, whereas academic staff at state university colleges tends to hold different kinds of lecturer positions in which they are supposed to dedicate between 25% and 10% of their working hours on R&D activities. The second major source is competitive grants from the Norwegian research council, and its historical development shall be briefly outlined below. Other important sources of research funding, such as the Ministries, shall be discussed in Section 4 on patterns of research funding.

The first Research Council of Norway were established by the national government in 1949 with three different Councils for Science and the Humanities (NAVF),

[3] The new system replaced a system in which the lower degree, (cand.mag.), was a rough parallel to a Bachelor degree. It was programmed to take 4 years to complete and consisted of one semester of "preparatory" studies, two basic courses (grunnfag) and one intermediate course (mellomfag). These "basic" and "intermediate" courses were quite different from a course in a course credit system. A basic course represented two semesters or one full year of studies, whereas the intermediate course consisted of one basic course plus one additional semester. The higher degree (*hovedfag* or *embetseksamen*), which was roughly equivalent to a Masters degree, was gained after 2 years of specialisation based on the intermediate course after completion of the lower degree. A liberal education was programmed to be completed in 6 years.

Technical and Natural Sciences (NTNF), and Agricultural Research (NLVF). The former was the main provider of funding for basic research; the two latter ones were the main sources of funding for applied research.

In 1995, the then five councils were merged into one national research council, The Research Council of Norway. The fiercely debated merger was justified as an attempt both to break down disciplinary divisions and the sharp division between basic and applied research.[4] Thus, when the Councils for Science and the Humanities (NAVF), Technical and Natural Sciences (NTNF), Agricultural Research (NLVF), Fisheries Research (NFFR) and Applied Social Research (NORAS) were merged into one single national council, they were not preserved as sub-divisions within the new council. The new council was thus organized in "program areas" that were supposed to break down the divisions represented by the former councils. The period following the merger was characterized by conflict and led to a dramatic change of top leadership 1 year after the merger, before the open conflict tapered off. Then from 2003 in the council was reorganized in three divisions, representing roughly basic research, applied research and innovation that aimed at making an even clearer and more radical break with disciplinary divisions.[5]

6.3 Four Waves of University Reform

The aim of this part is to give a rough sketch of the main phases of higher education policy since the 1960s. It focuses on the policies as they evolved during the university expansion the last 4.5 decades and identifies four different periods of higher education policy with their own distinct principles of policy formulation: (1) expansion and democratisation, (2) educational selectivity, (3) quality and systemic integration and (4) teaching efficiency, standardization and internationalization. The two periods of strong higher education expansion, the years before and after 1970 and 1990, correspond roughly to the first and third phase of higher education policy. The periods are not clearly distinct as they to some extent overlap in time. The fourth period starting in the late 1990s is the period we are still a part of today, and its principles of policy generation forms the general political setting of Norwegian universities today.

In order to come to grips with the current higher education policy developments, I have already argued that it is necessary to go back to the policies and practices during and after the first educational expansion in the late 1960s and early 1970s. Looking at policy developments over time I shall argue that although there are important continuities, there has also been an important shift of emphasis. Whilst policies in the

[4] The Council for Science and the Humanities (NAVF) was responsible for basic research, the other four councils for applied research. The latter council (NORAS) was originally established as a sub-division of the NAVF in 1978 under the name of the Council for Social Planning (RFSP). It was reorganized as a separate council, NORAS, in 1989.

[5] With the establishment of one research council with a broad area of responsibility Norway chose an organizational model that ran against the tendencies in other OECD countries.

1960s and 1970s were preoccupied with the *quantitative* aspects of higher education, i.e. its overall size and capacity, policies from the late 1980s on have put more emphasis on the *quality* of higher education with a stronger focus on the efficiency and effectiveness with which institutions and system produce desired outcomes.

6.3.1 Expansion and Democratisation 1960–1980

Traditionally, Norwegian universities were regulated by separate laws and regulations by which national authorities set the basic framework for each individual university. University teachers are civil servants, and until about 1990 Parliament made decisions on detailed matters like the establishment of new professorships. However, there were fairly tight informal relations and a common understanding that universities must be granted considerable autonomy in order to function properly[6]. When the Ministry of Church and Educational Affairs (hereafter referred to as the Ministry of Education) in 1969 proposed a common act regulating examinations at all universities, objections were raised on the grounds that it would impose standardization on essentially different institutions thus threatening institutional autonomy. Apart from regulations governing examinations, the universities remained regulated by separate laws until 1990, despite the fact that the Ministry of Education on several occasions in the early 1970s declared common university legislation an objective. Thus it was "natural" for the central authorities to let each institution deal with its own situation (Midgaard, 1982: 285). Consequently changes in the governing structure of Norwegian universities were the product of local institutional politics and how each institution settled its affairs with central authorities.

The central authorities were not passive in university politics, however. A committee of higher civil servants and one deputy minister, the University and college committee of 1960, (Universitets- og høgskolekomitéen, a.k.a. the *Kleppe commission* after its chairman) made plans for the expansion of the institutions in Oslo, Bergen and Trondheim, that for the first time predicted and recommended a radical expansion of the higher education system. Later far more controversial and ambitious plans to reform the entire post secondary educational system were drawn up by a government commission for post secondary education (Videreutdanningskomitéen, a.k.a. the *Ottosen commission*). Appointed by the Ministry of Education in 1965, it was composed of civil servants, politicians and representatives of the universities and the school system. Its mandate was to suggest measures in order to make existing

[6] Forland (1993) aptly illustrates the point in a comparison of the 1948 University of Bergen legislation with the national University legislation of 1989. The 1948 law was formulated in a bottom-up process, its first draft being formulated by a working committee of two professors at the Bergen Museum, an institution which formed the institutional basis of the university. It is also important to bear the smallness and intimacy of the system in mind. In the late 1950s one Education Ministry official knew personally all Norwegian university professors (Kjell Eide, personal communication, Nov. 1992).

institutions of higher education more efficient and suggest ways in which to expand the system in the future. In a series of four reports delivered in the period between 1966 and 1969, it proposed comprehensive reforms of the post secondary educational system in order to meet the challenge of rapidly rising student numbers and the imminent transformation of the higher education system from elite to mass education. Although potentially radical, its recommendations were general, specifying certain objectives and leaving it up to the institutions how they preferred to implement them. The commission recommended that all university education should follow a predetermined pattern: (a) basic education (bachelor level *cand. mag*. degree), 4 years based on the already established system at the faculty of science, University of Oslo, (b) specialization (master level *hovedfag degree*) 2 years, (c) research education (*doctoral degree*) and continued education. Its proposals for university reform were fiercely opposed both by leftist students and professors who saw what they regarded as their academic freedom threatened. The commission gained, however, widespread support for its proposal to establishing a system of regional colleges, and in 1969, a year after the recommendations were given, the first district colleges were established. Thus a binary system was created where the new and successful institutions, numbering a total of 14 separate colleges in 1990, provided both shorter vocationally oriented higher education in a variety of fields and convenient regional policy instruments for the government.

With regard to their internal structure, Norwegian universities suffered tensions of the same nature that was found elsewhere in Scandinavia and Europe, the pressure from rapidly rising student enrolment, the rapid increase in the number of university teachers below full professor level, and in the number of technical and administrative staff.

The process of local reform at Norwegian universities was not a direct response to student unrest, although it certainly was affected by the student political action of 1968–1969. Firstly, there has been a long-term trend in Norway towards broader participation in university government. The University Acts of 1905 (Oslo), of 1948 (Bergen) and of 1955 (Oslo), represented successive steps in this development, and well before 1968, students, teachers below professor level and technical and administrative staff were represented on the governing bodies such as faculty councils and university boards, although they were all dominated by holders of academic top-positions (i.e. professors and readers). At the department level, the old chair structure was in the process of being modified in the direction of a representative structure with an elected board and chair rather than the traditional chair holder as the centre of power. The working conditions of all categories of teachers were fairly uniform in the sense that practically all of them were supposed to do both teaching and research and teach at all levels. Secondly, the process of reforming the governing bodies had started at the Universities of Oslo and Bergen before the unrest got off the ground. As the reform process was under way and experiments with the governing structure at department level were encouraged, the university system was largely able to absorb student protest in a rather flexible way.

Both at the University of Oslo and the University of Bergen, commissions reforming the governing structure were at work. The student protest was at its most intense in 1969 and 1970, but soon subsided. By 1972/1973 the political climate

had changed in the sense that demands for participation did not catch student attention to the extent it had some years before. The technical-administrative staff unions were also driving forces behind the demands for representation and voting rights, and they made at times common cause with the students. When the committee proposals in the final analysis were to be cleared by the government, it tended to support demands of voting and representation rights. Even while the Bergen committee was still at work, the Ministry of Education in 1970 introduced an amendment to the University of Bergen Act that laid down the principle of a representative central board at the university (Forland, 1993: 281).

The outcome of the commission's work in individual institutions and the final modifications made by the Ministry and Parliament in 1976 resulted in representative structures whereby permanent academic staff held a majority in all elected decision making bodies at department, faculty and university levels, with minority representation from academic staff in temporary positions, administrative staff and students (Forland, 1993: 274–288; Midgaard, 1982: 299, 310).[7]

Although resisting the tide of educational reform, "the educational revolution" and the massification of higher education meant that the universities did change, as did government policies. The 1970s thus came to be characterized by expansion and institutional differentiation of the higher educational system. It also meant, however, that budgetary growth was funnelled into the regional college system, whereas university budgets grew only slowly and not enough to keep up with the growth of the student population. Two policy developments contributed to this trend. Firstly, regionalism became a powerful political argument in higher educational policy, and contributed to a political climate that put the universities at a disadvantage. Secondly, budgetary growth became disentangled from the needs of the school system for qualified teachers and linked with changes in student numbers, as the primary function of the universities was transformed from the production of state employees to the distribution of education conceived as a welfare entitlement. From the mid-1970s to the late 1980s, student numbers in the shorter vocationally oriented educations rose, whereas the university student population stagnated (Fulsås, 1993).

6.3.2 Educational Selectivity – 1980s

The policy of vocationalism is often seen in connection with a 1984 Government report to the Parliament on higher education presented in 1984 (St.meld. nr. 66, 1984–1985), which gave high priority to specific vocational studies. I shall make the argument that the origin of this policy can be traced back and related to changes in research policy preferences during the early 1970s when the government started to put more emphasis on applied research in specific areas related to "production", "environmental problems

[7] The exception was the new University of Tromsø where the structure was somewhat different and where permanent academic staff although the largest group, did not hold an absolute majority on the highest governing body, the University Parliament (Fulsås, 1993).

and resource problems" and "human growth and development". This does not mean that we are dealing with an isolated national development. 'Vocationalism' was an international trend that affected many countries in Western Europe (Vabø, 1994).

These selective policies had a number of consequences for the universities. In general, it was a financially rather depressing period since most of the expansion of educational capacity came in the college sector. This must be seen against the backdrop of diminishing trust in universities that after the setbacks of the reform attempts in the 1970s were often accused of being "useless ivory towers" and leftist strongholds. Additionally, it was also underpinned by a general ideological climate characterised by a demand for more socially 'relevant' and useful universities. Educational expansion therefore had to come in the college sector with its shorter programs, and a general increase in vocationally oriented short-cycle studies was considered necessary. However, in a number of disciplines, particularly in technology and the sciences, but also the social sciences, new research opportunities presented themselves because of increased availability of external funding.

The selective policies represented an attempt to manage the output of research and education by technocratic means. The policy meant that the government made more deliberate choices to support particular disciplines and educational programs on the assumption that this would promote economic growth. The effect of the policies that was felt by the universities was mainly that whilst demand for research-based education in general was at low ebb certain areas of research were strengthened. Particularly for the 'free' faculties this was a difficult period, as many of their educational tracks were too 'general' and not 'relevant' enough. Various attempts at introducing stronger vocational elements or to start new and more 'exciting' courses than existing 'dull' ones were made in order to attract students (Vabø, 1994). Most of these reforms were discarded or faded away when the next 'sea change' came with the policy of quality and integration.

6.3.3 Quality and Systemic Integration – 1990s

The policy of quality in higher education in Norway is closely related to the person Gudmund Hernes who served as its 'catalyst' on the national political scene.[8] However, similar policies were commonplace in Western Europe at the time

[8] The advent of what we have called 'the policy for quality and integration' can be traced back to a media controversy in the national daily *Dagbladet* during the spring of 1987. Sociology professor Gudmund Hernes launched the controversy while he was a guest professor at Harvard, and wrote an article titled "*Is it acceptable to be ambitious in Norway?*" ("*Kan man ha ambisjoner i Norge?*"). Hernes criticized Norwegian universities; in particular his own institution— the University of Oslo, for mediocrity and suggested that one might learn a thing or two about academic standards and ambitions from Harvard. In the summer of 1987 Hernes, also a politician and previously social democratic Deputy Planning Minister, was asked to head a commission on higher education reform, later to be known as the "Hernes Commission". Its report was released the following year (NOU, 1988: 28). In the fall of 1990, Hernes once again, while a guest professor at Harvard, was

(Bauer et al., 1998; Kogan and Hanney, 1998; Neave, 1986, 1988), and we may safely assume that similar policies would have been introduced in Norway anyway. One may even argue that the previous period of selective policies represented an earlier version of the policy of quality in its emphasis on the *output* of teaching and research, rather than the previous focus on the *input* of money, students and teachers. Hernes himself has emphasised the links between the proposals of his Commission and those of the Ottosen Commission in the late 1960s. Both aimed at a more integrated, flexible and efficient higher education system. There were, however, significant differences in focus and emphasis of the new policy that gave the universities new opportunities to strengthen their positions.

When the Commission report was delivered in September 1988, it was apparently received with general acclaim by leading academics and administrators. Most academic groups seemed to have something to gain by supporting the proposals made by the Commission. Its main ideological argument rested on three presumptions: (1) explosive growth of knowledge, (2) internationalisation of knowledge and (3) demographic changes. This meant that in order to develop the economy and preserve society in an increasingly tough international economic competition Norwegians had to "live by their wits" (NOU, 1988: 28). The third challenge for higher education was the demographic changes that both meant scarcer supply of new students, increased needs for re-education and continuing education and the need for replacing the ageing population of university teachers.

The policies of the Hernes Commission were couched in the language of 'quality', but 'efficiency' nevertheless was a fundamental value and one that ideologically preceded 'quality' in the sense that there was a heavy emphasis on output and the speed with which an output of acceptable quality is produced. If we look at the organization both at the system level and at the level of individual institutions, 'integration' was an important means to achieve as well as an important aspect of 'quality'. Institutional fragmentation was considered a problem both within university faculties with many small departments and in the college sector with its many small units. In order to avoid extreme dispersion of resources in a small society with limited supply both of material and human capital, the Commission wanted to move in the opposite direction from what had been the prevailing trend during the 1960s and 1970s. A higher degree of specialisation of individual institutions in the university sector, linked with a tighter co-operation between them was a means the Commission suggested in order to improve this situation. These ideas were behind the suggestion of the Network Norway – a co-operative network of all higher education institutions. The Commission suggested furthermore that departments and research groups be of a minimum size in order to provide 'critical mass' or necessary conditions for high quality academic institutions. It proposed accordingly, both to merge colleges in order to create regional educational centres, and to fuse

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appointed Minister of Education of the incoming social democratic government. When the Prime Minister Gro Harlem Brundtland asked him to accept the post as Minister of Education: "… I told her I would say yes, but on the condition that I shall be concerned with quality throughout the entire educational system." (Interview: 18.11.94).

small university departments in order to make bigger ones. An important aim of the Commission was to strengthen the administration of the universities, and to develop a proper division of labour between administrative tasks and tasks that belong to the realm of academic autonomy. Within elected bodies, where academic staff controlled the majority of seats, the Commission wanted to strengthen the authority of senior staff members. Another key element was the devolution of authority from government to individual universities, but with stronger demands for plans and goals as well as reports of results from the institutions to the government.

There are several reasons why the Commission report won an immediate approval by university academics. One important reason was that there was apparently something to gain for all affected parties from the proposals in the report. It did not attack cherished academic privileges such as tenure. More importantly, the Commission based it proposals on the premise that research-based knowledge of all types was in demand. Its arguments for basic research and graduate education provided a new legitimacy for increased budgets and more academic positions, although it did not leave altogether the old notion of student demand as a criterion for resource allocation. The Commission also based its proposals on the premise that there should be a 5% real annual growth in the general university budgets in the coming years, so there would be some gain for all academic groups. The concern for 'quality' had a strong appeal to academics and tended to make them favourably inclined. Many of the Commission's proposals were originally promoted by the universities themselves or the major trade union in the field, the Union of Researchers. From the perspective of university teachers, it was also an attractive feature that the report seemed to sustain the 'binary system' with its relatively clear distinction between the university and college sectors. A demand by central authorities for longer studies and graduate education clearly favoured the university sector. University administrators, furthermore, clearly had something to gain by decentralisation of responsibility from the Ministry to the institutions. Academics and administrators, however, both had to accept the introduction of activity planning and reporting procedures that partly followed from NPM policies introduced throughout the civil service, and partly from new ideas that spread internationally within higher education as well.

The Hernes Report emphasised quality and higher efforts in research and education. The institutional 'reality' of the academic field, however, moulds reforms. There is also an important characteristic of the consensus culture in Norwegian political and administrative life that makes it a common strategy to declare an initial support of a governmental policy and then try to reach their aims by influencing the way in which it is implemented. In spite of the relative positive reception of the proposals, the way in which they were implemented was piecemeal, gradual and tentative.

6.3.4 Efficiency, Standardisation and Internationalisation – 2000s

When the government followed up the white paper of the Mjøs Commission (NOU, 14: 2000) with an ambitious reform proposal (St.meld. nr. 27 (2000–2001)), Norwegian

higher education institutions seemed on the brink of becoming engaged in one of the most comprehensive and fundamental reform processes in their history. Parliament formally approved the reform proposal on June 12. 2001. The reform got the upbeat name "The Quality Reform". It proposed apparent sweeping changes as to the way in which institutions were managed and organized; introduced a new degree structure that entailed a change in the way in which study programs were organized aiming at shortening time to degree and raising completion rates; and intended to internationalise Norwegian higher education in a way that was basically different from previous attempts with the same stated purpose.

The Quality Reform thus was poised to break with the Norwegian tradition as careful and conservative reformer in the field of higher education (Bleiklie et al., 2000). The ambitions were impressive. After a period of steep growth during the 1990s, the first decade of the twenty-first century should be dedicated to flesh out the comprehensive higher education system that was built up with a qualitatively improved content. In its report to Parliament on the proposal, the government stated that the goal went beyond the ambition of creating better higher education institutions. The ambition was to make Norway "a leading nation of knowledge". I shall argue that although a break with tradition still is a possibility and that current policies still may cause changes that will be more radical than previous reforms, subsequent developments indicate that the reform process may be about to slow down and become somewhat diluted. Thus, we may argue that both the extent of change and the direction in which it will move depend on a number of conditions that are not yet settled.

The reform consisted of three main components: (1) *The study program reform* which involved the implementation of the recommendations of the Bologna declaration with the introduction of a new degree structure: the so-called "3 + 2 + 3" or "3, 5, 8" system indicating the duration of the bachelor-, masters- and doctoral degree programs. The reform emphasised the responsibility of the institutions for efficiency and successfulness of the study programs and the need to introduce modern teaching methods, frequent feedback to students, longer teaching semesters and portfolio evaluation instead of traditional lectures and written exams with rather long intervals that dominated particularly in the humanities and social sciences. The main goal was to make the degree studies more efficient by shortening time to degree and increasing compliance with program schedules and completion of study programs. The reforms aimed at making students float more quickly and with more ease through the system. Several tools were supposed to be introduced in order to achieve these aims, such as contracts between student and institution, more coherent study programs, better use of the entire, enlarged academic year, more varied and better adapted teaching methods and more teacher-student contact with frequent feedback to students. (2) *Internationalisation* aimed particularly at increasing mobility of bachelor degree students and to offer a 3–6 months' stay abroad for all students who wish to travel. The aim was that 20% of the students should make use of the offer. (3) *Organizational changes* concerning the formal status of higher education institutions in relation to central government, governing structures at all levels within institutions and introduction of an incentive based element in the funding system that puts a heavy emphasis on the efficient production of exams and student credits.

Among these three reform proposals, the radical element seemed to lie in the degree- and study program reform which, if implemented as promised, was aiming at changing the curricular, teaching and degree structure as well as student and teacher roles in fundamental ways. This apparent break with tradition may be explained in various ways. One explanation may be related to changing characteristics of the higher education sector itself, such as changing values and/or new actor constellations, may have created a more reform minded ideological climate. Another explanation of this break with the tradition as a careful reformer may be that this tradition was overrun by another Norwegian tradition: that of clever implementer of supranational agreements and decisions. In the effort of introducing a new European degree system, which is the intention of the Bologna declaration of 1999, Norway has been a front-runner if we consider the pace of the reform effort. However, as already observed in connection with previous reforms, one cannot overlook the possibility that reforms that may appear radical, even revolutionary when announced, may slow down and become diluted by resistance in the implementation stages. Signs of such slowing down and withdrawal of radical proposals have been observed in several contexts and shall be discussed below.

One important reform tool was a new funding model that will be described below. It aimed at introducing a clearer separation of education and research and emphasised the role of incentives in promoting quality and efficiency in education and research.

In the recommendation from the parliamentary Committee on ecclesiastic affairs, education and research that prepared the proposal before submitting it for the final vote in Parliament, the high reform ambitions were reiterated verbally. The committee unequivocally stated that the reform required extra funding, basing its estimates on those made previously by the Norwegian Council of Universities and Colleges. It stated furthermore, that if the reform was implemented without these extra resources, it would jeopardize, rather than improve the quality of higher education. These considerations indicated that the effects of the reform were perceived to depend on the extent to which sufficient resources were provided for the new teaching programs. In its 2004 national budget proposal the government increased higher education grants to a level that, although somewhat less than the institutions had asked for, was considered sufficient by them to carry out the reform successfully.

The changes that have been proposed with regard to institutional organization and leadership were initially offered less attention. The committee proposed new legislation that suggested alternative principles for organising the institutions under the Ministry. A majority proposed that they be organized as “public enterprises” whereas the minority recommended that they keep their status as “special civil service institutions”. Regarding internal organization, a majority wanted the institutions to have appointed leaders and “unified” leadership, whilst a minority wanted to keep the existing arrangement with elected leaders and “shared” leadership, i.e. one elected academic leader (rector, dean or department chair depending on organizational level) and one head of administration (director general, faculty director or office head). Whilst leaders at each organizational level had their mandate through elections and the consent of elected representative bodies, the new system meant that appointed leaders had their mandate from superior authorities in a hierarchical chain in which

department chairs report to deans who in turn report to the rector who reports to a board appointed by the Ministry based on recommendations from the institution. A strong minority proposed to keep several elements of the existing arrangements.

The Ministry subsequently left it to the institutions to choose whether they wanted to retain the "shared" leadership model or introduce a "unitary" leadership model and named a special commission (the Ryssdal Commission) to study the matter and produce a joint recommendation on the issue. In connection with the committee work, a public controversy surfaced in the summer of 2003. It was triggered by a declaration that was circulated on the Internet and argued against a legislation that might organize universities as public enterprises. The controversy raised the issue of potential consequences of organizational reform, and it was contended that it might jeopardize university autonomy and the freedom of research.

The report of the Ryssdal Commission was released in September 2003, but the committee was unable to agree on a common recommendation. However, although the majority and minority recommendations were similar to the parliamentary proposals, they were modified somewhat. The most significant modification was that in this case the majority proposed that institutions be organized as independent foundations rather than as public enterprises. The group of professors that initiated the public controversy was now arguing against the new majority proposal. They organized a campaign against the proposal and collected more than 4,000 signatures from a majority of Norwegian professors and other academic employees. By late October 2003 the group established "Vox Academica", a forum for information and debate in order to "shed light on" the implications of the new law if the majority proposal is adopted.

The introduction of the Quality Reform started the fall term of 2002, and the study program reform as well as the internationalisation of study programs was scheduled to be fully introduced by the beginning of the fall term 2003. The institutions initially complained that the funding they received failed to meet the requirements of the study program reform and predicted that funding problems would increase in 2004 unless additional grants were provided. However, the budget proposal for 2004 went further than sceptics predicted in meeting the demands for extra funding; a funding level that was also kept for 2005.

In early 2005, Parliament introduced a new legislation where it was decided that the institutions keep their status as special civil service institutions, and left it to the institutions whether and to what extent they would keep their traditional internal organization or introduce the new system of "unified leadership". Many institutions have chosen mixed solutions, e.g. introducing the new model with appointed leaders at department level, but keeping the traditional "shared" model with elected leaders at the faculty level and chief administrators. Some institutions have chosen a "unified leadership" model. The main pattern is elected rectors and double leadership at institutional level and appointed unified leadership at faculty and department levels. The government thus had to let go its ambition to have a more organizationally integrated and standardized higher education system. As important in this context is the extensive use of economic incentives in order to boost the efficiency of study programs, emphasizing student numbers, credits production and time to degree.

The organizational reforms also meant a strengthening of institutional autonomy by transferring decisions on a number of matters to the institutions. In addition, the new independent intermediate agency, NOKUT, became responsible for accreditation and evaluation. This meant that the authority to decide whether a state university college could be upgraded to university status was transferred from the Ministry to NOKUT. Yet within institutions, the traditional academic freedom, both the authority of the academic staff/the professoriate and the autonomy of the individual scholar, is circumscribed by stronger external influence on institutional boards and stronger institutional leadership to convey that influence throughout the organization. Furthermore, the reform also looks to strengthening the power of students as consumers, emphasising the importance of student numbers for funding.

Recently there are signs of an increasing scepticism against the reform. Questions have increasingly been raised about the effects of the reform on academic quality, and the relationship between quality and efficiency, as the first graduates under the new system are starting to emerge. At two major universities new rectors were elected in 2005 on programs that were less enthusiastic and emphasised the need for a critical scrutiny of the effects of the Quality Reform. Finally, by 2006 it was possible to start measuring possible effects of the reform in terms of increased efficiency measured by time to exam and retention rates. So far, the results indicate that there have been almost no measurable changes (Michelsen and Aamodt, 2006).

6.3.5 Change and Stability in Higher Education Reform Policy

In trying to consider the four periods of higher education policy since 1960 in a long-term perspective, I would like to make two observations. If the reforms are considered as developing interpretations of what ought to be the proper social contribution of higher education institutions, it is safe to say that these interpretations have varied from period to period. The policy for expansion valued any studies as positive. Resistance among students and junior academics, however, meant that the proposed restructuring of the ‘free’ faculties never took place, and the universities never complied with the demand for ‘short cycle’ education. The utilitarian policies of the 1980s, which grew out of the previous experiences, gave clear priority to specialised ‘short cycle’ education, to certain disciplinary fields and to the college sector at the expense of research universities. The introduction and increase of applied research in the university sector served partly as a new way of sustaining funding levels in some fields, while others withered. The policy of quality and integration turned this situation upside down. The quality of education and research on a broad scale became important. However, the policy of quality was simultaneously driven by a strong quest for efficiency with a focus on the capacity to produce higher volumes of candidates and research publications. The policy of efficiency and internationalisation continues the quest for higher efficiency both through the study program reforms and the organizational reforms. It differs from the former period in several important respects, in particular because of the impact of the Bologna process and

how it served to give increased legitimacy to the study reform, but also through the ambitious plans for increased student exchange. In addition, the emphasis is to a lesser extent on graduate educate education and the focus has shifted somewhat towards undergraduate education.

I shall not draw any conclusion about the extent to which the study reform represented an early and swift implementation of the Bologna agreement or to what extent it would have been introduced anyway and was merely conveniently justified by it. Suffice it to say, as a second observation, that it may be regarded as the first apparently successful implementation of the restructuring of undergraduate education within the 'free faculties' that somehow had been on the agenda since the 1960s.[9] The four periods with their different policy principles have to some extent, formed the institutions of higher education in Norway, and it is a likely proposition that structural features from these different periods may be uncovered in the institutional fabric like archaeological layers. The institutions had to fend off or adjust to new policies, and had to translate political demands into the 'language' of higher education. Higher education is, however, no fixed and uniform entity, and the ability to resist, exploit and adapt to a given policy may vary.

It is still early to draw a definite conclusion as to whether Norway has transformed itself from a reluctant and slow reformer to an early adopter and swift implementer of drastic changes in higher education. In this section of the paper we have seen how a very forceful start has gradually slowed down and how forces of resistance, not always very clearly articulated, have begun to have their effect. We may conclude therefore, that Norway may still prove to keep its reputation as a slow and incremental rather than a revolutionary reformer.

6.4 Tracers Issues

6.4.1 Patterns of Research Funding[10]

Research spending in Norway has increased considerably in later years with a 3.8% real growth from 2001 to 2003. However, in spite of Norway's favourable economic situation as a wealthy oil nation with a growing economy and extremely favourable public finances, the country finds itself among the low research spenders measured as a percentage (1.7% in 2002) of GDP, well below the OECD average (2.26%) and far below the neighbouring top spenders, Sweden (4.3%) and Finland (3.5%). The central government plays a comparatively prominent role in Norwegian research funding as it provides almost half of total funds invested in research (46% in 2003). A similar

[9] By 'free faculties' are meant the humanities, social sciences and sciences as opposed to the 'professional faculties' like medicine, law and engineering etc.

[10] Main source: the 2004/2005 government report to parliament on research policy: St.meld. nr. 20 (2004–2005), Ministry of Education and Research. *Vilje til Forskning*.

share is provided by industry (48% 2003), whereas foreign contributors, among them the EU, provide a smaller share (7% in 2003).

The relatively low general level of research spending is understandable in comparative terms in the light of the low level of industry spending on research (0.82% of GDP) compared to the OECD average (1.4%) and far behind Sweden (3.07%) and Finland (2.4%). Government spending on the other hand, is high (0.76% of GDP) compared to the OECD average (0.68%), and Norway ranks number seven among OECD countries, behind Finland, France, Iceland, Germany, Sweden and the USA. Industry is slowly catching up, however, but nevertheless it has been argued that the policy of reaching the OECD average or some other standardized percentage does not make much sense without taking the specific needs of Norwegian industry into consideration. One important consideration in this context is the research intensity and needs of the major sectors of the economy (Maurseth, 2006).

In terms of resource streams, the public and private sectors appear to be almost separate realms as 80% of industry research spending in 2003 was invested directly on research within the industry sector whilst 80% of public funding went to public institutions. Conversely, about 10% of public funding went directly to industry while about 13% of industry spending went to public institutions.

Government research spending in Norway is distributed between two types of public institutions, universities and colleges (55% in 2003) on the one hand and public research institutes (35%) on the other. The remaining 10% went to industry. Most public funding goes directly to research institutions, but about one quarter (26%) is distributed competitively through the Research Council of Norway (RCN). The existence of one research council spanning all kinds of research (basic and applied) and all disciplinary areas is one distinguishing characteristic of the Norwegian research sector. In addition to the brief outline of the history of the research council in Section 2, it is worth mentioning a few characteristics that may distinguish the organization of the RCN in comparative terms. When the research councils were amalgamated into one organization, it was argued that it was an advantage for overall planning and steering capacity to have all research council spending under one organizational umbrella. A major counter argument is that putting all competitive research funding under a common organizational umbrella eliminates competition and invites nepotism. Both assumptions may or may not turn out to be corroborated by actual processes and practices depending on a number of factors in addition to the formal organizational arrangements.

Another distinguishing characteristic of the Norwegian research sector is the relatively comprehensive sector of research institutes. (St.meld. nr. 20 (2004–2005: 168–187). The sector dates back to the first decades after WWII, and the institutes were usually established as vehicles for contributing to problem solving in specific areas of social and economic life, such as innovation and technological development in the industrial sector, transportation economy, social welfare, foreign policy, peace research, alcohol related problems, hospital research, fisheries and so on. After the whole social planning ideology behind the establishment of the sector was increasingly called into question from the 1980s on, the efficiency and organization of the sector has been called into question The sector subsequently went through a

number of mergers, had its level of basic government funding reduced and its relative size have diminished. Nevertheless, the sector is well established and will in all likelihood continue as a significant contributor to the Norwegian research effort.

Since the 1980s, the Universities have launched several initiatives that were designed to attract more external funding both from public sources and the business sector. One such initiative was the establishment of research parks where the goal of increased business-university co-operation and increased business research funding were important drivers. Another initiative was the establishment of organizations for externally funded research. As we already have seen the initiatives did not change the situation where business and public research funding are realms apart in terms of funding flows. Still therefore, university research is mainly funded by public sources.

In recent years a number of developments that affect the patterns of public research funding have taken place. The first is the establishment of national centres of excellence selected and funded by the RCN, the purpose of which is to increase the competitiveness of Norwegian research institutions in areas of national importance. The first batch of 13 centres was established in 2002 for a funding period of 5 + 3 years after a comprehensive international and national review process. They were all located in the major university cities of Oslo, Bergen, Trondheim and Tromsø. Apart from three centres in history, political science and linguistics, they were concentrated in the disciplines of medicine and the sciences. The second development is the establishment of the Fund for Research and Innovation in 1999. The fund has grown very quickly since then, and yields from the Fund amounted to more than 14% of public research funding in 2005. The idea behind the establishment of the fund was to improve the conditions for stable long-term funding of research. Most of the contributions from the fund are distributed through the RCN, whilst somewhat more than 20% goes to the higher education sector. Finally, the expansion of the higher education system in itself contributes considerably to an increasing research effort as all tenured academic positions in traditional research universities are supposed to be devoted equally to research and teaching, whereas a limited number of the positions in the college sector have a smaller research component (10–30%). Although competitive funding schemes are becoming increasingly popular in Norway, the public-private mix in the provision of research funding seems remarkably stabile. Research funding for higher education institutions is overwhelmingly provided by the state, while public and private research funding still seems to belong to separate realms. Thus we find few traces of Network Governance. The increasingly competitive funding schemes indicate that research funding is changing as NPM style policy instruments are increasingly used. Yet the stability of actor constellations, and public-private division of labour, suggest that state control over research funding has not been weakened. The evidence makes it tempting to interpret the changes in support of a neo-Weberian narrative, where the state adopts new policy instruments in order to improve steering and make Norwegian researchers better able to compete internationally, e.g. for EU-funds, by increasing competition for research funding through publicly steered and professionally managed allocation procedures.

6.4.2 Doctoral Education[11]

The reforms of doctoral education in Norway may in many ways be considered a representative case. They have been characterised by increasing formalisation and attempts at making the programs more efficient and predictable, by a redefinition of responsibilities in which the institutions have been charged with a responsibility for the outcome of graduate programs that previously rested with the individual student. The main challenge that had to be faced in the case of graduate studies was, and still is, the relatively disorganized and inefficient character of doctoral education in humanities and social sciences.

6.4.2.1 Graduate Education and New Doctorates

Graduate education beyond the master level in Norway has not traditionally been much standardised and certified. Since the mid-1970s, however, there has been a piecemeal process in which universities have established new doctorates and built up organized education programs in all fields. This development represents an effort to standardising graduate education as well as university career patterns and academic qualifications.

It is often claimed that until the introduction of new doctorates from the mid-1970s, Norway did not have any research training (Tvede, 1994: 43). To the extent that it existed it was in any case old fashioned and inefficient. It is not difficult to corroborate this view if one limits oneself to look at the doctorate level. However, if we let the expression research training mean all kinds of education involving research practice, then the traditional 'higher degrees', i.e., the *magister* and the *hovedfag* degrees, must be included as graduate education. Both degrees involve substantial research and the production of a thesis. The "new" doctorates in Norway, meaning organized doctoral programs, were first introduced in the technological disciplines and natural sciences, and later on they were gradually introduced in law, humanities, social sciences and medicine over a ten to 15 year period. One of the central aims of the Hernes Report (NOU, 1988: 28) was to strengthen the forms of graduate education and thereby the role of doctorates in Norwegian academic life. In order to analyse this process it is necessary to look closer at the previous status of the doctorate in Norway and the political processes that lead to the introduction of the new degrees. In the analysis we shall focus on how different disciplinary areas developed diverging perceptions of the need for the new doctorates.

6.4.2.2 Tradition Challenged

Traditionally the doctorate (*dr. philos, dr. juris, dr. med, dr. techn*, etc.) was not a part of a graduate education – if we by that mean organized study programs that require the dissertation to be completed within a specific time frame. In the nineteenth century

[11]For developments until the 1990s this section relies heavily on Bleiklie et al., 2000, chapter 9.

a doctoral degree was first and foremost an honour given for brilliant research. During the first half of the twentieth century it became gradually a normal prerequisite for anyone who wanted to become a reader or a professor at a university. In the decades after W.W.II until about 1970 the traditional doctorates were thus mainly a kind of promotion test for future readers or professors. This may be corroborated by looking at the mean age of doctoral candidates. During the post WWII period the mean age has oscillated been between 41–43 years in the humanities and between 38–39 years in the social sciences. In the sciences, the mean age of doctoral candidates varied between 36 and 37 years until the introduction of the new degrees (Olsen, 1988: 24, 37). These mean ages may represent what was considered the 'appropriate' age within the different disciplinary areas for a candidate to present himself to be considered for a professorship or a readership. If we combine these observations with the low degree of mobility and high degree of 'self-reproduction' of academic groups that characterises Norwegian higher education, a pattern emerges where the 'production' of doctorates and the completion of doctoral degrees apparently were determined by the needs of the university as an institution rather than by the needs of scientific development. Thus doctoral education suffered from a situation in which the needs of the institution, the, 'rhythms of university life', came at odds with scientific needs of (some) disciplines (c.f. Bourdieu, 1988: 155). According to scientific needs one would expect that a candidate complete a thesis when he or she is ready to report its scientific results to colleagues in order to contribute to the development of a discipline or a speciality.

The expansion of the middle tier from the late 1950s until the early 1970s and its improved status and working conditions made it possible for academics to get tenured research positions without a doctorate. Thus the significance of the doctorate as a requirement for a university research position was weakened. The homogenisation of the corps of tenured staff since the late 1960s until the mid-1970s, whereby working conditions became almost identical and wage differences significantly reduced, made the doctoral distinction superfluous in many ways. If we look at the statistics over university personnel from 1985, it is only at the medical faculties that a majority of tenured academic staff held a doctoral degree. On average, 38% of all tenured academic staff at universities and scientific colleges were *doctores* at this time, and the lowest ratio was found in the humanities and social sciences (Olsen, 1988: 48).

The other challenge to the traditional doctoral degree came from the sciences. The higher science degree (*cand.real*) was changed during the 1950s to accommodate the perceived need for a stronger specialisation and systematic research training. In other words, the science degree was made more specialised and research oriented, whereas it previously was less specialised and defined by the needs of secondary school teaching.

The start of this process took place in 1961 when the Faculties of Sciences at the Universities of Oslo and Bergen appointed a joint committee to evaluate the student needs for further education after completion of the *cand.real* degree (the Rosenquist Committee).[12] The committee proposed to introduce a new doctoral degree in the natural sciences – *dr. scient* – modelled upon the American Ph.D. This degree was

[12] All references to the Rosenquist Report are from: *Vitenskapelig forutdannelse i matematisk-naturvitenskapelige fag. Innstilling fra utvalget. Blindern, 5. desember 1963*.

intended to replace the *dr. philos* for this disciplinary area. The proposal criticized the traditional doctorate as unfit for a modern research education and the needs of a modern research organization. It proposed a new degree that could be taken within 3–4 years after the *cand.real* and should include both a general education component and a researched thesis. Rather than an internal promotion test the new degree was considered an entrance degree. The proposal was also tailored to the requirements of research training within the dominant "hard-pure" research mode, in Tony Becher's terms, in the natural sciences (Becher, 1985, 1989). The main academic reaction to the report of the Rosenquist Committee was fear that the doctoral degree might loose status if the proposed *dr. scient* degree was introduced. This fear is most evident in the report by a committee under the Conference of University Rectors.[13]

Little happened concerning doctorates after this report. The topic did not re-enter the agenda until the Ottosen Commission made some fairly vague proposals about graduate education and the doctorate, and in 1969 the Conference of University Rectors established two separate committees; one for the sciences and one for humanities, social sciences and law. The sciences started to develop plans for a graduate education within the framework of the *dr. philos* degree, whereas there was little enthusiasm for this solution in the committee for the humanities, social sciences and law. Although lack of funds was used as an argument by the latter disciplines, there were other factors at play. The rather massive resistance should also be seen in the light of a negative alliance of radical and conservative groups within these two disciplinary areas. Whilst conservatives tried to preserve the status of the *dr. philos* degree by preventing the establishment of a new and competing degree, radicals fought against a new degree based on a politically motivated critique of the doctorate and the universities in general. Around 1970 it was not inconceivable that the doctorate would just whither away. The decisive breakthrough in the attempts to introduce a new doctorate came in 1974 when the Ministry let the Norwegian Institute of Technology introduce a *dr. ing* degree in engineering. Natural scientists in Oslo subsequently pressed further for a *dr. scient* degree, and the same year the University decided to apply to the Ministry for permission to introduce the degree.

6.4.2.3 Formalisation and Practice

The introduction of the new doctorate in the natural sciences was undertaken in the form of a regulation of the entire degree structure in which reductions in the stipulated time needed to complete the master level degree (*hovedfag*) was part of the restructuring at graduate level. After 2 years study stipulated for the *hovedfag* degree, a student could extend the *hovedfag* thesis by continuing 2 years within the doctoral program for a *dr. scient* degree. The *hovedfag* thesis thus would have to become a part of the doctoral thesis if a student wanted to complete the degree within the stipulated time

[13] *Den norske doktorgrad. Instilling frå komitéen til drøftelse av den norske doktorgradsordning, oppnevnt i henhold til vedtak 10.mai 1966 av det XIV møte av norske universitets- og høgskolerektorer*.

(Forland, 1996: 489). The *dr. scient* degree was instituted in 1978, and the introduction of new doctorates in science and technology could not be ignored by the social sciences and humanities (Jarning, 1985: 134–138). From 1980 onwards, new doctorates were introduced in these disciplines. A committee appointed by the University Board in Bergen suggested in 1981 a different solution to the problem of relating traditional and new doctorates. The *dr. philos* and the new degrees were both considered by the Committee to be of equal academic status, but they should be organized differently. Whereas the new doctorates should be part of an organized graduate education program, the *dr. philos* was to remain a 'free' degree open to everyone who wanted to specialise in a field of research on an individual basis.

This compromise, untying of the Gordian knot in the struggle between proponents of change and the status quo was apparently a well-balanced compromise, but for the new doctorates in the humanities and social sciences – *dr. art* and *dr. polit* respectively – it was almost a 'kiss of death'. Whilst the number of successfully completed new doctoral degrees increased sharply in the natural sciences and technology, the number of completed traditional degrees fell in these areas (Olsen, 1988: 37). In the social sciences and the humanities the development was quite different. A strong increase in the total number of awarded doctoral degrees took place during the 1980s, but was mainly an increase in the number of traditional dr. philos degrees.[14] This must be seen against the backdrop of the increasing emphasis that was put on the doctorate as an academic distinction during the 1980s, culminating in 1990 when a doctoral degree, or equivalent competence, was made a condition for tenure at the universities. The emphasis upon doctorates by university leaderships may be seen as a way in which they tried to increase the prestige of the universities compared to the college sector and thus counteract the levelling effect of the integration process within the higher education system.

6.4.2.4 Doctorates and New University Policies

The situation described above changed during the 1990s. The number of doctorates earned each year has become an important performance indicator, rewarded financially since 1990, and it has increased strongly in the humanities and social sciences as well. To produce graduates within the specified time of 3 years is thus a strong concern for the institutions. The fact that a doctoral degree has become a requirement for a tenured position has put the doctorate at the very centre of the whole reproduction process of the university. The increased attention directed towards the doctorate as a formal qualification and as a production goal has led to a number of different efforts aiming at developing an efficient organization of graduate education. One of the main targets since the Hernes Report has been to develop a stronger co-ordination of education programs at the doctoral level

[14] One reason for this was that a degree that was supposed to be completed in three to 4 years was considered an inferior *dr. light* degree preferred by those who for opportunistic reasons take an easy short-cut in order to gain an esteemed title.

(cf. NOU, 1988: 28, 95–105). Since 1990 three major co-ordination measures have been implemented. Firstly, the Council of Norwegian Universities has a national responsibility for the co-ordination of doctoral programs. Secondly, boards of graduate education (*Forskerutdanningsutvalg*) have been established at each university, at the institutional and at the faculty level. Thirdly, some doctoral courses are co-ordinated by national disciplinary councils (*nasjonale fagråd*). The extent of this latter co-ordinating effort still varies considerably across disciplinary areas.

The main effect of these efforts on graduate education has so far been a drift in the direction of formalisation and homogenisation, based on an administrative standardisation that influences the research process. The main problem for the Faculties of Social Sciences and Humanities has been the lack of commitment to the new doctorates among their academic staff. The result has been a flow of students through the system that although increasing still is considered too small and too slow. Relatively few have yet been able to complete their doctorate within the specified time of 3–4 years. There is therefore a strong pressure on both students and supervisors to improve performance in this respect.

In the wake of the Quality Reform, all previous disciplinary doctoral degrees were replaced by one degree, the PhD. The new degree may be seen as one further step in the direction of formalisation and homogenisation. Like the previous degree it is supposed to be completed in 3 years. The introduction of the new degree is also supposed to be followed up by an increased emphasis on the training component, and the universities are expected to establish "research schools". Until now the degree of formalisation and development of the research schools has been very uneven, across universities and across faculties within universities. Since its inception in the sciences in the 1960s the development of doctoral education has been the history of a slow but steady progress of the American PhD model that emphasises the degree as a formalisation of research education and a requirement for anyone who wants to become a researcher in an academic discipline. The process of national standardisation and formalisation reached its current stage when the PhD was introduced with the Quality Reform in 2003. Apart from the fact that NPM-style incentive policies are being used to increase efficiency and boost production of new PhDs, the evidence support the neo-Weberian narrative emphasizing increasingly forceful attempts by national authorities to standardise and increase the efficiency of doctoral education nationally by means of legislation and funding policies.

6.5 Concluding Discussion: Ontinuity and Discontinuity in Norwegian Higher Education Policy

Whether we consider higher education in terms of the major general reform efforts or more specifically through the prisms of research funding and doctoral education, certain common characteristics seem to emerge. The first is that there are some important continuities and discontinuities in the direction of reform activities. One common characteristic of the efforts throughout the period has been the attempts at developing the higher education system and its institutions into a more formalised

and standardised one that is better equipped to process increasing student numbers efficiently. Perceived lack of efficiency has particularly characterised the humanities and social sciences where the majority of students were to be found. Also, graduate education reforms have tried to impose higher productivity and efficiency on the programs within these disciplines. The pattern of a slow moving reform activity characterised by a relatively low level of conflict and a slowly changing system has also been a stable feature, where core elements in the latest major reform safely may be regarded as the implementation of reform goals formulated over 40 years ago. Although the government has always demanded certain social contributions from the universities, the specific content of those contributions have changed as have the means by which the government has tried to achieve them. As for the contributions we have seen how the ideas about what is 'useful' education have changed over time, as have the functions of the doctorate within graduate education. The importance of internationalisation and Europeanisation through the Bologna process have no doubt increased supranational influence over higher education development although it is still an open question what aspects of higher education policy that are influenced and how strong that influence is. Around 1990 the significant change in government steering of higher education changed from emphasising rules to emphasising much stronger management by objectives and outcomes which implies delegating more responsibility, but not necessarily more power, to higher education institutions. It is still early to say whether the current reform will fundamentally alter Norway's position as a reluctant and slow reformer, but recent developments may indicate that old patterns seem to re-assert themselves and increasingly slow down the process of planned policy change.

The apparent radical nature of the Quality Reform, its emphasis on teaching and undergraduate studies, may lend support to perspectives which assume that policies have changed fundamentally since 1980. The NPM and Network Governance narratives make such assumptions. However, only the former is supported by the data presented above as there are no indications of a change from traditional hierarchical to a network structure. The changes in the type and number of actors involved are within the traditional state structure. These changes include an increase followed by a drastic reduction in the number of higher education institutions because of institutional mergers; introduction of new intermediate bodies such as the evaluation agency NOKUT and stronger supra national influence, in particular from EU-policies. In the area of research funding, several attempts have been made to forge stronger ties between research and business interests and bring actors from industry into closer cooperation with research institutions, the establishment of research parks and the applied emphasis on the allocation of research funds from the RCN. However, as we have seen, business related and public research funding still seem to belong to mainly separate realms. Furthermore, although the goals and means underlying these efforts have changed, the attempts at forging stronger ties between public research funding and private businesses, between public investment in research and the development of new products and processes, is not a new phenomenon. Both the latter observations indicate that these policies represent a continuation and new expressions of a long-term ambition on the part of the state rather than a new phenomenon emanating from new forms of governance, such as NG.

There is more solid evidence of NPM measures in the reform policies. This started first as a careful move from ex ante to ex post control from 1990 on. Then it was followed by more comprehensive moves in connection with the Quality Reform, comprising the proposal of a new leadership structure, the funding system that started with an estimated 40% incentive based funding share – about 25% based on teaching efficiency and 15% on research performance – and a further transition from ex ante to ex post control following the establishment of NOKUT. Both in the areas of research funding and in doctoral education, NPM policies are clearly evident in the funding policies. Incentive funding, based on performance indicators and ex post control are increasingly used as a steering instrument.

In the Norwegian case it is far from obvious that state control over higher education and research has been weakened (Bleiklie and Byrkjeflot, 2002). The most striking characteristic is a remarkable stability regarding the coordinating forces that have been regulating higher education. Apart from the fact that growth has been followed by more formalised forms of management and control, higher education institutions have been integrated parts of the civil service throughout the period, and manpower needs as central authorities have defined them, have been decisive for the overall size and structure of the system. Thus, the national system for communication and creation of knowledge has not become a less important basis for research and development of experts and elite personnel. It still sets the conditions for what kinds of received knowledge shall be taken for granted and passed on to new generations, and for the norms that regulate career advancement and elite selection (Byrkjeflot, 2001). In addition to the continuity regarding coordinating mechanisms, the continuity thesis also holds true regarding the content of the reforms. Core elements of the Quality Reform, such as the study reform and the new degree structure are the last stages in government attempts to develop a system of mass higher education that have progressed slowly and haltingly since the 1960s (Bleiklie et al., 2000; Michelsen and Aamodt, 2006). The above observations lend considerable support to a neo-Weberian narrative that emphasizes continuity regarding the strong role of the state in the regulation of higher education. However, if we look at the certain aspects of the way in which the institutions are funded and governed, and not least the role of the European level operating through the Bologna-process, it is easier to make the case that Norwegian higher education finds itself in the midst of a period of profound transformation that at the same time may indicate a continued strong role for the state in higher education. The changes are related to the formalisation of university studies and the teaching process, as well as the formalisation of research activities. These are primarily attempts by the state to establish reliable macro steering instruments for a growing public higher education system. Although private sector research spending has increased more sharply than public spending, public spending measured as a ratio of GNP, is increasing and well above the OECD average. In addition, there are few indications that state control over the use of public research funds have decreased. As for doctoral education, the current reforms are the last in a continuous series of efforts over a 50-year period that basically has had the same goal. The aim has been to provide an organized, efficient and reliable doctoral education based on research needs as defined within the ‘hard-pure’ research tradition of the sciences.

Chapter 7
Switzerland

Between Cooperation and Competition

Lukas Baschung, Martin Benninghoff, Gaële Goastellec, and Juan Perellon

7.1 Introduction

For a couple of years, political debates and legal decisions have resulted in an increase, from a formal point of view, of the power of higher education institutions' (HEI)[1] rectors. According to policy makers, this institutional change should increase the autonomy of the HEI. However, the dismissal of a university rector by the cantonal government in a quite authoritative way[2] seems to counterbalance this statement on HEI "autonomy" and addresses the governance issue: who governs the universities? The question is especially sensitive since this example is not an isolated one but embodies several cases in Switzerland.[3] This situation illustrates the tension between, on the one hand, the reinforcement of an *individual* HEI direction regarding *academic* activities and, on the other hand, the redefinition of higher education and

[1] In the Swiss case, the HEIs represent equally cantonal universities, Federal Institutes of Technology and universities of applied sciences.

[2] Opposed to a transfer project (which was initiated by the cantonal government and supported by the Federal state secretary of education and research) of a micro-techniques laboratory (based in his university) to the Federal Institute of Technology of Lausanne (EPFL), the rector of the University of Neuchâtel (UNINE) was dismissed of his function without delay.

[3] Under political and social pressure, the director of the University of Geneva (UNIGE) resigned in 2006. The same year, the director of the Federal Institute of Technology of Zurich (ETHZ) also resigned from his job due to faculties pressures expressing a disagreement with his suggested organisational reform inside the institution.

L. Baschung, M. Benninghoff, and G. Goastellec
OSPS-University of Lausanne

J. Perellon
Department Education, Youth and Culture, Canton de Vaud

C. Paradeise et al. (eds.), *University Governance*,

research (HER) activities as a *collective* and *political* issue.[4] To what extent does this tension reveal changes in terms of the governance of HEIs?

This chapter focuses on transforming means of state action in the Swiss HE system occurring between two main periods: the 1980s and the 1990s–2000s.[5] This diachronic presentation portrays, in a first section, the former structure of the HE system (1980–1990) and, in a second section, the reframed one (1990–2007). Both sections are divided into sub-sections, depicting, firstly, the structure of the actors' constellation, secondly the HE funding regarding allocation procedures and the institutional budget structures, and thirdly the organization and management of the academic marketplace, including the promotion and organization of doctoral studies. A comparative section discusses the changes occurring during the last decade. Finally, a conclusive section discusses the new governance regimes of the Swiss HER system.

7.2 The Swiss Higher Education and Research System (1980–1990)

7.2.1 Actors of the Higher Education and Research System

Historically, in Switzerland, HER policies have been a shared prerogative of the cantonal and Federal authorities, even if the cantons have more legal competences in higher education. This organization takes its roots in the national political system, identified in terms of executive federalism: the Confederation's competences being subsidiary in comparison to the autonomy of the cantons in public affairs.[6]

The sharing of the authority on HER expresses this political feature. First, at the Federal level, two ministries are involved, namely the Federal Department of Home Affairs and the Federal Department of Economic Affairs. Each department is specifically in charge of a subsystem: the Federal Department of Home affairs deals with the universities, which are oriented toward HE and fundamental research, while the Federal Department of Economic Affairs is concerned with vocational

[4] In the example mentioned above, the localisation of the micro-techniques laboratory seems to be a *political* issue that involved not only the direction of the HEIs, but several actors. It is a political issue in the sense that the re-localisation of the lab in other HEIs follows not only scientific or academic criteria but also a financial one: The cost of this lab seems to be too high compared to the cantonal financial situation.

[5] The analysis carried out in this chapter does not consider other issues like accreditation and quality.

[6] In Switzerland, the principle of subsidiarity means that the Confederation only intervenes in domains which are not already managed by the Cantons and Communes or in domains which are legally and politically delegated to the Confederation. Therefore, the division of tasks between Federal and cantonal authorities can change in time depending on the power balance.

training and applied research.[7] Second, at the cantonal level, ministries for education have large responsibilities for HE policy. Due to the cantons' autonomy, important differences are observed between regional regulations: the organization and legal frameworks of universities differ from one canton to the other, for example, academic titles and wages are framed within a specific cantonal scale.

Within these two different levels of governance (Federal and cantonal), two agencies are in charge of policy coordination: The Swiss University Conference – which associates cantonal ministers of education and the president of the Federal Institutes of Technology Board – is responsible for the political coordination between Federal and cantonal authorities. While the Rectors' Conference of the Swiss Universities and Federal Institutes of Technology promote the coordination of the "operational" level and is responsible for translating and implementing the decisions taken by the Swiss University Conference.

Besides these two coordination agencies, the Federal Parliament voted in a new Federal Act on research in 1983. Its aim is twofold: first, to increase the coordination between the actors in charge of research activities by consulting each other in order to use the Federal budget in an efficient way and, second, to define and to plan a Federal research policy (cf. Benninghoff and Leresche, 2003). However, this Federal Act does not constitute a new way to increase the financial support for research activities. Federal support for research activities is indirectly channelled through two Federal funding agencies.

The Swiss National Science Foundation is the most important one in terms of financial resources. This agency supports mostly basic research, but since the 1970s, applied and oriented research has been funded too (Benninghoff et al., 2004). A second agency, the Commission for the promotion of scientific research, provides funding for applied and industrial research (Joye, 2007).

The "operational" level of the HER system is represented by ten cantonal universities, two Federal Institutes of Technology and attached institutes.[8] The system is historically diversified: cantonal universities were devoted to fundamental research and education, the Federal Institutes of Technology, created later, were dedicated to the education of the engineers that were expected to build up modern Switzerland. To these institutions, one can add a dozen of research institutes that are affiliated neither to a cantonal university nor to the Federal Institutes of Technology.[9]

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[7] As we will discuss later, vocational training was not considered as part of the HER system before 1995.

[8] Only the two Institutes of Technology – Lausanne (EPFL) and Zürich (EPFZ) – are considered here. The four other attached institutes are funded exclusively by the Confederation and concentrate on fundamental and applied research. They fall into the same responsibilities as the two main Institutes as far as legislation is concerned, namely the Federal Act on the Federal Institutes of Technology.

[9] These institutes carry out research activities in very specific areas (risk governance, tropical diseases, bioinformatics, art studies, etc.) which are not addressed by the HEIs (cf. subsidiary principle). They are jointly funded by their home canton, the Confederation and private sources. Due to their specific place in the system, these institutes are not further addressed here.

As regards vocational education, a large number of schools dealing with engineering, business and administration as well as art exist. However, they are not part of the HER system. About 50 of these superior vocational schools would be upgraded as universities of applied sciences (UAS) in 1995 (see Section 2.1).

7.2.2 Funding Allocations and Budget Structures

In general, HEIs receive their allocations directly from their respective authorities. These funds are allocated to allow the institutions to carry out their fundamental missions of teaching, research and service to society. It is quite difficult to identify how the funds are used among the different tasks, because it is assumed that all academic staff pursue the ideal of a teaching and research unity. In addition to this core funding, HEIs can receive additional funds for research, both from public and private sources.

The budgets of *cantonal universities* integrate several types of public and private sources: the resources allocated by their respective canton, those allocated by the Confederation (since 1968) through the Federal Act on financial assistance to cantonal universities[10] and the inter-cantonal allocations constitute the largest share of university finance. However, their proportions vary considerably from one institution to the other. The reasons for these differences lie not only in the size of the institutions (a large institution like the University of Zurich receives more funds from extra-cantonal students than a smaller one like, for instance, the University of Neuchâtel) but also in the economic wealth of the respective canton. The Federal contributions, only dating back to 1968, have served as a mean to reduce these inequalities. Alongside these three funding types, competitive research funding coming from the Swiss National Science Foundation and the European Union can also be considered public. Generally, private resources like industrial funding and contributions provided through students' tuition fees constitute a smaller part of a university's budget.

The budget of the *Federal Institutes of* Technology is mostly provided by the Confederation (reallocated by the Board of the Swiss Federal Institutes of Technology). It is completed by third funds such as the National Science Foundation or the Commission for the promotion of scientific research (see Section 1.1), European Union and private sources (companies and tuition fees).

7.2.2.1 Academic Marketplace and Doctoral Education

Similarly to the actors' constellation (Section 1.1) and funding configuration (Section 1.2), the Swiss academic market is highly differentiated (Felli et al., 2006). Each institution is characterized by specific recruitment processes, professors' status and

[10] This new Federal law on HE can be considered as a historical turning point. It is the first time that the Confederation intervenes in the cantonal HEIs.

wages, degree of internationalisation and gender representation. These differences go along with specific internal steering, within an academic marketplace characterized by a hierarchical and pyramidal organization. Such as the German academic market, it is organized around a chair system, the non-professors being dependent on the professor responsible for the chair and hired on non-permanent positions. The same hierarchical structure applies for doctoral education, characterized by a strong dependency of the doctoral student on his thesis director. At this stage, doctoral education is a (political) non-issue and, as such, does not appear on political or institutional agendas.

Historically, the academic marketplace is organized around disciplines, institutionalized in faculties. As a result, university rectors have little power compared to faculty deans and professors. In contrast, the governance structure is different in the two Federal Institutes of Technology where the presidents have more power (although there is also a difference to note between the two EPF, the ETHZ being characterized by a two-headed leadership shared by a president and a rector.

7.2.2.2 Governance Patterns of the Higher Education Institution System Between 1980 and 1990

During this time period, the HEI system can be characterized as a triple institutional differentiation: between types of institutions (Universities more involved in basic research activities, Institutes of Technology more focused on applied research activities and technical disciplines even if they are also largely involved in basic research); between types of funding agencies (National Science Foundation: basic research; Commission for the promotion of scientific excellence: applied and industrial research); and between types of public authorities (Cantons and Confederation). This differentiation is not the result of a particular political will. It is more the expression of the main rules of the Swiss political system being the institutional back-ground of any policy-decision making in the HE system: the Confederation does not intervene in the domain of competence of cantonal authorities (subsidiary principle) and the public authorities (Federal and cantonal) do not intervene in economical affairs (liberal state). Therefore, the HE system is more the result of an uncoordinated process that leads to incremental changes during a long period of time. It is why we can describe the system, at that period of time as quite fragmented. Nevertheless the governance patterns of HEIs operate a move during this time period. Indeed, the Federal state tries to give an impulse in the direction of a more coordinated system, even if this new legal instrument (cf. Federal law on Higher education) is not really constraining.

7.3 Changes in Higher Education and Research System (1990–2007)

The last 15 years have witnessed important changes in the structure of the Swiss domains of education, research and innovation. Different factors can be brought forward to explain these changes: rapid increase in the number of students during

the 1980s due to the 1960s baby boom, the retirement of numerous professors, a political will to integrate the European economic market, an increase of the unemployment rate, a decrease of the small and medium enterprises' competitiveness, and, last but not least, a crisis in public funds.[11]

In this context, different political and administrative reports have pointed out the need to optimize the use of public money and to increase the efficiency and the effectiveness of state actions. In order to achieve these goals, policy-makers have stressed the importance of *coordination* and *competition* as new patterns of state regulation in HER (Weber, 1998; Perellon and Leresche, 1998).

7.3.1 Changes in Actors' Configuration and Competences

In order to increase the competitiveness of the economy and the level of employment, different measures have been taken by the Federal administration.

The main changes in the HER system have appeared in vocational training and within industrial and applied research. Both the actors and the structure of this sector have been redefined. On the one side, public administration was transformed: the Federal department of economic affairs was reorganized through the creation, in 1998, of a new office that promotes vocational education and economical innovation: the Federal Office for Professional Education and Technology (OPET).[12] On the other side, the funding agency dedicated to applied research was reformed: the former commission for the promotion of scientific excellence was transformed into an Innovation and Technology Agency provided with more resources to reinforce the technological transfers between applied public research and the small and medium enterprises.

What is more, in order to increase the feasibility of these technological transfers, a large number of former higher vocational schools were upgraded to the HE level. This transformation resulted in seven networks of cantonal or inter-cantonal UAS that were introduced in 1995.[13]

The fact that higher vocational schools were upgraded to the level of UAS illustrates a profound change in the HER sector and testifies of a political will to favour a European harmonisation, to balance the absence of professional HE and, to a lesser extend, to create a more integrated HER system. At the same time, as the HER sector was enlarged and diversified, the relationships with the respective

[11] These financial crises lead to a general reform of the Federal and cantonal administrations. In this context, new public management tools such as contracts, merit-based salaries, ex-post evaluation, controlling, quality assurance, etc. were introduced within public administrations (see, Hablützel et al., 1995; Giauque, 2003).

[12] The OPET replaced the Office of economic affairs and took also responsibilities from the old Office of Industry, Trade and Work.

[13] In 2005, a private UAS was recognised by the Federal Council, testifying to the emergence of private actors within a public service.

authorities responsible for each type of institution were redefined through several legal frameworks (cf. Table 7.1), which have intervened in the steering mechanisms of the system (see Section 7.3).

In addition to the reorganization of the Federal department of economic affairs, the Federal Department of Home has also been transformed in order to increase the coordinated action of the Federal government. In 2005, the Secretariat for Education and Research (SER) was created, headed by a state secretary. This new body results from the merger of the Federal science agency and the Federal office for education and science. This merger confirms and reinforces trends that have taken place in recent years aiming at concentrating the Federal prerogatives on HER field in fewer agencies.

However, this double reorganization appears to be unsatisfying for some policy-makers. The Federal ministerial organization of the whole HER field is again under scrutiny. In the meantime, political pressures (mainly coming from the Swiss parliament) have invited the Federal government to consider the reorganization of the concerned departments in the perspective of concentrating the Federal HER competences within a single department. The main argument for this reorganization was a better coordination between cantonal and Federal authorities, HER activities, different HEI, and, finally, economic and scientific activities (Braun et al., 2007).

These deep institutional transformations at the levels of the HEIs and at the Federal administration also impact on intermediary bodies, i.e. on the Swiss University Conference, the Rectors' Conference of Swiss Universities and the Federal Institutes of Technology Board. In 2003, a common project group of the Confederation and the cantons[14] was created. In a first step, their appointment relied on the elaboration of basic principles about a new organization of the HER field. The result, a policy paper called Higher Education Landscape 2008 (*Paysage des Hautes Ecoles 2008*),[15] especially stresses the deficit of national steering, a lack of funding transparency and the necessity to reorganize the responsibilities of the different public authorities.

Table 7.1 The Swiss HER system

	Legislation	Funding education	Funding research
Federal institutes of technology	Confederation	Confederation	Confederation
Cantonal universities	Home canton and Confederation	Home canton, other cantons and Confederation	Confederation and home cantons
Universities of applied sciences	Confederation and home canton(s)	Confederation, home canton(s) and other cantons	Confederation and home canton(s)

[14] More precisely, this group was composed of the heads of the Federal department for home affairs, the Federal department for economic affairs and the delegation of the committee of the public education directors' conference.

[15] This policy document is also the base for the elaboration of a new legal framework seeking to regulate the whole HE system. According to the State Secretariat for Education and Research, this new law should come into effect from the 1st of January 2012.

Regarding the steering issue, three main options were discussed. The first one suggested that the steering and financing of all HEIs should be the prerogative of the Confederation. The second option proposed that the Confederation had the complete control on research policy and that the cantons had all competences in HE policy. The last proposal, which won the favour of the project group, consists in strengthened cooperation between the Confederation and the cantons. To achieve this goal, different measures are planned: (a) the idea is to enlarge the competences of the current Conference of Swiss Universities by a UAS representation in order to increase the steering capability of the HE and research system. According to the Swiss HE landscape paper, this new body would be responsible for the entire system and design the common framework. This is important, since it would reinforce the national coordination of policy-making decision into a single body for the first time in Switzerland. (b) The second proposition concerns the institutions' coordination regarding the implementation of the decisions adopted in the new Conference of Swiss Universities. This task would be left to the reshaped Rectors' Conference of Swiss Universities. (c) The third proposition deals with the construction of a form of public arena for critical debate on the future directions of the HER system. This debate could take place in a new body: the science and innovation council.

The ideas coming from this report were taken up by a Federal parliamentary commission dedicated to elaborate a new constitutional article on education. This article gives more power to the Confederation to intervene in the HE domains which historically was the competence of the cantons. The idea is to foster the cooperation principle (cf. "cooperative federalism") between the Confederation and the cantons regarding the main issues: quality assurance, autonomy of universities, harmonisation and transparency of rule related to (a) the acknowledgement of curricula and diploma, (b) the mobility of students, teachers and researchers, and (c) the financial allocation. This new constitutional article was accepted by a popular vote in 2006, after 8 years of discussion.

7.3.1.1 Changes in Funding Allocations and Budget

The idea of efficiency promoted by politicians and administrators at the Federal level is partly implemented through new modes of funding allocation. However, we cannot speak of radical changes at the empirical level (see Benninghoff et al., 2004; Lepori, 2006). The change in the funding allocation is also related to the political aim to increase the autonomy of the HEIs and to give more power to the heads of the HEIs.

In the following sub-sections we focus on further changes related to funding, studying separately each HEI type.

7.3.1.2 Cantonal Universities

The source of the cantonal universities' funding is diverse but still illustrates the historical power of the local public authorities: in average, the home cantons fund

43% of their corresponding university. The Confederation is the second funding provider (15%). Its part is even larger if we add the part of the national funding agencies (FNS – National Science Foundation and the CTI – Swiss Innovation Promotion Agency), provided by the Confederation (although the Confederation funds the National Science Foundation, the former is autonomous in the management of its budget), which elevates its funding share to 23%.

Figure 7.1 constitutes an average. Concerning the part of the home canton, however, the repartition of funding sources varies quite strongly between institutions: the Universities of Geneva and Lausanne strongly depend on their canton (54%), while the cantons' part is significantly smaller in the case of the Universities of St. Gallen (19%) and Lugano (20%). By comparison, the Confederation's part is varying between 13% (Universities of Lausanne and Geneva) and 29% (University of Lugano). With Lucerne (20%) and Neuchâtel (23%) two other small Universities are more strongly funded through the Confederation, whereas the Universities of Zurich, Basel, Bern and St. Gallen all show a proportion around the average (14–15%).

As we have seen (Section 1.1), the cantonal universities' budgets are established on the basis of the cantonal university acts, and those have been revised in all cantons during the 1990s. Two dynamics are at play in the funding calculation. On the one hand, the funding is transformed from being itemized to being allocated on a global basis (lump sum). On the other hand, it is not anymore exclusively focused on inputs

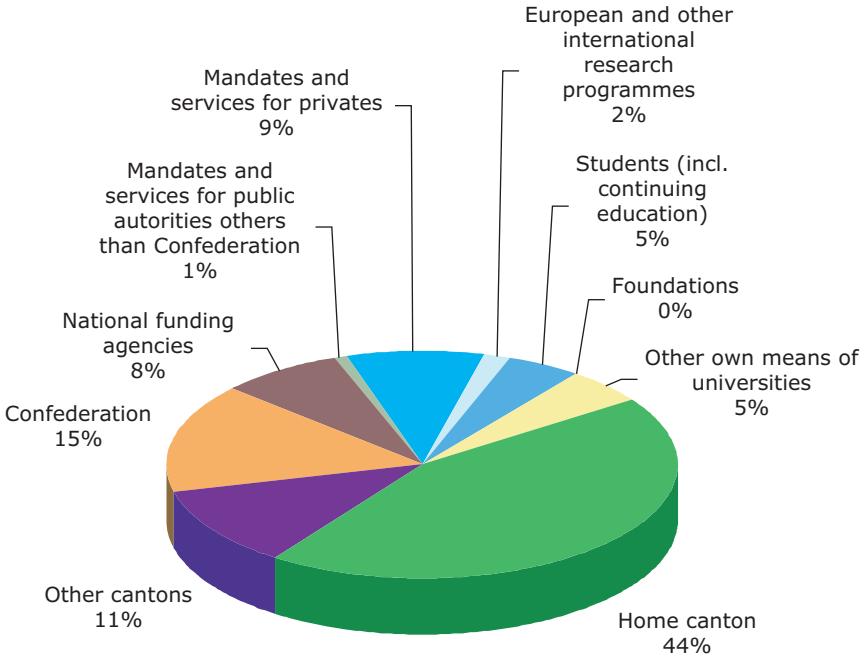

Fig. 7.1 Funding sources for universities 2007 per actor (www.bfs.admin.ch, own calculations)

and gives more importance to outputs. Performance-oriented mechanisms have, in some cases, been introduced, but remain limited in most cases and input-oriented mechanisms – the number of students, existing members of staff and existing infrastructure – are still predominant in the way cantons fund their universities. These changes in funding are framed in performance-contracts between cantons and their university. The degree of constraint varies from one contract to another: some are defined only in terms of general goals while others are formulated in terms of clearly defined performances.

The funds allocated by the Federal authority to support the activities and missions of the cantonal universities have also witnessed changes. This is especially true since the revision in 1999 of the Federal act on financial assistance to cantonal universities, which regulates, among other elements, the amounts that should be allocated by the Confederation to the universities, as well as the modalities of this allocation.

Similarly to the different cantonal acts on universities, the sums allocated through the Federal act incorporate both teaching and research activities. An innovation of the revision is that, since 1999, the sums are divided at a rate of 70% for teaching and 30% for research. It is important to note that this distinction does not mean that 70% of the funds allocated to the universities are targeted at teaching activities *only* and 30% at research activities *only*. Rather, the ratio serves as a means for calculating the total amounts to be allocated to each institution, universities being entitled to use this funding to support their research priority. In other words, 70% of the total Federal contribution is distributed on the individual universities based on indicators related to "teaching" activities – like the number of students – and 30% on indicators related to "research" activities – such as the number of research projects being carried out. In both areas, one has observed an increase of performance-oriented mechanisms, for instance by limiting the number of studied semesters funded by the Confederation or, in research, by taking into consideration the amounts of external funds the universities have been able to gather from other sources, notably the national and international funding agencies, to determine the Federal subsidy for this activity.

In terms of the role to be played by the Confederation in the steering of the HER system, we stress the fact that the revised Federal act has introduced a new funding instrument aimed at sponsoring priority projects that address the concerns of cross-cantonal coordination and inter-institutional cooperation. This instrument is managed by the Swiss University Conference.

The inter-cantonal agreement is the third funding mechanism for the cantonal universities. It dates back to 1981 and was revised in the late 1990s. The *raison d'être* of this agreement lies in the necessity to integrate all cantons in the financing of universities. For that reason, each canton whose inhabitants study in other cantons pays a given amount of money per student to the university cantons where its students register.

Over the years, not only the amount but also the modalities of allocations have changed. The amount has generally increased in line with inflation. In 1995 a decision was made to differentiate the type of disciplines to adjust more precisely the allocations to the actual costs. This led to a three-tier system distinguishing

between humanities and social sciences, natural and technical sciences and medical studies, which indicates that a more accurate mechanism was applied to this part of the funding allocation.

The above table also testifies to an increase in the cost of medical and life sciences studies, while the cost of humanities and social sciences studies remains constant. This reveals an anticipated adjustment of the funding mechanisms to the changes in the disciplinary students repartition, and, maybe, a shift toward a "real cost" funding. In 2007, the average funding based on the inter-cantonal agreement constitutes 11% of the total average expenses of all cantonal universities.

Another important element in the organization of the funding structure and budget allocation is the increasingly stormy debates about the introduction of higher tuition fees. The access to education in universities or in the Federal Institutes of Technology is open to every holder of a Federal *maturité* degree (upper secondary). In average, fees constitute 3% for ordinary students and 2% for students of continuing education programmes of the overall expenses. They are low compared to other countries but not inexistent. They have increased during the last 2 decades and their amount varies substantially regarding the institutions but not the discipline.

This table underlines differentiated fees regarding HEIs. First, we can observe a regional or linguistic effect: the French speaking universities are characterized by lower fees compared to their German counterparts. Thus, the hypothesis of an indexation on life costs is not pertinent: Geneva and Zurich (cf. Table 7.3) are places where life costs are very high while it is lower in the Italian part of Switzerland (USI), Lucerne and Bern. Tuition fees may thus reflect a political and institutional strategy independent of other factors. The high level of the USI fees can be explained by the fact that initially USI did not get any financial support by the Confederation and had to find other financial resources.

This strategy is also at play regarding foreign students, some institutions having introduced a differentiated cost regarding the student origin. In these cases, similarly to an increasing number of HE systems, international students are charged higher fees compared to national students. However, unlike HE systems, new-regional (European) students are assimilated to international ones (which is not the case, for example, in England).

Besides the previously mentioned sources of funding, universities also benefit from the funding of the two national funding agencies, the National Science Foundation and the Swiss Innovation Promotion Agency. Since the creation of the National Science Foundation in 1952, we observe an evolution of its allocation mechanisms. Until the 1970s, the whole budget supported basic research. From the 1970s to the 1990s, 10% was dedicated to applied research and, since the 1990s, a further 20% to oriented research. For the last few years, in relative amounts, we observe a stagnation of the funding allocated to fundamental research and an increase in the funding allocated to oriented and applied research. The National centres of competence in research represent the most important instrument for the promotion of oriented research. It aims at different goals: first, supporting high level research activities by building networks (centres of excellence); second, organizing, promoting and rationalising the costs of research through a strong

management. This tool is also aimed at encouraging the research education (see Section 2.3) as well as the technology transfer to industry. This funding type works on a contract basis between the National Science Foundation and the host institute. This contract obliges the researchers to account for their activities to the National Science Foundation. This programme, built to last 10–12 years, illustrates the development of NPM mechanisms in the Swiss HER system (Benninghoff, 2006). All in all, the FNS and CTI constitute 8% of the cantonal universities' budget. The CTI's part being less than 1%, the core of this funding agency part is almost exclusively managed by the FNS.

Another source, i.e. mandates and services for privates, is, with 9%, even slightly higher positioned than the public funding agencies. This shows that this type of funding represents a source that should not be neglected in the discussion on the funding of Universities. However, the role of foundations seems to be completely insignificant.

Finally, still in 2007, the cantonal Universities' budgets comprise 5% of other "own means", 2% of European and other international research programmes and 1% of mandates and services for other public authorities than the Confederation, hence cantons and municipalities.

Altogether, public authorities (Confederation, cantons and the funding agencies) remain the most important sources for cantonal universities (78%). However, two important changes must be noted: first, they are more strongly related to conditions, namely to input and output criteria, and second – partly as these criteria's effect – became more competitive.

However, it is difficult to calculate the respective part of competitive and non-competitive funding. If we consider "competitive" every type of funding distributed on the basis of a competition between HEIs, funding from the funding agencies for instance belongs to this category. From this point of view, funding coming from the home canton may be considered rather "non-competitive" because each canton maximally funds one university. However, one could argue that besides that, Universities could compete for more students in order to get more money from their canton. Yet, one has to ask the questions, to what extent this competition really takes place (also regarding certain Federal funding) and whether cantons are always able to follow up the developments within their University from a financial point of view.[16] Finally, there are several types of funding, like mandates and services from private funds, which – because of the lack of more detailed differentiation – can neither be clearly classified within one or the other type of funding. From this point of view, real changes in terms of competition depend on the behaviour of the University staff, the students and the privates. However, one can argue that the funding mechanisms now offer the possibility for competition between HEIs.

[16] An administrative staff responsible of a small University explained that its cantons' finances do not always allow to increase the University's budget according to the increasing number of students (interview 20.2.2008).

7.3.1.3 The Federal Institutes of Technology

With 88% (Confederation and funding agencies), public authorities play an even more important role in the funding of the Federal Institutes of Technology than for cantonal universities (Fig. 7.2). Moreover, the Confederation taking into charge the whole "public part", the cantons have no responsibility at all for these HEIs. It is also interesting to note that mandates and services for privates represent a smaller part of the budget (6%) than in the universities (9%). This does not mean that, in absolute terms, Federal Institutes of Technology attract less private funding than cantonal universities. The Zurich one (ETHZ), for instance, attracts twice as much private funding as the University of Geneva or the University of Basel (www.bfs.admin.ch).

The situation of the Federal Institutes of Technology must also be differentiated, although the repartition of funding does not substantially vary between institutions: the ETHZ attracts more than twice as much of the amount received by the Lausanne institute (EPFL), probably due to its "bigger size" (for example in terms of students or researchers, etc.).

Some years ahead of the universities, the Federal Institutes of Technology Board introduced the lump sum contract and a performance contract signed with the Swiss government as the body responsible for the coordination of this sector. The amounts are allocated for a 4-year period. However, the Parliament votes annually on the yearly amounts. As a result, variations can be introduced, especially if cutbacks are imposed on the institutions. This situation characterizes the whole sector and affects, in fact, the entire HER system.

The modalities of funding allocation are codified in a contract, in which seven general goals are identified together with more precise objectives indicating the modalities through which the goals can be achieved. Indicators have been devised to ensure that the objectives will be met and that, by extension, the seven general goals too. Hence, as in the case of cantonal universities, the FIT's funding from

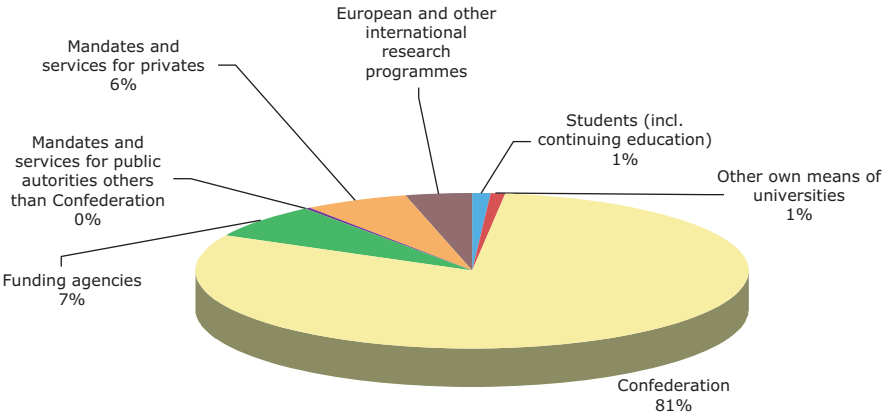

Fig. 7.2 Funding sources for Federal Institutes of Technology, 2005 (www.bfs.admin.ch, own calculations)

public authorities is more strongly related to certain conditions. Concerning the degree of competition between HEIs in funding distribution, the situation is generally the same as for cantonal universities, with one exception: the two Federal Institutes of Technology share the same public authority – compared to cantonal universities where every institution has its "own" home canton – and, hence, are in direct competition regarding their principal funding resource (Confederation).

Compared to the universities, the tuition fees' part in the overall budget at the Federal Institutes of Technology is even lower. Thus, they are not related to the institutional degree of prestige. What is more, foreign students are not charged higher fees than national ones (cf. Table 7.4), which testifies to a perception of international students as a prestige oriented resource as opposed to a financial one. The fact that the Federal Institutes of Technology have low and non-differentiated tuition fees partly explains why they represent only 1% of their overall funding, compared with 3% for the universities.

Finally, the Federal Institutes of Technology's budget contains 4% of funding coming from European and other international research programmes, compared to 2% for cantonal universities.

7.3.1.4 The Universities of Applied Sciences

As for the cantonal universities, the UAS also receive most of their funds from the Confederation and the cantons. The Federal act on the UAS indicates that one third of the overall running cost of these HEI has to be covered by the Federal government. The cantons that host a UAS or that have a college that is integrated in one of the networked institutions allocate funds for its functioning. Finally, an intercantonal agreement states the amounts to be allocated by each canton for each of its students. This agreement only applies to the study fields that were accredited by the Federal government or that were in the process of getting such recognition (Table 7.2).

As illustrated by the previous table, the funding of HER is characterized by an almost 80/20 ratio that translates the stronger importance of teaching in UAS compared

Table 7.2 Funds allocated to cantonal universities through the intercantonal agreement (in Swiss francs) (Intercantonal agreement, 1999)

	Social sciences and humanities	*Natural and technical sciences*	*Medical sciences and biology*
1999	9,500	17,700	22,700
2000	9,500	19,467	30,467
2001	9,500	21,233	38,233
2002	9,500	23,000	46,000
2003	9,500	23,000	46,000

Source: International Agrement, 1997.

Table 7.3 Fees in Swiss Universities for academic year 2007/2008* (in Swiss francs) (CRUS, 2008)

	USI	*SG*	*LU*	*BS*	*ZH*	*BE*	*FR*	*LA*	*GE*	*NE*
Tuition fees (including other taxes) per year	4,000	2,040	1,570	1,400	1,378	1,310	1,210	1,160	1,000	1,030
Added fees for foreign students	4,000	300	–	–	200	–	300	–	–	550
Total yearly fees for foreign students	8,000	2,340	1,570	1,400	1,578	1,610	1,510	1,160	1,000	1,580

*USI, University of Lugano; SG, University of St. Gallen; LU, University of Lucerne; BS, University of Basel; ZH, University of Zurich; BE, University of Bern; NE, University of Neuchâtel; FR, University of Fribourg; LA, University of Lausanne; GE, University of Geneva.

Table 7.4 Fees in Swiss Federal Institutes of Technology for academic year 2007/2008 (in Swiss francs) (CRUS, 2007)

	EPFL	*ETHZ*
***T**uition fees (including other taxes) pre year*	1,266	1,288
***Added fees for foreign students-**Total yearly fees for foreign students*	1,266	1,288

to other HEI. This corresponds to their historical orientation (before their upgrading to UAS). As a result, the proportion of public funding dedicated to research is low (18% of the Confederation funding and 17% of the cantons funding). Nevertheless, other funding sources balance this trend by devoting 41% of their resources to research. Behind this "other funding" lies the increased trend in self-funding, or, to put it in other words, the necessity for academics to apply for external funding in order to sustain not only their research and teams salaries but sometimes also part of their own wages (see for example Giauque, 2006). At the same time, strong accountability mechanisms require to justify the use of resources. The accountability obligation is related to contract-based resources allocation.

In 2006, the average part of Federal funding[17] for all UAS consists of 20%. With an average cantonal contribution[18] of 59%, the cantons have an even bigger importance for UAS than for cantonal universities.[19] The funding allocations have moved in the direction of managerial precepts (performance – evaluation/assessment – customer-oriented, target based) and a more precise differentiation of tasks and theirs costs. A "professionalisation" of the techniques of accounting through the introduction of

[17] Including the Confederation's contribution per student (cf. Table 7.5), CTI, FNS and "other Federal contributions".

[18] Including contributions from home and other cantons.

[19] The UAS of Zurich and the UAS of Southern Switzerland have respectively the most varying percentages: Confederation: 16% vs. 26%; cantons: 64% vs. 51%.

Table 7.5 Funding of UAS charges by origin and type of activity (2006 in millions of Swiss francs) (OFS, 2007, percentages are own calculations)

	Total		*Confederation*		*Cantons*		*Others*	
	Amount	*(%)*	*0.111*	*(%)*	*Amount*	*(%)*	*Amount*	*(%)*
Undergraduate teaching	1,071	70	248	81	724	80	99	31
Continuing education (post-graduate)	118	8	4	1	25	3	89	28
R&D et services	340	22	54	18	152	17	134	41
Total	**1,529**	**100**	**306**	**100**	**901**	**100**	**322**	**100**

cost accounting has also been witnessed, which implies the description and prescription of the tasks. By turning to cost accounting, decision-making bodies have provided themselves with a potentially powerful tool to look into the HEIs' activities, assess their cost and steer them.

Finally, the part of private contributions[20] (21%), compared to cantonal universities and also Federal Institutes of Technology, constitute a considerable part of the overall budget.

7.3.2 Developing the Academic Market and Doctoral Education

The transformations of the HE landscape have strongly affected the organization of the academic market. Between 1980 and 2005, the number of students increased from 61,347 to 166,449,[21] and, as underlined in Table 7.6, the staff body – composed of professors and other teaching staff – did not follow this trend.

Relatively speaking, the increase in discrepancy between the students and staff bodies is 35% for universities, 40% for Federal Institutes of Technology and 12% for UAS (yet only for the period 2000–2005). However, this tendency varies if we add the assistants and scientific staff: staff at universities was growing stronger than their student body, and the staff of the Federal Institutes of Technology and UAS was quite equilibrated compared to their number of students. As a consequence, especially in universities, the lack in professor and teaching body has been compensated somehow by a growth in the number of assistants and scientific collaborators.

Participating in the assistants' number increase, the growth of doctorates is also striking.[22] In order to transform the structure regarding the new context, the academic

[20] Including tuition fees, "contributions of thirds," and "other contributions." Private contributions vary between 16% (UAS of Western Switzerland) and 27% (UAS of Central Switzerland).

[21] Almost half of this increase (54,140) can be attributed to the HES' integration into the HE system and their growing popularity. The number of students in the Federal Institutes of Technology doubled (9,545 to 18,959) and the cantonal universities' one largely augmented (51,829 to 80,119).

[22] This increase is much bigger in Federal Institutes of Technology (294%) than in universities (175%). Altogether, doctorates awarded by universities and Federal Institutes of Technology per year almost doubled from 1,586 in 1980 to 3,093 in 2005.

Table 7.6 Development of Swiss HE system 1980–2005 (Calculated on basis of OFS data (2006). In grey: 2000 is year of reference (=100%))

	1980	1985	1990	1995	2000	2005
UNIs Students	100%	120%	137%	139%	155%	180%
*UNIs Staff**	100%		110%/126%		130%/169%	145%/197%
vUNIs doctorates	100%	112%	137%	154%	154%	175%
EPFs Students	100%	133%	157%	168%	173%	199%
EPFs Staff	100%		118%/144%		119%/178%	159%/192%
EPFs doctorates	100%	113%	136%	205%	268%	294%
HES Students	–	–	–	–	**100%**	**215%**
HES Staff	–	–	–	–	100%	203%/196%

* For all staff percentages: in the 1st percentage, assistants, scientific collaborators, administrative and technical staff not included, in the 2nd percentage, assistants and scientific collaborators included.

market has been several times object of political intervention, especially since the early 1990s. The next section analyses these political measures.

7.3.2.1 Fostering the New Academic Generation

Stemming from the enlargement of the HE system, characterized by the necessity to educate more potential professors, and from an increased international competitiveness both at public and private sector levels, doctoral training in the Swiss HER system has gained political and institutional attention only during the last decade, along with the reorganization of the academic career in Switzerland. In a first phase at the beginning of the 1990s, a Federal programme ("*programme de relève académique*") offering complementary working places to the universities has been launched in order to answer to the teaching needs. This programme remains in the traditional marketplace organization by providing HEI with the power to choose their professors. In the meantime, the National Science Foundation was assigned to implement a new programme ("fellow professors programme"), focusing more on the research dimension. Within this programme, starting at the end of the 1990s, HEIs enter in competition to attract the best researchers before they submit their application at national level (to the National Science Foundation). This illustrates a shift in the steering configuration, the National Science Foundation being in charge of selecting the professors. This period is also characterized by the increase of doctoral programmes or schools,[23] initiated both by political bodies and HEIs. In fact, the tension between cooperation and competition is particularly at stake in the reinvention of the doctoral training.

The current offer of structured doctoral training that can be distinguished between politically and institutionally initiated, illustrates this shift.

[23] The existing denominations are not uniform.

7.3.2.2 Current Doctoral Training

Several reasons led to a (broader) offer of organized doctoral training and partly even to its stronger formalisation: the necessity to improve the preparation of the new academic staff, international competition, the increasing number of doctoral students and their difficulty to finish their doctoral theses as well as the Bologna process. Roughly seen, two kinds of initiatives can be noticed: coming from the state, or from HEIs themselves.

With regards to the political initiatives, most of the doctoral schools have been inter-institutionally organized and emerged under the incentives of the Swiss Science and Technology Council, the science policy advisory body of the Swiss government, whereas the National Science Foundation in collaboration with universities – and in the case of the most recent initiative also with the rectors' conference – took in charge the implementation. For example, the first politically initiated doctoral school was part of a research project funded by the National Science Foundation, "Switzerland: Towards the Future." The first goal of this project, whose aims and topics where politically defined and which was launched in January 1996, resided in promoting topic-oriented research and networks for research, the second one consisted in structurally strengthening social sciences.[24] One of the adopted measures that aimed at realising the second goal consisted in the offering of organized doctoral training. The first 3-year offer started in 1998, the last in 2000.

Another political initiative is related to National Centres of Competence in Research (NCCR) again managed by the FNS. One of the NCCR goals consists in the promotion of talented young researchers at doctoral and post-doctoral levels and in the advancement of women in research careers (FNS, 1999). Numerous offers of doctoral training are created in this framework; they are mostly incorporated in their respective inter-institutional NCCR projects and cover a wide range of scientific domains. These politically initiated doctoral schools illustrate both the political will to foster cooperation while stimulating competition and disciplinary negotiations: within the first selection round, in December 2000, social sciences were not considered and, thus, no organized doctoral training was proposed in this domain. Representatives of the social sciences were shocked (Stücheli, 2001) and, a few months later they formulated a "manifest" including different demands. Among others, they asked for the creation of doctoral schools for social sciences. Their demand was supported by the Swiss Science and Technology Council (CSST, 2002) which designated the lack of a uniform and fair fostering of the new generation as the most urgent problem of Swiss HER policy. It also confirmed the need for doctoral schools, especially in social sciences and the humanities.

This wish has become reality: the Swiss government integrated in its Higher Education, Research and Innovation white paper for the 2004–2007 period[25] the creation of doctoral programmes,[26] initially exclusively for human and social sciences. Since the end of 2006, these programmes, called Pro*Doc, have been

[24] http://www.swiss-science.org/_sppzch/html_e/spp_frame.htm

[25] "*Message FRI 2004–2007*".

[26] In this context the term "doctoral programme" has been preferred to the term "doctoral school".

implemented under the direction of the National Science Foundation. Each Pro*Doc offers ten to twelve 3-years doctoral grants as well as several training components organized by researchers from at least two related HEIs. Besides the beneficiaries of the doctoral grants, about ten more doctoral students, financed through other funding channels, may get access to the organized doctoral training.

In the context of the implementation of the Bologna Declaration, the issue of doctoral training is set up on the European and national political agenda (Berlin Conference, 2003). In its "strategic planning 2008–2011", the Conference of Swiss Universities (CUS, 2006) formulated the doctoral training reform as a strategic goal. Therefore the CUS mandated the Rectors' Conference of Swiss Universities and Federal Institutes of Technology to suggest a "national project of doctoral training" for the period 2008–2011. The Rectors' Conference has recommended that any given doctoral programme should normally be implemented by several Swiss universities together and should be opened for collaborations with foreign universities. Progressively, all doctoral students in Switzerland should be integrated in such a programme. Scheduled in the Higher Education, Research and Innovation white paper 2008–2011 of the Swiss government, this project has been implemented through two kinds of initiatives: on the one hand, the Rectors' conference decided to join the National Science Foundation's Pro*Doc project by funding further doctoral programmes of the same type. Hence, from 2008 on, the Rector's conference and the National Science Foundation manage the Pro*Doc programmes together. On the other hand, the Rectors' conference undertakes different measures in order to elaborate "good practices" in doctoral education, which then could be diffused within the Swiss HER system.

These four actions show the growing importance of organized doctoral training on the national agenda. However, they also have two important limitations: first, they have only concerned a small part of the Swiss doctoral student body and, second, they are all limited in time and therefore no durable solution.

Besides the politically initiated doctoral programmes, *Swiss HEIs* developed themselves[27] further programmes. Among others, these programmes vary regarding institutional and disciplinary organization, applied rules and objective(s). From the point of view of institutional organization, two types can be distinguished, namely mono-institutional and inter-institutional programmes. The 17 doctoral programmes of the Federal Institute of Technology Lausanne essentially correspond to the mono-institutional model. They are united in a supra-structure called "EPFL Doctoral School", existing since 2003. From 2005 on, the University Conference of French-speaking Switzerland suggests – apart from its already existing offers ("third cycles" and "post-graduate training" called DEA or DESS[28]) – 15 inter-institutional doctoral programmes. Funded by the participating universities and co-funded as well as coordinated by the Conference, these programmes cover varying disciplines,

[27] We do not precise here whether the initiative for the doctoral programmes' creation came from the HEI or faculty direction (top-down) or from researchers themselves (bottom-up). However, an ongoing doctoral thesis shows that there is variation regarding this governance issue according to the respective HEI and doctoral programme.

[28] DEA: Diplôme d'études approfondies. In English: Diploma of deepened studies. DESS: Diplôme d'études supérieures spécialisées. In English: Diploma of specialized studies.

two thirds of them being concentrated on social sciences and humanities. According to the programme, between three and five institutions are associated to a programme.

Due to varying institutional arrangements, rules related to doctoral programmes also strongly vary: in the case of the mono-institutional "EPFL Doctoral School", EPFL doctoral regulations define for instance the number of credits and types of eligible courses to be done by doctoral students. The situation is more complicated for inter-institutional programmes. On the one hand, it is more difficult to get a consensus about applicable rules and, on the other hand, many institutions have, until now, not defined any rules regarding doctoral training in their doctoral regulations (Baschung, 2008). This often results in *ad hoc* or gentleman agreements at the programme level with relatively few constraints for participating doctoral students and professors.

The range of objectives related to doctoral programmes is wide. Programmes, especially in human and social sciences, mostly aim at providing to the doctoral students with some additional disciplinary training and opportunities to meet other doctoral students and professors. Other programmes, especially those united in a supra-structure, like the "EPFL Doctoral School" or the "Life Sciences Zurich Graduate School," aim at getting a large visibility in the international academic market. Visibility should help attracting especially strong doctoral students from all over the world. A selection process with elaborated recruitment mechanisms is part of this competitive tool. Hence, objectives go farer than only the provision of post-master education.

All in all, due to political and institutional initiatives, the offer of doctoral training has strongly increased during this period since the 1990s. However, there are still doctoral students without access to any training offer.

7.4 Tracers Issues

As mentioned at the beginning, the aim of this chapter is to compare two periods of time (1980–1990/1990–2007) of the Swiss HE system in order to stress the main changes in terms of governance regime. To that end, we focus on the different modes of state actions (Federal and cantonal) in two specific domains: financial allocation and academic workplace and doctoral education (Table 7.6).

7.4.1 Allocation of Resources as Mode of Higher Education Institution Regulation

Even if we do not observe a radical change – especially in quantitative terms (see Lepori, 2006) – we can describe, from the 1980s onwards, a qualitative change in the way resources have been allocated by Federal and cantonal authorities. Allocations are more and more based on output criteria related to performances (in teaching and research activities). Such kind of allocation allows a more targeted financing control-

led through indicators. However, nowadays, the universities budget is not itemized anymore but allocated on a global basis (lump sum). The allocation is often part of a contract between the cantonal or Federal authorities and the HEIs. Besides the aim to increase efficacy and efficiency of some financial instruments, the contractualisation of the relation between public authorities and HEIs also constitutes a mean to increase their accountability, although the degree of accountability varies according to the contract, from one university to another.

We have also seen that the parts of third funds or external resources have relatively increased compared to institutional accounts. This is due to increased Swiss participation in EU research programmes (see Lepori, 2006). What is more, the Federal authorities decided in 2006 to proportionally increase the 2007–2011 budget of the funding agency (National Science Foundation) in comparison with the Federal institutional allocation for HEI, in order to improve the competitiveness of funding allocation between HEIs which thus have to apply at the FNS level to increase their research funds. The final idea is to move from a "watering can" policy to a more targeted one based on a competitive allocation of financial support. This new trend in funding allocation follows the rule "be the best" (if you want to get money). Nevertheless, the funding allocation mechanism of the late 1990s is also based on the rule: "strong through unity", that is by the concentration of (financial and human) resources on specific research domains and disciplines.

We have seen that new funding allocation mechanisms sometimes imply a large cooperation between researchers (or teachers) but also between HEIs (cf. The "National Priority Programme" and the "National Centre of Competence in Research" of the National Science Foundation, but also the EU programmes and the "Cooperation and Innovation" instrument managed by the Conference of Swiss Universities). Administrators or politicians argue that due to the economic situation and the size of the Swiss academic field, it would no longer be possible to support all disciplines and all research domains in all HEIs. Therefore, researchers have to collaborate in large research projects or infrastructures that go beyond traditional institutional boundaries. This type of instrument also implies a financial contribution of the host institution (fund matching rule) where the management of the research project-network is located. This rule leads the HEI to select the projects they want to support. One of the possible consequences of this allocation mechanism concerns the politics of institutional profile and differentiation. HEIs have to devise more and more precisely their research and teaching profiles (see Perellon and Baschung, 2006). Consequently, the matching fund rule in such kind of instruments increases in a certain way the importance of the HEI direction in the attribution of large scientific projects.

7.4.2 Doctoral Education as Mode of Higher Education Institution Governance

The development of structured doctoral training has begun relatively late in Switzerland. This gradual development was related to varying problematic contexts.

The necessity to foster the new academic generation became obvious when structural problems of the Swiss academic labour market appeared and threatened the well-being of the Swiss HE system. The apparently poor situation of social sciences was another context that contributed to the development of doctoral education. The function of doctoral education has also developed according to the context. Doctoral education may not only give the doctoral students a better education, but it can also be interpreted as contributing to the creation of new and more concentrated research networks within the Swiss HER system. Eventually, it may also be a more or less potential tool for the HEI to attract the "best" young researchers and, thus, to increase their competitiveness.

The governance of this recently developed field seems to be shared by several actors. At the moment, both the HEIs and other actors, especially the Confederation via the Swiss National Science Foundation, play an important role. The Bologna Declaration appears to be an opportunity to introduce common rules in this highly diversified field. However, the future will show to what extent HEIs accept new regulations concerning the doctorate, a domain that has "always" been conserved and ruled by the universities themselves. Nevertheless, for the moment, it comes out that an important objective of the Swiss HE landscape – i.e. the building of stronger concentrated networks within the Swiss HER system – is being accelerated, thanks to the numerous collaborations both within politically and institutionally initiated doctoral training.

7.5 Concluding Discussion: A Tension Between Two Competing Governance Regimes

At the beginning of this chapter, we stressed the tension existing in the governance of Swiss HEIs. We argue that the tension expresses two competing approaches of state intervention: *New public management* vs. *network governance*. The first one is characterized by a more vertical state-university relationship based on contract, strong HEIs' direction, economic instruments, and *competitive rules*. The second one is defined in terms of horizontal state-university relationship based on network, joint problem recognition, solving capacity and *coordination rules*.

These a priori *opposed rules* can be seen, in fact, as *two faces of the same coin*: a new governance regime of the Swiss HER system that aims to modify the social and material conditions of research and teaching activities inside HEIs. The competitive rules of the NPM governance regime allow the allocation of public resources only to the best researchers or the best projects and, by the same way, increase the efficiency of the state interventions. However, this new competitive instruments do not only target individual researchers. Indeed, new instruments are also dedicated to collective research projects. The aim, there, is not only to increase the quality of research but also to restructure the HEIs and the disciplines.

Therefore the tension mentioned at the beginning of the chapter around the notion of HEI autonomy could be explained as following: on the one hand, the state

wants to give more power to the direction of the HEI in order to define a strong academic profile. On the other hand, this strong academic profile has to be coordinated with the other HEIs and actors of the HER policy.

Related to these two modes of governance, we observed the implementation of a more constraining policy which conducts both, the researchers and the HEI director, to be more coordinated at national level. New reforms, like the forthcoming new law on HEIs, initiated at national level could reinforce this tendency in the next years.

Chapter 8
United Kingdom from Bureau Professionalism to New Public Management?

Ewan Ferlie and Gianluca Andresani

8.1 Introduction to the UK Case

UK Higher Education Institutions (HEIs) exhibit strong ideologies of autonomy and retain important sources of institutional autonomy when compared with other HE systems. UK HEIs hold Statutes from a non party political body (technically known as the Privy Council), which guarantees their institutional rights. Universities have internal control over faculty appointments and academics are not civil servants. Universities are not part of the Ministry of Education, although steered by it. Traditionally, the UK HE system has been steered indirectly through 'buffer' agencies as it was not a political priority for intervention (compared with, say, schools and hospitals) and the doctrine of academic freedom was respected in the policy arena. It is commonly argued within the sector that it is 'special', insulated from outside macro forces and shaped by traditional internal and academically led dynamics. But is this pattern badly dated? Has the sector undergone progressive managerialisation since the 1980s? This national case study argues that powerful outside forces – including public sector wide reform strategies – have shaped the UK HE system over the last 30 years. We argue that these reforms have had more than the superficial impact often predicted.

This paper takes a historical perspective on the evolution of the UK HE sector. Part 1 describes the pattern pre 1980. Part 2 focuses on the mid 1980s–1997 period, where important policy shifts were evident towards the NPM mode of steering elaborated in the introductory chapter. Part 3 asks whether there has been a shift since the election of New Labour in 1997 to a governance style steering pattern. Part 4 considers two tracer issues: doctoral training and research. The conclusion argues that there is a hybrid mode apparent, but one with a strong NPM component. We here acknowledge an earlier source paper (Hartz et al., 2005).

E. Ferlie
Director, CPSO and Head of School of Management, Royal Holloway University of London, UK

G. Andresani
University of Hull, UK

C. Paradeise et al. (eds.), *University Governance*,

8.1.1 UK Context and Some Definitions

Political and legal institutions: The UK is a majoritarian Parliamentary system where the 'winner takes all' and there is no Proportional Representation in Parliamentary elections. One party usually wins a majority of seats and there is no tradition of multi party coalitions. Political power is concentrated in the Cabinet of leading Ministers drawn from the ruling party. The revising Chamber (the Lords) is unelected, lacks legitimacy and is therefore weak. The UK has usually been seen as a classic unitary state with high political concentration in London. After 2000, this pattern changed with devolution to Scotland and Wales. The new Scottish and Welsh assemblies had devolved powers over HE so that Court (2004) sees HE policy as a 'policy lab', which tests the processes of devolution. There is a tradition of common law rather than a specially designed body of administrative law found in Continental jurisdictions.

Political context: From 1945 to 1979, both main parties (Conservative and Labour) were largely committed to the post war settlement of the mixed economy and the welfare state, This was challenged by more radical Conservatives, who came to office under Mrs Thatcher in 1979. The Thatcher government tried to reform what they saw as a large and bloated public sector 'from above'. They challenged the presumption of growth in HE with a new 'value for money agenda'. Following successive defeats, the Labour Party moved back to the centre in the 1990s, reinventing itself as 'New Labour' under Tony Blair. New Labour won the 1997 election and has been in power ever since. There is a debate about whether New Labour have abandoned or retained Thatcherite policies. Reform to the machinery of government was an important policy domain for both the Thatcher and Blair governments. Public sector reform was a policy domain not left to technocrats but displayed a pattern of strong leadership 'from above', led by ideologically informed politicians, often imposed on a resentful public sector and its professional groupings.

Key Characteristics of the UK HE system: The UK HE system has historically been based on individual Universities rather than single disciplines (unlike France). There are now about 120 HEIs in the UK (Universities UK, 2005). This number has grown substantially over the last 40 years. There was until the 1980s a small and elite University system funded by a national agency, the University Grants Committee (UGC) complemented by more vocational provision in locally based Colleges, accredited by a second agency (the Council of National Academic Awards or CNAA). The CNAA accreditation system was detailed as these fledgling institutions were seen as in need of tutelage. The UGC (then its successor bodies, namely the University Funding Council and the Higher Education Funding Council) was a 'buffer' agency responsible to the Department of Education but which sought to remove departmental micro control from the Universities. The system has historically been planned rather than market led. HEFCE operates as a central planning body for the allocation of Undergraduate Approved Student Numbers to each institution. Universities are fined if they diverge markedly from target numbers. The overseas and postgraduate markets are not regulated and are of increasing importance as a 'market facing sector.'

Local colleges were incorporated as Polytechnics in 1965, leading to the so called binary system where the Polytechnics formed a second sector alongside the old Universities. They were subject to more detailed local government based governance

and displayed more assertive internal management. Their heads were less likely to be academics and more likely to be professional managers. This binary divide was a major feature of the UK system between 1965 and 1992. In 1992, the Polytechnics were incorporated by new legislation as Universities in their own right – being removed from local government control – so the binary system formally ended. With the Thatcherite policy of 'efficient expansion', student growth was concentrated in the polytechnic sector as it offered lower unit costs. New systems of sector wide quality assurance (QA) emerged to replace the old CNAA's tutelage. One interpretation of this development was this reflected the dominance of the old Polytechnics in teaching (by contrast, research showed a pattern of old University dominance).

There is as yet only one privately funded UK University (Buckingham), which offers only a few vocational subjects. However, many publicly funded Universities charge market rates for vocational degrees (such as the MBA) so private fee money has been increasing. Publicly funded research is organized by the various Research Councils (e.g. Medical Research Council; Economic and Social Research Council). Councils utilize extensive peer review by academics on proposals submitted.

There are now about 150,000 total academic staff in the UK system (Universities UK, 2005) and 2,247,000 students in 2003/4 (up from 1,547,000 in 1994/5). The fastest rates of growth are in part time undergraduate degrees and full time postgraduate degrees, and the latter is now a major sector. The number of international or non Home or European Union (HEU) full fee paying students increased from 98,000 in 1994/5 to 199,000 in 2003/4 and provides an important (but volatile) private income stream. The growth in the Chinese student market has been significant, but concentrated in certain subjects such as Management. The UK spent about 0.8% of GDP on public expenditure in HE in 2003/4; as opposed to an OECD average of 1.0.

Financing a massifying system has posed difficult policy problems and underfunding was a chronic problem of the 1980s and 1990s. UK HEIs are financed by a grant from HEFCE, which is voted by Parliament. Until 1986, this took the form of a block grant, but since then the Teaching and Research components have been separated out and subjected to greater scrutiny. Non HEFCE funding became important as the UK slowly moved towards a mixed pattern of financing. As well as their HEFCE teaching grant, Universities receive tuition fees from HEU UG students (previously at an annual level of £1,000, but now increased to a maximum of £3,000). The OS and PGT sector fees are unregulated and much higher. Student loans replaced student grants in the 1990s and are paid back by the graduate once their income level has reached a minimum. Some Universities are developing an income stream in technology transfer, although on a small scale basis. These changes to student financing were politically controversial, opposed by the student union (National Union of Students), but forced through by politicians.

8.2 Pre NPM System – Steady Growth and Professionalized Bureaucracy

The old system was dominated by professionalized bureaucracies where academic control over work practices coexisted with a dense administrative (but not managerial) apparatus. It reflected Mintzberg's ideal type of the professionalized organisation

(Mintzberg, 1979). Micro change at departmental level was pervasive; but macro change across the system rare. There was little interference in questions of 'academic freedom'. The old Universities did not need ministry approval for curricula, which were instead shaped by internal academics and external academic examiners (but the Polytechnic sector demonstrated tighter control over teaching via CNAA validation).

The policy was one of growth (from a small base) funded by the taxpayer. Students were supported financially by grants rather than loans and were not liable to fee payment. After the Robbins Report (Robbins, 1963) on the expansion of higher education, student numbers increased and a group of new Universities (e.g. Warwick) was created to stimulate system growth. The role of the UGC was that of a modest (Shattock, 2003) 'system builder', creating a common framework for pay and conditions and reducing 'excessive' inter HEI differentiation.

UK Universities were affected by the student protest wave of the late 1960s and the early 1970s. This led to calls for the reform of curricula and internal governance, with demands for participation from students and junior faculty. An unintended consequence was a public backlash against student protests, which fuelled the hard line policies of the Thatcher governments. This was linked to their dislike of the growth of the critical social sciences in this period ('too many -ologies'). For the first time, the Universities faced an unsympathetic government, which felt that they had been feather bedded for too long.

8.3 The NPM Period, 1979–1997

From the early 1980s onwards, NPM style ideas were applied to the HE sector as in other UK public services (Ferlie et al., 1996). NPM reforms in HE started with contained changes in the early 1980s to reduce public subsidy and ensure value for money but escalated by the late 1980s into more macro reforms (Reed, 2002). The late 1980s were a critical period in UK HE as many reforms went on to demonstrate higher resilience (e.g. quasi markets; corporate governance reform) than originally expected.

The new Thatcher government's resolve to reduce taxes and public expenditure applied in the university sector as in other public services. Tight spending targets were set by the Treasury. There was a new efficiency and value for money agenda imposed on the HE sector. The first HE policy decision by the newly elected Conservative government in 1980 was to increase the tuition fees of overseas (non EU) students to three times the fees for Home and EU students. This reduced the UK taxpayer's traditional subsidy of foreign students and in the longer term provided Universities with a new and autonomous income stream.

In 1981, the UGC overturned the policy of continuing growth and announced severe expenditure reductions in University funding. This proved a severe shock to some badly affected Universities (e.g. Salford), forcing them to develop commercial streams of income (perhaps as intended). University funding was cut by 15% (Deem et al., 2007: 44). There was pressure put on Universities to increase their income streams from non core services (such as Conference income). Entrepreneurial and powerful

Vice Chancellors emerged at local level in some Universities (e.g. Salford and Aston) to push through this 'survivalist' agenda in the face of staff opposition.

The Jarratt Report (Jarratt, 1985) mimicked the ideas of the 1983 Griffiths Report (Griffiths, 1983), which had introduced general management into the NHS. Jarratt heralded a policy shift away from academic collegiality within the old University sector. It advocated devolution of budgetary control from the centre to smaller units; stronger corporate governance and more directive Vice Chancellors to act as Chief Executive Officers. Enhanced managerial capacity led to an acceleration of departmental mergers and closures in the late 1980s (Deem et al., 2007).

8.3.1 Mid 1980s: The NPM Takes Off

While these were contained interventions, by the mid 1980s the scope of NPM reforms accelerated in HE as in other policy domains. The Thatcher government had been reelected with a big majority in 1983: some reforms were more popular than predicted and now there was a growth of ambition. The Treasury (Ministry of Finance) was unconvinced that it was getting value for money in relation to output from research funding which appeared as a 'black hole' with no real accountability. So a separate R funding stream was devised, allocated through the Research Assessment Exercise introduced in 1986. RAE will be considered in more detail later as a key tracer issue.

After another election victory in 1987, the third Thatcher term sought to reform social policy functions still held within the public sector. There was a flurry of legislation in the late 1980s, which affected HE as well as other public services. The 1988 Education Reform Act (ERA) made a number of NPM style changes to HE. It removed the polytechnics from local authority control (the opposition Labour Party was strong in many urban areas) so they became 'independent corporations' post 1992, with more appointed business representatives on their Boards and less staff representation. Strong VCs who saw themselves as career managers (Deem et al., 2007) emerged in the post 1992 'New Universities', imposing radical top-down reform on reluctant faculty. The ERA also provided for a more directive and business led Universities Funding Council to replace the 'hands off' UGC. The early UFC phase (1988–1991) represents a failed attempt to introduce a quasi market in HE through an auction system of the allocation of student places. Nearly all institutions came in at the guide price and the experiment was abandoned. However, the quasi market reemerged in the third Blair term with variable tuition fees.

In the early 1990s, HE policy moved back towards 'efficient expansion', as in the White Paper (Cm 1541) 'Higher Education: A New Framework', and then the Further and Higher Education Act in 1992. It was hoped that greater competition for funds and students between HEIs would increase cost effectiveness. A key change was the setting up of quality assessment units within the Funding Councils to advise on relative quality across HE institutions. There was a tension between the internally controlled QA units emerging within HEIs and the external regulatory apparatus (Power, 1997), which increased in power in the 1990s. Building on these

initial QA units, the Quality Assurance Agency for Higher Education was set up in 1997 as an integrated quality body across the Funding Councils. QAA conducted external reviews led by academic assessors (so retaining some peer review) and came to overall judgements based on a points system which were made public (e.g. on the QAA website) in order to inform potential students. QAA encouraged the development of more explicit subject based benchmarks and programme specifications to formalize traditionally tacit knowledge about course design. Unlike RAE, teaching quality scores were not directly related to HEFCE funding but were an important piece of information made available to prospective students.

8.3.2 Overall Interpretation of This Period

The period saw a substantial increase in NPM style steering of HEIs, albeit with important elements of continuing peer review and clan control. Many shifts observed within HE replicated those in other public services. Both RAE and QAA sought to change core academic working practices in the domains of research and teaching respectively and had real impact (Power, 1997: 100). Both interventions used publicly available ranking systems to engage in explicit performance measurement and made traditionally tacit judgements made within the academic profession about quality explicit.

There was a substantial move away from a professional bureau model to NPM style steering, albeit with continuing local variation and retention of elements of peer review. Generally, inter HEI relationships moved to overt stratification and competition, driven by RAE and competition for student recruitment. There was a reduction of democratic or collegial oversight in the name of managerialism (e.g. removal of the Polytechnics from democratic influence; empowerment of Vice Chancellors).

8.4 Post 1997: A Post NPM or Governance Period?

8.4.1 Political and Ideological Shifts

The Labour Party reacted to this period of Thatcherite hegemony by distancing itself from its legacy of the 1970s and reinventing itself as a market friendly party. In 1997, New Labour was elected after a long period of Conservative rule (1979–1997). A ‘modernising’ political philosophy had been developed in the mid 1990s to support New Labour ideologically (Giddens, 1997). New Labour pledged itself to renew social democracy but also to move beyond the ‘false dichotomy’ of the Old Left and the New Right. There was to be triangulation of position and policy between these two extremes within the new doctrine of the ‘Third Way’. This was a period of strong intellectual influence over the core of New Labour.

A post NPM paradigm of public sector management emerged, drawing on this new ideology and discourse. Newman (2001) captures the key themes of this network governance narrative: leadership (rather than top down management) joined up government, management through collaborative networks, the encouragement of learning organisation based approaches within the public services and evidence based policy. Public services managers were charged with tackling problems of 'social inclusion' and social inequity, for example, by ensuring fair access to key life chances including admission to elite Universities (admission tutors in Oxford University unexpectedly found themselves under intense political and media scrutiny).

At the same time, the Treasury under Gordon Brown increased its dominance over domestic policy making, agreeing contracts and reform objectives with spending departments such as HEFCE in exchange for increased public funding ('the modernisation agenda'). Targets were set and monitored centrally. So, dominant elements of the New Labour coalition remained wedded to key NPM instruments such as contracts, performance measurement and management. Funding levels for HE increased with a substantial injection of public money. There was an end to the historic decline in the student unit of resource apparent and new long term investment in science.

In the late Blair period, there was disappointment with the pace of reform: money had been provided; but modernisation not always taken place. Weaknesses of the network governance form were apparent: long timescales; high transaction costs; few clearly identified implementation structures and incremental forms of change. Local networks were populated by producers rather than consumers. Policy tilted back to quasi markets with underlying principles of greater consumer choice, more provider diversity including the entry of private sector providers and competition.

8.4.2 Changes in Political Institutions

The first Blair government (1997–2001) moved away from the classic UK Unitary State. There was a shift to multi level governance with devolution for Scotland and Wales (the new elected assemblies there had delegated powers over HE used in 2005 to prevent or modify the tuition fees being introduced in England). Court (2004) traces the intense burst of HE policy making that took place in Scotland and Wales in the late 1990s, often with strong Executive or Assembly involvement. HE was highly visible in the political spotlight in these devolved regimes: 'they want and expect more from their HEIs' (Court, 2004). In addition, aspects of HE policy were very slowly being moved 'upwards' to the EU level as the Bologna process of harmonisation of HE within the European space developed momentum, although Bologna has not been a visible policy priority within UK HE.

The English regional tier of government developed with the creation of Regional Development Agencies in the late 1990s. They were to increase regional growth and decrease inter regional economic and social variation. These bodies remained appointed rather elected and as such remain invisible, lacking democratic legitimacy. RDAs see their regional Universities as playing a critical role in economic growth

and are important sponsors of the so called 'knowledge transfer' stream of University activity. RDAs in less buoyant regions (such as in the North) have considerable sums of resources available for capital and revenue investment in 'their' local Universities. RDAs seek to connect Universities to joint activity with local businesses. Small streams of income were also made available to support local and regional knowledge transfer activity within the new Higher Education Investment Fund (HEIF). The development of these linkages is consistent with the network-governance narrative introduced in Chapter 1.

8.4.3 Shifts in the Higher Education Policy Mix?

The Blair governments developed a policy mix towards HE, which was not confined to one policy priority or one governance narrative. Often policies seemed in tension with each other or even contradictory. So how did the HE policy mix evolve under Blair? First, there was a new emphasis on social inclusion and fair access, which marked a sharp break from the Thatcher period. Alongside a new policy to increase the UG age participation rate up to 50%, there was emphasis on widening participation initiatives and using financial incentives to HEIs to encourage applicants from 'cold spots', or geographical areas with low rates of participation. A new set of comparative performance indicators was compiled and made public in relation to the social class basis of admissions by HEI (consistent with old NPM techniques). This publication of comparative performance data led to the public 'naming and shaming' of poorly performing HEIs.

Other inherited policies underwent evolution. QAA continued as before in the 1997–2001 but there was then a revolt by the Vice Chancellors in relation to the escalating bureaucratic burden facing HEIs. This successful revolt suggested a loss of confidence in QAA by the academic field. There was a transition in the 2002–2005 period to a 'lighter touch' model of QAA, which recognized that the HEIs themselves would play a key role so that QAA should now ensure that effective institutional processes were in place at local level. The tone also became more developmental and less inspectorial. Review would also be concentrated in locales which gave cause for concern within a risk management approach (HEFCE, 2001c). This was a rare example of deregulation and debureaucratisation, specifically of the passing of lead audit responsibility back from a central agency to HEIs themselves. This was a partial unwinding of the 'audit society' (Power, 1997) which is a prominent perverse effect within NPM reforming.

Other HE policies continued from the pre 1997 period in a stable manner or even accelerated. RAE was repeated in 2001 and will be run again in 2008. The 2008 RAE is even more selective, as it aims to identify and protect research of truly international quality. The flow of private capital and so called Private Finance Initiative money into the HE sector accelerated after 1997, providing the resources for new infrastructure such new student residences or academic buildings (the value of PFI deals across all UK public services rose from a total value of £667 million

in 1995 to £7.6 million in 2002; Hodges and Mellett, 2004). This addressed problems of crumbling infrastructure after decades of under investment. Venture capitalists moved into the HE sector, putting deals together which provided for Universities to assign them long leases in exchange for new buildings. The University would then pay the venture capitalist a market rent (say 6% annually) over a 30 year period, after which time the University would reclaim the lease and the asset (which may of course be dated by that time). These deals provided for major investment, were pushed through by some Vice Chancellors, although they were strongly opposed by the public sector trade unions (e.g. large scale PFI project at the University of Hertforshire, Guardian, 1.10.02). It is curious that the New Labour governments made a greater use of such a 'privatising' policy than the Thatcherite governments. It could be that the Thatcherite policy agenda was more orientated to cost containment than new investment and that for New Labour, private finance was a pragmatic 'off balance sheet' mechanism which got new resources into the sector without increasing public debt.

From the late 1990s, strategic alliances, networks and consortia emerged between neighbouring HEIs (e.g. the White Rose consortium in Yorkshire, the Bloomsbury Consortium in central London), encouraged by HEFCE as a 'system steerer.' HEFCE was worried there were now too many universities in the UK and that some consolidation was needed. This was a potentially important shift from competition to collaboration within a network governance model, but we need to assess how deep and durable these alliances are. Court (2004) suggests that network governance may be more strongly developed in Wales, with relatively small HEIs and a desire to keep provision across Wales. Wales and Scotland have more collectivist political cultures where quasi markets were less welcome as a policy instrument than in England.

8.4.4 The 2003 White Paper and 2004 HE Reform Act

The first Blair government did not develop an overarching vision of how the sector should evolve. A more global view was developed in the second term (2001–2005), provoked by the financial issues posed by massification which meant that previous financial frameworks were unaffordable. The 2003 White Paper ('The Future of Higher Education') (Department for Education and Skills, 2003) elaborated the government's diagnosis of how the HE sector should develop. The novel rhetoric suggested a 'freer' HE system, albeit one which was still steered by government in critical areas (p24):

The Funding Councils have been trying to retreat from micro management and develop more sophisticated risk management systems, which target interventions on most at risk HEIs to unwind over elaborate control systems. However, these risk management systems themselves escalate into new bureaucracies. New policy priorities trigger the creation of novel regulatory agencies (e.g. the Office of Fair Access oversees 'fair admissions' in those HEIs which sought to raise the tuition fee above the old level to £1,000 up to the new maximum of £3,000). An interesting development in HE finance policy was the stress on developing non state funding streams. A Task

Force chaired by Eric Thomas, Vice Chancellor of the University of Bristol, looked at expanding voluntary giving, taking American Universities as role models.

The 2003 White Paper combined two different policy streams. A novel strand emphasised social inclusion as a policy theme. Unequal access to HE is seen in New Labour political discourse as an issue of social justice which is conveyed in very non Thatcherite language which is worth quoting:

> *this state of affairs cannot be tolerated in a civilised society. It wastes our national talent; and is inherently socially unjust. We know that the roots of inequality run deep – in the education system, social class differences show themselves from the very early years. We are tackling them throughout the education system and beyond, knowing that the most important factor in getting access to higher education is earlier results at school or college. But we cannot allow this to be an excuse for failing to take decisive action to improve access to higher education.*

Despite the rhetoric of HEI autonomy, new performance measurement, league table and management systems were developed to pressurize HEIs in this domain (p73) of social inclusion.

A second policy stream promoted the globalisation and marketisation of UK HE. HE is seen more in terms of national competitive advantage than as a mode of personal development. The rise of OS student numbers from the late 1990s onwards (especially from China and now India) is significant, reflecting the globalisation of UK HE. Some UK Universities have formed strategic alliances with Chinese Universities and a few have opened campuses in South East Asia.

The 2004 Higher Education Act followed on from the White Paper. The Act's most politically contentious clause was the introduction of UG HEU tuition fees at a higher level of up to £3k per year. This was opposed by the National Union of Students but eventually enacted into law. HEIs were to offer bursaries and also put satisfactory arrangements in place to ensure fair admissions in return for the extra funding. These arrangements had to be signed off by a new regulatory office (OFFA) nationally. HEIs could opt to charge less than the £3k per year and a very few have done (mainly new universities) with a limited market emerging. These maximum fee levels are fixed in the short term but with potential to review them and they may increase within a few years. This would accelerate market forces as HEIs' ability to charge this higher fee is varied.

The White Paper states that the right of an institution to award degrees (Degree Awarding Powers) should be 'modernized'. DFES (2004) 'Renewable Degree Awarding Powers' (Discussion Paper) further proposed that to protect the reputation of UK degrees, more safeguards in terms of review and reaccredidation were needed. To achieve DAP, a HEI needs to meet the standards set by an external auditor (QAA) and be periodically reassessed. Intriguingly, para 11 refers to organisations seeking DAP from outside the traditionally funded public sector. The same processes for DAP could be applied to them, perhaps with additional risk management safeguards. The College of Law was the first non publicly funded institution to be awarded DAP in its own right in 2006 and others will follow. This important policy lever could be used to increase student choice, provider diversity and market forces in HE.

There were significant Human Resource policy developments. The Leadership Foundation for Higher Education was set up in the New Labour period to support a wider range of significant initiatives such as team development and succession planning. It reflected a sense that senior leadership was often weak in the HE sector. Given its significant financial support from the Funding Councils, it remains accountable to them to ensure value for money. There was an attempt to address wider issues of leadership rather than narrow 'management' but as many Vice Chancellors remain concerned with deficit reduction and RAE performance management, NPM management styles remain in many HEIs. A national pay modernisation process was implemented at local level (2004–2007). The overall pattern was a slow move to a more market orientated single spine system replacing a complex array of former scales with more local flexibility and payments for personal 'contribution'. A few HEIs (Imperial; Nottingham) left national payscales.

The late Blair period included reforms of the corporate governance of HEIs (Buckland, 2004) as a revival of a NPM style agenda. Lambert's (2003) proposed Model Code of Governance encouraged more compact Boards with strategic oversight. They would replicate the functions of private sector boards through audit, nomination and remuneration committees. Buckland (2004) sees this as an attempted (yet inappropriate) capture of HE governance by the UK business world. Shattock (2006) refers to local experiments in more 'business like' HE governance structures at Imperial and Manchester.

8.4.5 Commentary on the 1997–2007 Period: Quasi Everything? (Exworthy et al., 1999)

Developments in HE policy sit within broader public sector wide reforming during the Blair governments. In the early Blair period (1997–2002), there was a retreat from quasi markets, a turn to network governance (such as strategic alliances and collaborations) but a continuing reliance on NPM instruments such as performance measurement and management. In the later Blair period, there was an erosion of the earlier governance narrative and a revival of aspects of the NPM narrative, notably quasi markets and corporate governance reforms. However, NPM ideas co exist with other reform streams such as network governance and equity/social justice. There are tensions or even contradictions between different policy streams: for example, the Lambert Review (2003) of university/business cooperation was critical of the tendency of RAE to strip out research funding from lower performers.

There is little evidence of democratic engagement in HE policy making in England. In Scotland and Wales, the growing importance of local assemblies and politicians in HE policy, notably the intense policy review process around student finance, is evident and could lead to more democratic involvement in HE policy and governance.

There is a novel rhetoric around a radically 'freed up system' but still to be translated into concrete policy. It implies a radical diminution of the steering role of the Funding Councils: at present they still maintain strict control over UG

Approved Student Numbers. While one regulatory agency is cut back (QAA); another emerges to take its place (OFFA). Risk management systems promise a lighter touch for low risk HEIs but develop into new instruments of control and audit. The very gradual extension of DAP to non publicly funded institutions is a major policy instrument which could extend diversity and choice in the longer term, albeit highly concentrated in more vocational subjects.

8.5 Tracers Issues

8.5.1 Research Policy and Funding[1]

As already mentioned, the major reform in research policy has been the Research Assessment Exercise. Each academic Department has been explicitly assessed in successive RAE exercises (1986–2008) on a subject specific basis. Departments are awarded a sum of research support (so called Quality Related funding) commensurate with its grading. For top rated departments, QR funding represents a major part of their public funding and going down a grade leads to major financial problems. These gradings are placed in the public domain (from 1 to 5 and a top rank of 5* in the 2001 RAE), influencing perceptions of quality. QR funding has been withdrawn from medium ranked departments (Grade 3) and concentrated in the highest ranking departments.

By the mid 1980s, the Treasury was concerned about poor transparency and accountability in its allocation of research funding. The idea of introducing the RAE came from the UGC, through the initiative of its Chairman, Sir Peter Swinnerton-Dyer (Kogan and Hanney, 2000: 96) and had some support from the scientific academic community as a response to the long term erosion of the universities' scientific research infrastructure (Tapper and Salter, 1993: 15). The aim was to allocate resources in a fair but not egalitarian way and to protect high quality research. Some see it as a mechanism designed "to sustain academic values and academic control in a context where the state was making new demands on research and higher education and seeking to impose its own structures for quality assurance upon them" (Henkel, 1999: 105). This policy was supported by powerful elements in government and the elite academic scientific community who advocated greater research selectivity (Tappern and Salter, 2004: 15) and removal of funding from less research intensive HEIs.

Basically the RAE is a formalized peer-review process (McNay, 2007: 184) conducted by disciplinary panels in about 70 units of assessment. Each academic department provides a submission with information on the quantity and the quality of research. The department also provides information on numbers of all academic and support staff, studentships, research students, and on amounts and sources of external funding. It also submits a narrative describing the department structure, the scientific strategy for the future and indicators of research achievements. Each member of research active staff nominates four publications and indicators of peer esteem.

[1] We acknowledge Felipe Camerati's contribution to this section.

With this information, the panel members evaluate the performance of the different research units using criteria determined by each panel within a general framework. There have been continuing adjustments of the RAE in successive rounds but these are generally only "minor", "technical changes" or adjustments (Morgan, 2004: 462; Doyle and Arthurs, 1998: 461; McNay, 2003: 2; Tapper and Salter, 1993: 12). An important change has been an increase in the time period between RAE rounds from 3 years in the 1980s to 7 years in the 2000s. This has reduced transaction costs but also made it more difficult for upwards moving departments to secure more QR funding quickly. Panel members are generally senior academics respected in their fields. There have been repeated attempts to increase the presence of non academic ('end user') members, with little success so far.

Despite some support in the scientific community (especially in elite science) and taking on elements of a peer review process, the RAE is a strong NPM style policy instrument. Its impact on institutions, departments and individual academics alike has been strong. The RAE has led to more emphasis on institutional management of research locally (McNay, 1999: 195). Institutions have focused on their research missions (McNay, 1997, para 5), restructuring research "to conform to RAE units of assessment, or increased the size of research groupings specifically to increase their presence in the RAE" (McNay, 1997, para 6). Yokoyama (2006: 18) suggests vice-chancellors have become more managerial in respect of departments which have not performed well. Poorly performing departments are at greater risk of closure. The RAE exerts strong effects on individual careers. Yokoyama also found an increased emphasis on the appointment of researchers with a good RAE profile. Moreover, these trends were found even within universities with a strong collegial culture. HEIs have taken steps to 'identify the tail' and exclude poorly performing staff, with consequent effects on their careers.

These trends, coupled with the end of the division between polytechnics and universities in 1992 (leading to an increased number of submissions and competition within the system) and the inflation of RAE grades, impaired the *legitimation* of the allocation process according to some (Tapper and Salter, 1993: 13; Tappern and Salter, 2004: 21; Roberts report, 2003, para 30). Since the 1989 RAE round, there has been an inflation of RAE grades, with over half (55%) of all active research in 2001 being conducted in departments rated 5 or 5*, while in 1996 there were 31%. Moreover, in 1996 there were 20 departments rated 5 or 5* and in 2001 there were 39 (McNay, 2003: 8; Morgan, 2004: 465; Roberts report, 2003, para 157).

After the 2001 round, a review was carried out by Sir Gareth Roberts. This report suggested solutions to problems thrown up by earlier rounds, such as: the effect of the RAE on the financial sustainability of research; games-playing; a high administrative burden; the need to recognize collaborations and partnerships; the training and development of researchers; the need to recognize various aspects of excellence in research (including value added to professional practice, applicability, and impact within and beyond the research community); the ability to recognize enterprise activities; interdisciplinary and multidisciplinary research; poor discrimination in the current rating system, especially at the top end (Roberts report, 2003, para 67).

Minor reforms have been carried out, for example, to encourage submissions of categories of people excluded in previous exercises. One can submit less than four

outputs but justify the reasons (disability, maternity or paternity leave, long-term projects, etc.). Also the assessment of multidisciplinary research has been facilitated through use of special advisers and through cross-reference to other sub-panels. The submission guidelines now pay attention to applied research and on allowing people with this kind of research profile to be submitted. One of the most important recommendations is still to be implemented, namely the use of metrics to help panellists in their judgements. Metrics will be applied to the assessment of Science, Technology, Engineering and Medicine (STEM) subjects after the 2008 RAE. It was noted that in science subjects that RAE results correlated strongly with proxy indicators such as research income. In June 2006 the DfES and the Higher Education Funding Councils published their proposals on the reform of research assessment and funding. For STEM subjects, they advocate a metrics system based on research grant income. This system should be less expensive to run, more objective and lighter in terms of the administrative burden on the system. Metrics measures have encountered strong opposition in the social sciences and humanities and traditional peer review will survive in those fields.

8.5.2 Other Research Policies

While RAE is the dominant policy, there are two other strands of research policy which should be mentioned. A longstanding policy is the encouragement of links between science and industry to promote the knowledge based economy and economic growth. As early as the 1990s (Chancellor of the Duchy of Lancaster, 1993), 'science' foresight programmes were set up which were designed to predict and manage forthcoming developments in scientific fields and to foster collaboration between academics and firms. Industrial policy moved beyond competition policy to 'new growth' solutions designed to accelerate technological and economic change in key fields (Proudfoot, 2004). These policies were promoted by the Department of Trade and Industry rather than the Department of Education, so that there was an additional central ministry now seeking to steer the academic science field. This framework led to an attempt to align science with economic growth, seen also in the development of technology transfer policies and offices and the creation of university spin outs in such fields as biotechnology. Initial impact was low but some Universities learnt how to respond to early problems and increase scale (see Proudfoot, 2004 on the evolution of the Oxford bio technology cluster). Lam (2007) argues that the downsizing of traditional corporate R and D labs led knowledge based companies to construct closer ties on a strategic basis with a small number of key academic institutions. They fund university based research institutes. These macro trends then affect scientists' careers and identities, for example, 'entrepreneurial professors' emerge as key linkers. The Lambert Review (2003) revisited these themes, also considering how applied research might be paid for by private firms.

A second new research policy is a recent stress on *inter institutional cooperation* to create critical mass across clusters of HEIs within particular subjects. This policy is consistent with a more 'hands off' network governance approach. The 2003 White Paper proposes:

> *to encourage the formation of consortia, provide extra funding for research in larger, better managed research units and develop criteria to judge the strength of collaborative work (p32)*

Direct control over such collaborations is not expected:

> *Collaboration … cannot be imposed top down. So we do not have a blueprint for particular sorts of collaboration – we want to encourage them to grow organically over time. (p29)*

Such collaborative arrangements may be fruitful for small subjects under pressure (such as physics or chemistry) where regional networks can maintain provision or for devolved jurisdictions (such as Scotland) developing a territory wide strategy for strategic subjects.

Finally, the public Research Councils (e.g. Medical Research Council) remain key funders of academic research. These research institutions have remained relatively stable, with their budgets increasing substantially since 1997. Academics continue to apply for grants to their relevant Research Councils with proposals which are still assessed by peer review. Despite more emphasis on relevance and user involvement, in practice academic peer review has so far remained dominant. One shift has been away from purely investigator led research to more thematic programmes which provide an overall specification against which proposals are assessed (e.g. the Economic and Social Research Council recently commissioned a programme of research in Public Services against a brief prepared by the Programme Director).

8.5.3 Discussion of the RAE

How are we to assess the impact of the RAE which we argue has been the major NPM style instrument used to steer the UK academic field? The RAE is longstanding, powerful in its impact and highly controversial. For example, it has been strongly criticized by the University and College Union.

> The RAE has had a disastrous impact on the UK higher education system, leading to the closure of departments with strong research profiles and healthy student recruitment. It has been responsible for job losses, discriminatory practices, widespread demoralisation of staff, the narrowing of research opportunities through the over-concentration of funding and the undermining of the relationship between teaching and research (UCU web site)

The RAE has been seen as leading to increased division within the academic profession as HEIs increasingly devise exclusion criteria and identify non research active staff. A non returned academic may well have a higher teaching load so that RAE 'bites' at the level of the career of the individual academic. Research 'stars' enjoy power in the transfer market, which exists between HEIs in the run up to, RAE exercises; while non performers face pressure to improve or exclusion (Henkel, 2000). RAE has been criticized for its emphasis on research over teaching, generating an institutional bias against a teaching based agenda. Teaching and administrative tasks are then loaded onto junior academics whose careers are yet to be established (Harley et al., 2004: 335). There are potential issues of discrimination and exclusion from the RAE submission of scholars who are young, women or members of a

minority ethnic group (Tapper and Salter, 1993: 17). The concern is that some groups have suffered from RAE game-playing, particularly women who have for example taken maternity leave. RAE has been criticized for fossilising the present pattern of stratification. The top of the hierarchy does not shift substantially from one RAE exercise to another and it appears to be difficult for new players to break through. The transaction costs of the RAE 'industry' are high (Power, 1997), so that the auditing of research displaces doing research. The RAE has been criticized for discouraging interdisciplinary, practical/professionally related or Mode 2 research (Curran, 2000: 394; Tapper and Salter, 1993: 17; Taylor, 2006: 4). RAE panellists seem to rank outputs in leading academic journals more highly than applied research (May et al., 2006: 47). Institutions such as the Royal Academy of Engineering (2005: 3) who represent practice connected fields claim RAE style peer review is a good way of assessing only Mode 1 research.

Supporters argue that RAE has usefully caught the 'tail' of non research active staff and pressured HEIs to engage internally in more active research management practices. It has been a fruitful combination of peer review and explicit measurement but in the end it is the judgement of senior academics that creates the rankings. It has helpfully concentrated resources in departments likely to produce a 'pay off' in terms of research outputs of the highest quality. UK HE operates in an international market place where the production of internationally excellent research is a critical advantage which policy needs to acknowledge. RAE has produced a culture in which young scholars are more likely to receive effective mentoring and become research active. RAE has helped identify, protect and celebrate research excellence in a public sector system which might otherwise converge on a mediocre mean and which offered too few incentives for high performance. It should be recognized that HEIs can rightfully have diverse missions so that some HEIs will be better employed on valuable but not research centric objectives (e.g. widening participation; business facing universities). The removal of QR funding from these latter HEIs rightly steers them to their 'appropriate' missions. RAE transaction costs have been damped down by the move to a longer time period between RAE cycles and now the projected move to metrics. About the only point of agreement between these two camps is that RAE is a top down policy with high impact.

8.5.4 Doctoral Training

Padron's (2006) study of the governance of UK doctoral training found many indicators of NPM style steering. We here acknowledge Padron's work. These instruments of governance emerged late, as it was not until about 2000 that the UK State sought to manage doctoral training directly. Numbers of students had been small; however, numbers increased in the 1990s and their contribution to sustaining the science base was more recognized. For a long period (1965–2000), the main role of the State was to provide the finance for studentships via the Research Councils. Students applied directly to Councils with their projects and the support of a supervisor and these

applications were subject to peer review. The key relationship was between the student and the supervisor, albeit with the financial support provided by the Councils. So the key supervisory relationship was at this stage personalized, tacit and professionalized. The Funding Councils were not interested in non Research Council funded Ph.D. students nor in assessing the wider training package offered by the host HEIs. So there was a relatively modest steering role, although Research Councils began to monitor 4 year completion rates as a performance indicator (the target is currently 70% submission within 4 years). Performance indicators have now become more important in scholarship allocation. Research Councils' allocation of scholarships to departments is informed by a formula, which includes RAE score, completion rates and volume of Ph.D. students. The ratio of Ph.D. students to faculty is a performance indicator considered within the RAE assessment exercise as one aspect of a Department's research standing, as is the number of Ph.D. studentships.

Various reports (Harris Report, 1996; Dearing Report, 1997; Roberts Report, 2001) have led to significant shifts in policy towards doctoral training. The State increasingly sought to influence the structure and behaviour of HEIs as well as the supervisory/supervisee relationship. Doctoral programmes have increasingly been incorporated within QA reviews following the Harris Report (1996) which argued that there should be a Code of Practice so that only HEIs with: suitable research infrastructure; a suitable supervisory environment; and good information for students should accept research students. This was part of stratification of the HE system and protection of research intensive institutions. The QAA's code of practice has been extended (2004) to include a section on doctoral students. Starting from 2006, the periodic institutional audit of departments has also considered doctoral programmes. The QAA Code pays particular attention to issues of research environment, training and supervision.

Dearing and Roberts were concerned about the gap between the experience of the Ph.D. student in the University and the world of work. They wanted more emphasis on preparation for the job market and the development of 'transferable skills' to support the knowledge based economy. Research Councils were invited to respond to these recommendations in 2002. Now, each HEI receives a training budget proportional to its Research Council scholarships and delivers a compulsory Research Development Programme for these students. In some HEIs, this funding led to the setting up of Doctoral Schools to deliver these programmes on a supra Departmental basis. The so called Ph.D. CASE programme (which involves joint sponsorship with an industrial partner) is another lever to encourage contact with industry.

So central agencies now define institutional aims and targets in relation to doctoral training programmes. They have monitored performance and linked it to funding. It has sought to connect the HE system with the knowledge based economy. The centre shapes the HE field through Research Council scholarship funding and also QAA. Aims are linked to a formula based funding system for Ph.D. scholarships. However, the funding for RDP is lump sum and HEIs can manage it at a micro level as they see fit. These are strong indictors of a NPM style approach. The other face of NPM is more micro flexibility within a strategic framework set by the centre. The introduction of a formula based allocation system to Universities diminishes the transaction costs associated with an individual Ph.D. application and gives Universities more flexibility at a local level.

While the NPM paradigm seems strong in the doctoral training arena, there are a few indications of a network governance approach as well. There has been criticism of a lack of a 'joined up' approach between Research Councils. In 2001, all Councils signed a 'Joint Statement of Skills Training Requirements for Research Students' and there has been increased emphasis on cross council collaboration. HEFCE also uses its Strategic Development Fund monies to help collaboration between HEIs, and this may include joint work around doctoral training.

8.6 Concluding Discussion: A NPM Rich Hybrid?

Our first conclusion is that there is evidence of a long term track of HE sectoral change, led by powerful reform ideas as well as purely tactical policy responses. The UK HE system in 2007 is significantly different from that of the 1980s: larger; more managed; more internationalized; more market driven. So the sector is engaging with long term processes of substantial rather than superficial change. Some of the reforms launched in the mid/late 1980s have 'stuck': RAE, QAA, internal markets and corporate governance reforms are good examples of enduring NPM style policy instruments. There is a major move away from the old pattern of bureau professionalism and academic capture of HEIs towards NPM steering. The UK has long been seen as an index case of NPM (Ferlie et al., 1996): we conclude that the HE sector is part of the general rule rather than an exception.

While we are clear what the UK case is moving away from; what is it moving to? How do the explanatory archetypes of the first chapter relate to the UK case? The NPM narrative is strongly present in both tracers of doctoral training and research management as well as the macro NPM reform ideas alluded to above. But it is also a hybrid with some turn to a network governance model, especially in the early Blair period. Even in RAE, there is an important role for peer review characteristic of a professionalized system. So, there is a hybrid mode but one in which is NPM rich. Our assessment may be sensitive to time period. An assessment made in 2000 could have rated the impact of the network governance narrative as higher than in 2007. There may even be a shift back to NPM modes of governance recently with a revival of quasi markets and corporate governance reforms. Also, the very little evidence of a strengthening of mechanisms for local accountability (as past of a 'Neo-weberian', project for the democratisation and revitalisation of the State; Andresani and Ferlie, 2006) in England contrasts with a different pattern that emerges in the new devolved jurisdictions of Scotland and Wales. There is also a post NPM policy rhetoric emerging of greater HEI freedom but yet to translate into concrete policies. HEFCE continues to seek to steer the HEI field closely in such currently high profile policies as widening participation and the development of more business facing courses and HEIs, using traditional instruments of special funding streams and 'naming and shaming' in public league tables.

How does this analysis compare with other recent studies into the steering of UK HE? Hood et al. (2004) concluded that UK HEIs are steered by various mechanisms

within a hybrid form. The extent of what they termed the traditional mutuality based mode had declined (but was still present) and that of oversight and competition (both of which are NPM orthodox) had increased. Reed's (2002) analysis of the role enactment of key HEI managers (such as Heads of Departments) found them balancing principles of professional collegiality and an increasing emphasis on managerial control. Deem et al. (2007: 189) conclude that the NPM discourse has become institutionalized throughout the sector and that no other significant project or thoughtworld is apparent.

Our conclusions are similar, albeit slightly more optimistic than that of Deem et al. Over the 1979–2007 time period, we conclude there has been a substantial and long term shift from bureau professionalism to NPM principles in the steering of UK HE. This is not a pure shift and we can detect hybrid influences, but it is a shift of substantial significance and scale. We detect some but weak influence from the network governance paradigm. A potential post NPM policy rhetoric is emerging but yet to be enacted in practice. There are possible non NPM alternatives but they are yet to be realized. At present, a NPM mode of governance is as important in the steering in UK HE as it has been in other UK public services. Far from being an exceptional sector, HE confirms the general UK rule of high NPM impact.

Chapter 9
A Comparative Approach to Higher Education Reforms in Western European Countries*

Catherine Paradeise, Emanuela Reale, and Gaële Goastellec

The seven national case studies explore training and research changes in higher education institutions. They focus on the various institutional, organizational and individual dimensions of change over the last 30 years, characterized in western European countries by major shifts in relation to levels of autonomy, accountability and managerial approach. Yet national systems remain to be compared. By using an international and comparative thematic approach, this chapter undertakes a systematic description of how and how much the sector of higher education has changed in terms of organization and steering, leaving interpretative issues to the second conclusive chapter.[1]

It is divided into two sections. The first one presents itemized comparative reform histories since about 1980 and changes that have taken place, including central government regulation, system characteristics, organization and governance of higher education institutions, degree structure and study programs. It states the rise of managerial approaches to the reform of universities, demonstrating striking international similarities in public policy rationales and tools. It documents the organizational turn of universities and its relationship to a new multilevel governance design characterized by the redesign of jurisdictions and steering rules between public authorities and universities.

The second section compares national processes of reform implementation. Even though they share rationales and tools, reforms remain path dependent and

C. Paradeise
Université Paris Est/LATTS, Cité Descartes, France

E. Reale
CERIS-CNR, Rome, Italy

G. Goastellec
OSPS-University of Lausanne

* The authors are grateful to Ivar Bleiklie, Ewan Ferlie and Don F. Westerheijden for their help on final edition.

[1] See charts p. and sq. for systematic information country per country.

C. Paradeise et al. (eds.), *University Governance*,

most often incremental: changes imposed by the coercive authority of the State combine with renegotiation between public authorities, universities, academic professions, and civil society at large. It shows that European higher education systems remain far from converging towards a unified pattern that would progressively erase borders, with the help of European level policies and intergovernmental actions.

9.1 From Bureaucracy to Management: The Rise of the Managerial Approach to Steering

Over the last 30 years, many national governments in Western Europe have constructed various policies with the purpose of 'modernizing' their national public sectors. That was true in health (McNulty and Ferlie, 2002), justice (Vigour, 2008) or social protection (Sikes et al., 2001) as well as in higher education and research. In most sectors and countries, the expression of the need to reform was resource-driven at the beginning of the process. In Higher education, it became a hot issue on policy agendas with the rising burden of costs also driven by massification, which to some extent occurred in all seven countries reviewed here. As a consequence, spending per student decreased.[2] The efficiency issue and value for money in limited higher education public budgets was also spurred by such phenomena as economic stagnation, the development of supply side economic policies and tax reductions. Finally, the problem of defining university missions was exacerbated in the 1990s with the emergence in Europe of the notion of knowledge-based economy (Godin, 2003), putting Higher education at the very core of engines of economic dynamism. This problem increased, given rising dissatisfaction when new visions of the social and economic role of higher education in society coincided with the feeling that it currently proved unable to answer the labour market's needs. The idea developed that the HERIs might be used more effectively as policy instruments in this connection, and this increased the workload of public higher education and research as new missions were piled onto existing ones.

European universities are mostly public and state funded institutions. Recent figures from a sample of European universities show that this apparently remains the case, since it is only in the UK where a significant proportion of universities get less than 50% of their basic funding from the State (Lepori et al., 2007). Higher education and research appear to be one among many sectors of public service, particularly professionally based services, affected by the loss of confidence in Welfare State organizations, together with facing perceived or real budgetary limitations in the face of evolving needs within changing economies and civil

[2] Since 1995, recently computed data series, although incomplete, show no decrease, rather an increase in most higher education institutions. Decreases were concentrated in the 1980s and probably stopped and reversed due to the decreasing number of students since the mid-1990s (Lepori et al., 2007; OECD, 2005).

societies. At various paces and rates, public sectors have been, over the past 3 decades, affected by the idea that the proper way in which to improve productivity and quality was to transform public *bureaucracy* by means of public *management*. The European level also influenced the content of reform. On the one hand, the intergovernmental Bologna process had a substantial impact on the mode in which the educational function was restructured. On the other hand, the European Union funding schemes within the Framework Programs enhanced the networking of research actors with a growing involvement of academics. Moreover, the Lisbon strategy from 2001 on had a global impact on government choices. The concept of a 'knowledge-based economy' became a kind of shared understanding or "buzzword" for change. It enhanced the need to monitor universities as producers and diffusers of knowledge for the sake of national and regional innovation and economic performance.

The beneficial character of universities' contribution to society long remained unquestioned in public opinion and by public authorities. It was felt as an undisputable contribution to the progress of mankind by spreading the lights of education and science. As strange as it may seem today, post-war Welfare states did not develop the notion of evaluating public investments by measuring their returns (Esping-Andersen, 1990). In education as elsewhere in public service, especially among knowledge institutions like hospitals, the notion of output measurement expanded under a double pressure. On the one hand, social and economic engineering proved its shortcomings in terms of curing social and economic evils. More precisely, the social and economic utility of higher education remained unquestioned as long as it was restrained to a small elite. The question of the adequate relationship between training and employment outcomes only became problematic with the diversification of university publics and thus of university missions. On the other hand, public money became scarcer, in part as a perceived or real consequence of these shortcomings. The idea of linking investments and returns in education and research was a new phenomenon that emerged during the 1980s, as well as the idea of correlating education supply with the needs of the economic system (Goedegebuure et al., 1993; Van Vught, 1993).

Funding university training increasingly came to be viewed as a problem in a period when this free public service faced massification, while concern about limit to growth of public sector increased (van Vught, 1994). University systems were more or less afflicted by this trend, depending upon the scale of this phenomenon and the harshness of public funding limitations. Apart from Switzerland and Norway, budgets per student decreased dramatically from the early 1980s. Some countries even experienced cuts in public funding and academic positions. At best, the absolute increase of university budgets (per student) slowed down or disappeared. At the same time, funding education and research was becoming more expensive as a consequence of their expanding dependence on expensive technologies. While the notion that economic well-being in advanced European countries would increasingly rest on knowledge and innovation, universities as training and research organizations came to be squeezed between contradictory expectations. The tension between the increasing perceived role of higher education as a source of competitive strength for knowledge-based societies and the ineluctable decrease of per capita public investment

in higher education was to be solved by reorganizing the national system of higher education and research to do things better, quicker and at lower costs, and to differentiate missions between HEIs. This policy problem was perceived as extremely important as the liberalization of European economies got underway.

Whatever the specificities of reforms in individual countries, the modernization of higher education has been understood everywhere as a need to turn professional bureaucracies into accountable public organizations. But the pace, methods and extent of reform vary across countries. Reform was largely resource driven. Therefore, the determination and swiftness of reformers was very much linked to how urgent they felt the problem was, and what corridors of political action were opened. Two broad groups of countries can be distinguished, cutting across the usual typology used to characterize European universities which opposes the internal consistency of British and "Humboldtian" individual universities in Northern Germanic countries to the vertical dominance of the nation-state in the Southern "Napoleonic" ones. This is a first important empirical conclusion that emerges from this comparative review of the individual case reports.

The first group includes the UK starting in 1979 (Ferlie et al., 1996) and Netherlands, that also emerged as a determined reformer in the 1980s (van Vught, 1989). The UK early on systematized the rationale of reform, imitated a few years later by Netherlands. These countries went far and strong in reorganizing forcefully and systematically the entire multilevel governance system of HERIs according to a general reform plan, which Italy also tried to implement 2 decades later. The second group includes countries severely burdened by massification and budgetary limitations in the 1970s (France, Germany, Italy), as well as countries where massification although it took place, represented less of a financial burden (Switzerland, Norway). The latter countries have been late or slow movers, developing mostly incremental approaches to reform. They used bits and pieces of a global instrumental repertoire or even reinvented parts of it through their own reforms in a disjointed and incremental manner (Lindblom, 1959).

9.1.1 Changing Understanding of University Functions

Interpretations of what ought to be the proper social contribution of higher education to society has varied over time. Before the 1960s, higher education in all countries was mostly dedicated to elite general and professional education and training. The expansion of Higher education started immediately after World War II, but only picked up speed in the 1960s due to the constrained means in the immediate post-war years and the long lead time needed to establish new HEIs. In the 1960s, their role as Welfare institutions was enhanced, based on a general push towards democratization of knowledge. This legitimized public funding by the provision of a specific public good – here training – as a contribution to education and citizenship of a rising number of students in full-employment societies. Several changes impacted on this notion of universities.

The content of higher education used to be unquestioned, as well as the expertise of teachers as producers and diffusers of knowledge. The rise of unemployment, the more general decline of social deference to professionals and the later conceptualization of advanced societies as "knowledge-based societies" converged to shift this producer-based notion to a more user-based approach of higher education, users being defined as both employers and future employees. It led policy-makers to better differentiate vocational, professional and general education. Professional education delivered in medical or law schools, or in French Grandes écoles, tended to remain untouched. Higher technical education was promoted by developing a dual higher education system, often under regional jurisdiction. This sector experienced rapid growth in the 1980s and absorbed much of the student number growth. Progressively, post-secondary vocational schools came to be upgraded to higher education institutions, as was the case for Polytechnics in UK, Hautes Ecoles Spécialisées in Switzerland or Fachhochschulen in Germany and in Netherlands.

As long as higher education was restricted to the training of national elites, each country found its peculiar and more or less distinctive historical way of dealing with the problem of differentiation among types of higher education: between general and professional higher education in the UK or Switzerland, between professional schools and general education inside universities in Netherlands, Norway, Italy, France, or between elite schools and universities in France. Gradually, regulations or incentives developed by the Ministries of education and science encouraged the redistribution of institutional national frames in training and research within or between universities (Switzerland provides a good illustration of this with its disciplinary reorganization of federal and cantonal universities) or by building clusters of universities (like regional networks in the UK, doctoral schools affecting individual faculties in Netherlands or Poles of research and higher education in France). Such institutional changes aim at the rationalization of training and research supply and securing economies of scale. These evolving policies are also meant to increase external visibility and build resources that enhance identity and strategic capability of universities, both internally and externally.

Academic research originally developed inside higher education institutions as a regular and self-determined component of professorship. It later became increasingly identified as a specific mission, with dedicated budgets, organization and evaluations. This mission itself diversified into basic, applied and strategic research, each generating specific returns in education and training, basic scientific results and innovation (Laredo, 2007). Basic and strategic research would feed into research education, while applied research would relate to higher vocational training. The importance ascribed to innovation in economic dynamics led public funding authorities to increasingly emphasize applied and strategic research. Research agencies that used to be completely dedicated to basic research funding progressively increased the share of applied research grants, as for instance the Swiss national fund of research (FNSR), increased them from zero in 1970 to 20% in 1990.

By clarifying university missions, public authorities encouraged universities to pay more attention to their environment. In particular, they encouraged individual institutions to position themselves in order to catch the attention of diversified

publics and private stakeholders interested in university outputs of education and research for such reasons as regional employment, economic interest of research results, reputation through sponsorship of excellence, etc. By the same token, they could then respond to public budget shortages by diversifying their funding base through enlisting new external private and public funding sources. Positioning could mean diversification across universities. In some countries, it led progressively to specialization by disciplines (especially in small ones such as Norway or Switzerland). In the UK, it sustained differentiation between research and teaching universities, as with the 2007 *Excellenz Initiative*, intended to promote top-level research universities in Germany.[3] In other countries, such as Italy, universities remained all encompassing even though they increasingly developed reputations in specific fields.

Until the 1980s, most European universities on the Continent did not enjoy the high degree of autonomy in governance that traditionally characterized universities in the UK. They were bureaucracies externally ruled by national (or regional) substantive rules, while they internally joined government by consent with academic freedom. It was certainly the case in the Northern countries, such as the Netherlands, Switzerland, Germany and Norway. In France and Italy, the landscape was quite different. In these "Napoleonic" countries, universities remained at the backstage of overarching disciplines that dominated the national landscape of *the University*. In either case, universities involved bureaucracy, but no management whatsoever. As social arrangements, they did not possess the properties of formal organizations (Brunsson and Sahlin-Andersonn, 2000; Krücken and Meyer 2006), even more so in terms of the increasingly dominant vision built into rational choice theories. In particular, they did not pursue collective goals based on internal interdependencies, and they did not control their own performance. They were even seen theoretically as ideal types of organizational 'garbage cans' or loose arenas in which multiple actors and agendas coexisted (Cohen et al., 1972). They were certainly not considered as purposively 'managed' organizations.

With few exceptions, universities used to depend almost totally upon public basic grants for gratuitously distributing a public good, namely education. Social equity criteria emphasized the importance of a free service and input-based budgeting grounded on student numbers. From the seventies onwards, rising shortage of public money encouraged the development of new theories and instruments for public goods delivery. Rationalizing public administration, including higher education, by developing public management would ensure better "value for money". Increasing space of manoeuvre for public institutions controlled by evaluation devices would ensure more selectivity and thus quality improvement as well as cost reduction. Public policies commonly promoted such changes by extensively emphasising universities as 'key actors', encouraging them with a series of new tools to identify their own contributions to knowledge creation and dissemination, to rationalize internal organization and build proper strategies. Management tools would favour

[3] France followed the German example with the *Campus 2008 campaign*.

coordination between public authorities and individual institutions based on procedural incentive rules rather than substantive prescriptive ones. While university budgets usually remained based on public money, a rising share of them came to be linked to evaluation of outputs rather than counting of inputs. This new type of coordination was early on conceptualized in the UK within the frame of rational choice theories as quasi-market devices to overcome outdated bureaucracy.

9.1.2 Turning Universities into Organizations

9.1.2.1 From Weak and Subordinated Organizations

Shifting from administrative bodies to strategic actors first requires reinforcing individual universities' internal steering capabilities. Indeed, the increasing influence of rational choice theories, translated in the public sector as New Public Management, led analysts to consider continental Europe universities of the 1980s as loosely coupled professional bureaucracies (Weick, 1976) lacking major properties of formal organizations such as strong principal agent relationships. They were distributed between the two extreme cases well described by the opposition of the UK and France. In the UK, the higher education system was based on a large degree of autonomy of individual universities. They were not regulated by laws covering more than one institution except for common frameworks on a few matters like salaries. They were financed by a buffer funding agency, loosely coordinated externally by an association of Rectors. Until 1986, the funding agency planned distributive block grants in a very conservative manner in accordance with a 5-year plan. Internally, the universities were based on a large administrative apparatus, but were not designed as strategy-making authority structures. Internal distribution of power was based on professorships and collegiality. French and Italian universities represented the other extreme of the spectrum. They were directed by a large number of laws defining detailed substantive rules implemented top-down by Ministries in charge. Organization and allocation decisions were made by central bureaus in the Ministry, possibly using disciplinary national academic advisors, with no consideration of individual universities' specificities. Universities were submitted to line-item budgeting and ex ante budgetary control implying rigid resource allocation. Real estate was State owned. They were not allowed to borrow funds or to capitalize money. Universities were not responsible for their own human resource decisions. As a dominant norm, academics were civil servants and the creation and administration of academic positions were placed under the jurisdiction of national Ministries (or regional Ministries in federal countries), formally or informally assisted by prominent academics belonging to disciplinary national communities. Definition of work contents was uniform. Each academic supposedly dedicated time to research work supporting teaching, justifying low teaching loads as compared to other education levels. Degrees were nationally defined. In brief, universities were sort of administrative bodies. Universities had permeable frontiers unable to resist dominant disciplines

or prominent academics organized at the national level. Yet, in both extreme cases, collegiality, absence of strategic power and distributive behaviour were common characteristics. While British central authorities deferred to academic autonomy by normally accepting a minor policy role, the continental central authorities claimed a prominent role in policy making.

The internal structure of university governance reflected their organizational weakness. They had developed a roughly common pattern of dual leadership. At each organizational level (university, faculty, department), administratively appointed staff shared the floor with elected academic leaders in France, Italy, Norway or Germany. The jurisdictional divide between them was often unclear, in particular between elected Presidents, Rectors or Vice Chancellors, and appointed administrative leaders. While administrative staffs were small in numbers, weak and formally confined to operating bureaucratic rules, it might occur that the head of administrative staff[4] gained much power by handling relationships with the ministry and politicians. It might also happen that elected academics captured the floor even though their authority was limited. Neither of them usually had much strategic leadership capacity since they both lacked the tools of strategic decision-makers. Consequently, presidential functions were usually restricted to representation and internal consensus building across disciplinary powers. Rather than a CEO heading a big organization, the President or Rector, usually backed by an elected governing Board, was an institutional integrator among colleagues rather than a boss. He or she was a *primus inter pares* using status resources rather than functional position to lend academic legitimacy to university decisions. These decisions were taken by faculties or prominent professors often in direct interaction with the Ministry, discussed in the "professors' Parliaments" (Senates or Scientific councils acting as elected non executive university councils) and ratified by the executive Board.

In countries where university structures were the strongest, leaders were more often appointed than elected among academics, as in the Netherlands, Germany or the UK. Yet, appointment was most often a confirmation of the nomination by the university, made on nomination of the university's deans, after consulting the University Council. Leaders worked in close connection with the Ministry of Education (Friedberg and Musselin, 1993). Starting 1997 in the Netherlands, they were not any more accountable to the elected University Council but to a board of trustees. They might even start playing some managerial role, as in the UK. Being appointed, they had more power to buffer the relationship between disciplines or faculties and the Ministry. They might even succeed in building national associations that mediated the relationship between academic institutions and public authorities, as exhibited by the University grant council (UGC) in the UK, the University rectors' council in Norway or the Federal council of Federal institutes of technology in Switzerland.

[4] He could be appointed by the Ministry (Italy), chosen by universities on national lists (France) or selected by universities on the labor market (Norway, the Netherlands, UK, Switzerland).

9.1.2.2 … To Increasing Organizational Density

Starting in the UK, new instruments and rules have to a various extent strengthened the internal micro-management capability of universities in all our seven countries. The development of managerial tools like strategic plans, new accounting schemes, new partnerships incentives, new HR frames, etc, have helped implement the objective of reinforcing the organizational density of universities. By strengthening leadership and senior management, and by internalizing choices, the rise of self-government tools attempted to increase the subjective and objective belongingness of university members.

It is in the UK that the 1985 Jarrett report first repudiated the notion that *academic collegiality* and election of the Vice-chancellors should be among the governing rules of universities. It offered individual universities the possibility to appoint a CEO type of leader. Netherlands followed suit later in 1997 by compulsorily putting an end to participatory modes of internal governance, shifting from the continental mode and dual order of the 1970s to the UK model of centralized executive power based on appointment. This decision was in line with the new government's vision developed in the previous years, according to which universities required stronger leadership, concentration of power, and weakening of representative bodies. As a consequence, control of primary processes shifted from individual professors to collective setting of teaching and research agendas in line with strategic planning, under the supervision of appointed deans. Norway moved half way in 2005 by offering universities the choice between keeping the traditional dual leadership model or adopting an appointed leadership model. Switzerland already possessed the two types of governance structure. In France and Italy, the elective model remained unquestioned. Yet, presidential power was gradually strengthening in France over the last 2 decades, as presidents became principal negotiators of 4-year contracts and inescapable gatekeepers for reaching the outside world of Ministries and stakeholders. Major articles of the French 2007 act on university autonomy aim at concentrating executive power in the hands of the presidents, for instance by allowing them to run for a second term and providing them with decision making authority over human resource and real estate management.

Reforms have often massively increased the degree of formal and actual *autonomy* of universities in defining their internal governance structure. They have reinforced their right to self-organize and extended their space of manoeuvre under the rising authority of presidents or rectors. As a general trend, heads of universities increasingly act as intermediary between senior academic managers, deans and public authorities. While the political leadership of presidents and rectors is clearly strengthened (Mignot-Gérard and Musselin, 2002), the introduction of management instruments also enhances the role of senior management. First, they tend to explicitly place faculties under scrutiny of new instruments measuring performance. Secondly, they sustain the professional claims of an increasing numbers of managers to organize within associations with the purpose of improving collective know-how, benchmarking and defending common interests. As a consequence, the internal decision making hierarchy tends to be strengthened, if for no other reason than the rise of

professionalism required by an increasing internalization of management within universities. Management professionalism has not yet played an extensive role in many countries. Nevertheless, the process is at work everywhere, and contributes to renegotiation and rebuilding of the distribution of power between presidential teams and senior management.

A common feature in all countries is the promotion of *strategic planning* at the level of individual universities, most often as a basis for negotiating the allocation of resources. Strategic planning was promoted in France from the beginning of the 1980s with the setting up of 4-year university contracts, in Germany later with the mission statements, in the Netherlands with the quadrennial strategic policy plans prepared in turn, on a biannual basis, by individual universities and by the national government. Italy has created in 2005 the notion of a 3-year plan as a basis for funding the core budget and a preamble to recruiting human resources. The budget share related to the negotiation of such plans may remain quite limited. Their ex post evaluation may be weak and have little influence on next year's budgets. It remains a fact that, by making plans compulsory before budgetary negotiations, ministries have stimulated identity assertion by universities, development of common frames for internal operation, external communication and elaboration of prospective visions of their future, and finally encouraged the building of a shared interest by negotiating institutional projects. They have often led universities to get a better knowledge of their internal landscape and external networks, of their strengths and weaknesses, of their actual and expected resources and performance. Therefore, plans must be considered as much more than technical tools trying to rationalize relationships between public authorities and universities. They present themselves as governing instruments with structuring effects on the higher education system configuration as on the higher education system organization. They stimulated emerging strategic organizations, able to identify and structure their own means and aims. In turn, they arouse self-reinforcing effects such as claims on internal governance reforms.

A central property of formal organizations is to possess the jurisdiction over their own resources, such as human resources and real estate, and the possibility to develop them according to their own strategic orientations. Until recently, no university system in Europe fitted these minimal requirements of organizations. Not even the British ones did so in spite of the traditionally high degree of autonomy of universities.

9.1.3 Strengthening Micro-Management

9.1.3.1 Human Resources

Various models of university human resources administration share the floor in Europe. British universities have always acted as employers of their administrative and academic staffs. On the contrary, French, Italian, German, Dutch and Swiss university employees as well as administrative and academic staffs used to be State

or regional civil servants, and universities were not free to decide which positions they would open. National committees of some sort were in charge of recruitment and promotion in France and Italy, while universities were in charge of recruitment of civil servants in Germany and Switzerland. Everywhere, salaries and promotion rules were set according to national or regional public service scales.

The strengthening of the university organizational authority is visible everywhere and on all aspects of human resources management. Decision-making power on hiring has finally been devolved to universities where it was not yet the case. Individual universities are in charge of recruitment in the Netherlands, Switzerland, Norway, the UK and lately France, depending upon availability of funds. In Italy, each individual university can decide which positions to open, under certain budgetary constraints. Only the number of professors to be recruited has to be formally approved by the Ministry, after Rectors have fixed the annual number of new positions in cooperation with the university Senate. The share of civil servants decreases in universities, among technical and administrative staff and/or among academics. In the Netherlands, academics are no longer civil servants. In Italy, they remain civil servants while technical and administrative staff are not any more. Collective agreements are introduced in several countries. In Norway, Germany and Switzerland, a shift is observed towards more individual and contractual relationships and more autonomy to appoint new staff, with more decentralized negotiations and local wages negotiations. In the UK, overall pay determination is moving slowly from former complex national salary scales to a more market oriented system. More local flexibility has been introduced to reward personal contribution and scholarly reputation. France has lately joined the club. With the 2007 act, it allows diversification of recruitment statuses and contracts within given margins. In autonomous universities, the presidents will be in charge of defining the number, type and benefits of positions he/she opens, based on internal rules of decision defined with his/her representative bodies.

If tenured teaching positions remain the norm, a shift toward more flexibility can be observed in all seven countries: increasing numbers of temporary teaching contracts in Italy or Norway, increasing numbers of fixed-term post-docs all over, weakening of permanent status and difficult conditions to get tenure in the Netherlands, increasing number of part-time positions in Switzerland, rise of non-tenured staff for both teaching and research activities in the UK, extension of the possibility to hire non-civil servants on contract from doctoral and post-doctoral students to senior scholars in France. These trends are sustained by the widespread idea that more staff mobility is necessary, as often repeated in policy declarations in countries like France, Italy or Norway, but also that more flexibility favours both competition and attractiveness. The internationalization of the market also increases at various speeds across countries, amounting to very low levels in countries like France or Italy to high levels of about 40% of total academic staff in Switzerland or the UK. By creating specific schemes facilitating return of expatriated nationals or opening the road to negotiated academic labour contracts where it was not the rule, each country tries to be present on the internationalizing labour market of higher education and research, where the percentage of foreign academic staff is now commonly

used as an indicator of excellence. The increased flexibility is thus both aimed at improving HEI internal adaptability and international competitiveness. At the same time, the increased mobility of academic staff becomes an issue for more institutions or disciplines facing difficulties to stabilize academic teams. They come to create specific programs to promote academic stability, as did for example the British in 2003–2004 with the Golden Hello's, which provides academics with a 3 years' financial bonus for taking up teaching in less attractive disciplines and remaining in place (Metcalf et al., 2005).

9.1.3.2 Real Estate and Equipment

They are another essential part of university resources. Yet, most universities in Continental Europe did not formally possess their own buildings until quite recently, with more or less unfortunate consequences depending upon the degree of actual delegation to universities in decision making on construction and administration of buildings. In some cases, like France, universities were not even allowed to include provisions for depreciation in their budgets. Things have changed in most countries, where all real estate has been devolved to universities. This option is now also open to French universities, on a voluntary basis, as a result of the 2007 act. In countries where devolution did not occur, like in Norway or Switzerland, universities have been given more power in the management of their properties. More private property is also allowed, for instance regarding student housing in the UK.

9.1.3.3 Diversification of Funding

Diversification of resources came very incrementally onto the agenda. It was first thought of as a way to counterbalance the reduction of government contribution per student. After this contribution stopped decreasing in the mid-1990s in Continental Europe (Lepori et al., 2007), it remained a way of stressing the need for higher education to be demand- rather than supply-driven, by internalizing specific stakeholders' interests, and thus diversifying universities' orientations. It is only at the end of the nineties that tuition fees increases were implemented in some countries (UK, the Netherlands). By that time, in most countries, Ministries and university presidents or rector were convinced that Regions might be good targets for raising funds as university mass tertiary education, vocational training and applied research could contribute to local employment and economic dynamism. They were also convinced that companies could get involved in sponsoring technological training and research programs, feeding innovation and executive education. Finally, they were conscious that a rising share of public money was becoming more competitively awarded and the channels of financing were diversifying with rising shares of European and regional money.

Diversification meant achieving a better fit between resources and missions and thus a more incisive characterization of universities in training and research.

Certain countries, such as the Netherlands and Switzerland took advantage of their small size to promote more disciplinary specialization of each individual university. In the eighties, the UK created new performance-based allocation instruments to reward the best and to promote differentiation between research universities or departments and the others. Public incentives were not that radical in other countries until very recently. As will be explained below, most allocation of education funds remained based on students' numbers, with strong historical inertia, while the increasing share of performance-based allocation in research did not lead anywhere outside UK to the removal of historical criteria. Therefore, it did not lead either to real specialization of universities, even though it improved opportunities for good research centers within them. Yet, the notion of strategic planning according to specific resources and constraints developed with 4-year contracts in France, mission statements in Germany or 3-years plans in Italy. At the present time outside the UK, increasing differentiation between universities is visible based on specific strategic arrangement of internal and external resources. As mentioned before, public authorities increasingly encourage a sharper differentiation. It is too early to say whether and where this trend will favour either specialization or more internal differentiation of universities.

Public authorities often created new schemes to encourage *regional contributions* to national public service mostly on the basis of competitive grants. This was the case in a centralized country such as France within the framework of State-regions projects after the decentralization acts at the beginning of the 1980s, as well as in the highly decentralized Switzerland. Regions would also develop their own policies. It was obvious in countries where higher education had always been a regional jurisdiction like Switzerland (where cantons are historically responsible for universities, although the state increasingly comes into play) and Germany (where Länder have total jurisdiction over the sector). It became true in Scotland and Wales through regional development agencies since the devolution of powers to these newly autonomous regions at the end of the 1990s. More surprisingly, higher education and research are now part of the agenda of the most dynamic European regions, often related to political decentralization, even where regions have not gained jurisdiction over universities. It is, for instance, the case in the French Rhône-Alpes, Midi-Pyrénées or Languedoc-Roussillon regions. It is also true in the wealthy Italian regions such as Trentino and Lombardy. Only the Netherlands or Norway remained outside this trend, probably due to their small size and the political insignificance of the regions in almost every area of policy. Norway even moved in the opposite direction by integrating the regional colleges run by the counties into a wholly nationally controlled higher education system in 1995.

As far as innovation is concerned, research funding from *private companies*, technology transfer, patenting and diffusion of results to the economic and social environment is considered by many countries a crucial set of actions that needs to be improved. The "Third mission" of universities is clearly established. For instance, the British Department of Trade and Industry created a joint venture between the Office for Science and Technology and the Research Councils to supply funding support. In all countries, public authorities have set up various instruments to promote

innovation in or with universities. They created institutions helping risky innovative research-based investment such as ANVAR-OSEO in France or Innovation Norway in Norway. They built joint private–public innovation programs. They favoured installation of company chairs in higher education institutions. In many countries, they put up tax deductions for investment in public or private research and innovation. In the UK, they encouraged venture capital to penetrate the market of educational "by-products" such as students' residences. Yet, in most continental European countries, private funding of universities remains marginal on the average, yet with a large variance across universities (Lepori et al., 2007).

As a side effect, the pressure towards diversification resulted in increasing dissatisfaction with bureaucratic schemes and rules that restricted strategic and operational flexibility. The promotion of university management reforms was also understood as improving reactivity in respect of cooperation with external stakeholders. On top of that, universities, regions and central authorities launched initiatives to attract external research funds from the private and public sectors, such as lately Pôles de compétitivité and Instituts Carnot in France following the early established model of the German Frauenhofer Gesellshaft (1949), research parks in Norway or Germany, etc.

Diversification of resources was also encouraged by trying to relax the norm of very low *tuition fees* prevalent in all European countries. The topic remains touchy everywhere in Europe, where the notions of welfare and equity still largely rest on free access to public goods. Yet, the UK, Switzerland, Germany and the Netherlands have taken the risk to face student unrest by introducing or modestly increasing university tuition fees. On the contrary, the recent French 2007 act carefully avoided this issue concerning national degrees.[5] A proposition to introduce student fees in Norway was stopped by opposition in the parliament. Italy maintains a threshold to tuition fees in place at the national level. Differentiation of fees according to nationality or to special programs is another way to increase the contribution of students. The UK increased sharply the fees for overseas students, who can now be charged three times as much as national students, opening up competition not only for good students but also for lucrative ones. The Netherlands and some of the Swiss universities have adopted similar principles in specific curricula.

9.1.3.4 Global Budgeting

Two paths may be used in order to face budgetary shortages. One is to increase resources, the other to rationalize expenses. Besides encouraging diversification of funding sources, ministries came to explore ways to rationalize the production process of higher education as they did in other sectors of the public service. Prospecting for

[5] In France, universities have long been allowed to charge fees for curricula that do not deliver national degrees. These curricula have developed over the last thirty years and sometimes represent a fairly important share of their training supply escaping national accreditation.

new resources and devolving formerly state-controlled funds would not be enough to support autonomy if not backed by proper organizational frames and managerial tools. Reforms of budgeting and accounting rules are spreading that fit the new vision of the university evoked above. They imply important innovations to sustain strategic behaviour by building instruments to inform objectives, rationalize allocation choices, allow diversification and provide insight into the use of resources.

Universities historically provided a rather uniform public good in higher education with rather uniform means. France represents the most extreme case of the sort. Until the 1990s, each national curriculum had to fit a detailed list of substantive norms supervised at the Ministry level, each position was filled by national commissions with no (or not much) consideration of individual universities' specific needs, with each budgetary item being decided upon by specialized units within ministries at the national level. So to speak, only the Ministry of finances could get a global vision of university resources!

The lack of budgetary autonomy echoed the collegial vision of universities in the framework of (national or regional) administrations. Universities were not considered as problem solving organizations nor were they strategic actors free to allocate and manage their own resources according to their own strategies. In terms of resource allocation, universities were the last step of a vertical top-down administrative scale, even though deliberation on resource creation and implementation was delegated to academic communities.

Equating equity with input-based public allocations, core budgets were most often computed through student numbers based formula, in which parameters took care of differential costs of education along disciplines and curriculum levels. The yearly global State allocation did not differentiate teaching from research,[6] nor did it consider variation in quality of teaching or research except for ex ante accreditation. Funding of functional departments and real estate was based on line-item budgeting. The budgetary allocation process left no room for university strategies.

Over the last decade, lump-sum funding and global budgeting at the university level has been introduced in most European countries, and is in process in others. Global budgets are first created by transferring financial resources from the state to universities, on the basis of actual budgets at the time of transfer, possibly including equity mechanisms balancing resource allocations between universities, as was the case in the UK or Italy. They are credited under large chapters that typically differentiate public salaries, operations and investment. Expenses are usually free within the global budget, except for a ceiling limiting global public salary costs and various obligations dealing with public regulations. This process usually comes

[6] In France, the development of joined research centers between universities and public research organizations afforded since the eighties specific research funds in those universities that possessed such research centers, but these funds were usually not managed by universities. Besides, these "joint labs" were concentrated in a few universities (about 60% of them concentrated less that 20% of the French universities in 2006). All non-joint research centers followed the same funding pattern as other European universities.

with the introduction of indicators, incentives and evaluation, with the purpose to better articulate allocation and performance.

9.1.3.5 Cost Accounting and Internal Audit Systems

A decreasing number of universities still live with accounting schemes that fit visions of universities as professional bureaucracies. In this framework, their budgetary inputs were itemized, based on central bureaus' definition of their needs and their expenses were submitted to ex ante controls of legality. They passively registered and spent input monies with the obligation of balancing each item. On the contrary, global budgeting and management decentralization requires shifting to cost accounting and ex post control of each individual university as a whole. It leads to identifying the share of full costs (including salaries, investments and operation) of the whole organization dedicated to each of its components. In other terms, cost accounting creates transparency and commensurability of investments, allocations and returns. It carries with it an ideal of rationalized organization, where each strategic implementation should consider full costs, expected returns (in terms of publications, patents, public goods delivery) and accepted risks.

The shift to cost accounting has been implemented in the UK and the Netherlands where it is complemented by internal and external audit and assessment systems such as the famous British Research Assessment Exercise. It is in the process of being introduced in France, Switzerland, Italy, and Norway, often in the context of general reforms of public accounting systems towards mission budgeting such as the French LOLF ("law on the laws of finance"). Cost accounting strongly draws universities towards a more managerial culture by developing a norm of accountability, where global revenues must cover global costs and be understandable in terms of organizational strategy. As a consequence, cost accounting makes all internal interdependencies within the organization visible and can be used as a tool for internal audits. It also creates the need for a legitimate internal political leadership that is able to argue in favour of decisions in terms of short-term returns as well as longer term strategic investment.

9.1.4 Self Governing Versus Steering at a Distance? Framing University Strategies by Steering Tools

Steering tools have a double face. On the one hand, they strengthen the internal strategic capability of universities. On the other, they enable ex post external evaluation of performance in teaching and research by scrutinizing outputs and budgetary efficiency. Steering tools are ambiguous. On the one hand, they afford a common language that may serve internal steering and strategic autonomy. On the other, the same language serves relationships between national policies and universities as potential fabrics of strategies. Altogether, these tools aim at articulating centralized steering by public authorities and decentralized micro – management in the universities.

9.1.4.1 New Allocation Models

Public funds remain largely dominant in university budgets of all our countries, even though private contributions to funding have more than marginally increased. Based on figures collected in 90 European universities in eight countries[7], Lepori et al. (2007) shows that basic public contributions – either competitive or non-competitive – still cover 60–90% of university budgets in three quarters of his sample. They have decreased to less than 50% only in 11 institutions, 9 of which are British. As told above, students' fees represent from almost nothing to about 20% of university budgets, while private grants exceed 5% in only one third of the sample, with a large intra-national variance. In Switzerland for instance, a country with strong orientation towards technological research, private funds only represent 13% of the total average budget, with a high concentration in the two federal institutes of technology and a long-established business school in Sankt Gallen.

The major overall change since 2 decades rests on the restructuring of public money allocation methods rather than on changing origins of funding. Rather than a sharp increase of private money or tuition fees, the striking common feature in all countries is the development of public competitive centralized basic funding, as well as the increase of decentralized allocations through public grants. The share of centralized allocation of public money increases everywhere, although it is only in the UK that large amounts of basic funding is allocated according to the results at the Research Assessment Exercise, especially to the four wealthiest universities, Oxford, Cambridge, Imperial College and University of London (Westerheijden, 2007). In the same process, research comes to be evaluated as such. Thus, it is no more treated as a natural extension of academic work, but comes to be identified as a specific activity distinct from teaching. Better identification of resource provision leads to clearer definition of specific missions. Concerning decentralized funding, departments and research centres are encouraged to look for competitive public money supplied by regional, national or European agencies, as well as for private resources, with incentives in terms of teaching loads, positions, salaries, fringe benefits, promotions, etc. It is now common that university research groups compete for such resources, which altogether amount to about one-third of research monies. Clearly, the volume and share of public grants have dramatically increased in every country, in particular with the sharp rise of funds emanating from international programs such as European framework programs.

Yet, the development of competitive money – either in basic funding or public grants – has not replaced the large input base of public funding.[8] As far as teaching is concerned, a major share of resources remains based on student numbers and costs. Nevertheless, they also increasingly relate to evaluation, based on complex measures of performance relating inputs to outputs, as in the UK and the Netherlands,

[7] Czech Republic, Germany, Italy, the Netherlands, Norway, Spain, Switzerland, and the UK.

[8] It may even happen that the input-based criteria of allocation are (re) introduced, with the purpose to incite universities to be attentive to these criteria, as is the case in certain German Länder (Orr and Schwarzenberger, 2007).

or based on output indicators, as with the funding formula newly introduced in Italy: 30% of the training budget remains based on student numbers, 30% depends upon teaching outputs measured by number of graduations, 30% upon the evaluation of research and 10% upon special incentives. Switzerland has recently introduced important qualitative, if not much quantitative changes, in its allocation process, by creating performance-oriented mechanisms in teaching funding, for instance by limiting the number of student semesters financed by the Confederation, and taking into consideration the amount of external funds gathered in research. Since 2003, Norway has adopted funding methods linked to throughputs whereby about 40% of public funding is supposed to be linked to teaching and research performance. French universities are invited to develop more accurate output indicators as a tool to adjust public funding to performance in the frame of the new public sector budgetary process (LOLF).

These trends towards performance-based funding, either public or private, more extensively impact research budgets. Yet, a more or less important share of research public funding remains based on historical criteria, with a large variance within countries. This clearly impacts the structures of university budgets and contributes to rising inter-institutional competition. In Switzerland for instance, competitive funding now represents 25% of total funding of research, half originating in the National Swiss fund and private resources and half deriving from European money. In the Netherlands, 20% of the formula governing public funding of university research is performance related. In Italy, national public research funds presently involve 60% of basic allocations and 40% of projects allocations on national interest programs defined by the Ministry.

On the supply side, these trends come with the development of coordination mechanisms, the diversification of funding tools, and the generalization of the notion of public agency as a funding institution. Coordination mechanisms between regional and national authorities have been enhanced in France as well as in Switzerland or the UK. In Italy and Norway, integration and co-ordination of steering functions have been achieved between different branches of Government that funded research during the 1980s. National or regional strategic capacity has developed by clarifying the role of existing research councils in basic, strategic and applied research in the UK, the Netherlands, Norway and Switzerland. Whereas research councils have been operating for a long time in the Netherlands, Norway, UK, Switzerland or Germany, a latecomer like France has recently built its own National research council, while the European Union itself has recently created a European research council. Only Italy took a reverse stand, by suppressing its long standing but rather weak research council and replacing it by a new competitive fund called PRIN.

9.1.4.2 Indicators

As a counterpart of increased autonomy, public controls of legality and efficiency are shifting from ex ante to ex-post. Until the late 1970s, welfare state actors tended not to question the implementation of means dedicated to the fulfilment of its aims (Barret

and Fudge 1981; Sabatier, 1986). Regarding public services, the assumption tended to be that resources dedicated to carry out public services were accurately allocated through vertical channels from Ministries at the top to delivering agencies such as universities. Because they had to face rising needs and limitation of means since the 1980s, the same actors gradually became interested in shaping the process of implementation. Actual outputs came to be regarded as important matters within the process of rationalization. As far as universities were concerned, it led in certain countries to the development of tools combining peer review and sets of indicators measuring outcomes of investments in human resources (for instance in terms of number of degrees delivered in a given period of time, bibliometric measures and patents in research) as well as financial ratios, budgetary performance indicators, etc.

Strikingly, all countries analyzed in this book have tried to develop indicators as steering tools, not always successfully. The UK initiated this process more than 20 years ago as a component of the Research Assessment Exercise: a formula was created to base allocation of resources on a synthetic rating of outputs. Extension, systematization and use of indicators vary greatly from one country to the other. They may be systematic and uniformly imposed top-down upon all universities as in the UK. They may be agreed upon by negotiation between each individual university and public authorities within the frame of strategic plans as in France. They may be built as a quasi-market mechanism aiming at strictly coupling resources to performance as in the UK. They may back the allocation process in a much looser manner as in France. In a principal-agent perspective, they may operate as quasi-market mechanisms linking impersonally and non-ambiguously central resource allocation to a complex measure of output. Or they may be conceived as providing multidimensional strategic tools anchoring strategic debates within universities as well as between universities and their stakeholders, developing a "fractal" organization of coordination between policy levels in higher education and research. In all cases, they aim at providing visibility and accountability of universities in terms of costs, performance and efficiency. Whatever their characteristics, indicators obviously carry the hopes of governments to increase transparency by building systemic information, and to monitor coordination between university strategies and national or regional policies.

9.1.4.3 Assessment, Quality Auditing and Ranking

Assessment and evaluation are already an old story in several countries. Before the eighties, researchers and research centres may have been submitted to evaluation as was the case in post-World War II French research organizations. In this country as in many others, evaluation in universities was performed item per item, through specific committees in charge of careers, curricula, etc. For instance, accreditation of national curricula was often conditional to ex ante evaluation, using fussy substantial rules operated by committees of experts. No assessment exercise was dedicated to administrative work, except for national accounting chambers to check here and there the conformity of accounts and general organization to public rules.

Assessment of universities as global research and teaching entities was introduced in several countries from the 1980s on. A specific national council was created to this effect in 1984 in France, with no direct consequence whatsoever in terms of funding. Italy created a similar committee in the same period. The UK installed the famous RAE in 1986 assessing each university department by peer review (McNay, 2007). Quality audit was first introduced at the end of the 1980s by the universities-owned CVCP, with its AAU performing institutional audits. After a couple of reincarnations, it turned in 1997 into the government-owned quality audit agency (Young, 1990; Brennan and Williams, 2004), conducting external review of study programmes (1997–2003) and of universities as a whole (since 2003), with the purpose to exert indirect pressure on internal management system by giving visibility to local appraisal and helping Vice-chancellors to monitor promotions and recruitment decisions (Yokoyama, 2006). The Netherlands belongs with France and the UK to the three European pioneers in external quality assessment. The Dutch government introduced external evaluation of research for 'conditional funding' in 1982, but this was phased out after two 5-year cycles. Since 1993 research evaluation was done purely for internal university management. In 1997, a number of research evaluation schemes were integrated into the major one, signaling the (almost) complete end of governmental/external research evaluation.

Altogether, quality audits encourage benchmarks, formalization of tacit knowledge with no direct relationship to funding. Italy recently imitated this method. Norway or Switzerland also introduced or re-introduced such methods (as in France that created in 2007 its new Evaluation Agency For Higher Education And Research, AERES or in Italy that created the same year the Agency for the Evaluation of University and Research ANVUR), drawing from the various quality audit models developed in the three pioneer countries.[9]

Altogether, quality audits encourage benchmarks, formalization of tacit knowledge with no direct relationship to funding. What we observe here is the superposition of quality auditing onto assessment. The latter, being a qualitative evaluation process, is internally developed at the disciplinary or institutional level. As such, assessment procedures are highly diverse. By opposition, quality auditing consists more of a standardized procedure of external investigation, imported from the industry sector, and aimed at identifying within universities internal evaluation mechanisms. Auditing thus took place as a second historical stage, emerging in the mid 1980s and spreading in the 1990s, as a more standardized process at national and international level largely forced from the outside, with little cooperation from inside many Higher education institutions (Perellon, 2003; Schwarz and Westerheijden, 2004).

Over the last 2 decades, Europeanization and internationalization of teaching programmes, combined with rising competition for international students, have generated new international accreditation agencies assessing quality of degrees or

[9] For instance, the Netherlands developed its own model in stark contrast to the UK one, which influenced many other European countries, such as Denmark or Portugal (Goedegebuure et al., 1990; Schwarz et al., 2004).

institutions, on a voluntary basis. Good examples would be, for instance, the Brussels based EFMD which runs EQUIS as an accreditation system for business schools or the Institutional evaluation program launched by the European association of universities in 1994 as a tool for strategic change, based on self evaluation and external peer-review conducted by senior international institution leaders. As it was explicit in the 2003 and 2005 follow-up conferences, the Bologna process reinforced the need for national evaluation and accreditation agencies to build comparable degree structures in Europe. Such agencies have been created lately in Norway, Switzerland, the Netherlands and France.

The issue of assessment and quality auditing of Universities has become familiar to national governments. No national higher education and research system can now ignore the new market for international ranking of universities that feeds international competition in research and higher education. If not on its own initiative, each country is impacted by worldwide evaluations (Dill and Soo, 2005; Van Dyke, 2005; van Raan, 2005; Marginson, 2006; Usher and Savino, 2006; Marginson and van der Wende, 2007; Sadlak and Cai, 2007). In this respect, France experienced dramatically the backlash of the first Shanghai Jiao Tong University's ranking, when discovering that only three or four of its higher education institutions ranked among the first 100 worldwide. This disconcerting discovery certainly sped up the reform process in the years 2006 and 2007, by providing "good reasons" (Boudon, 2002) for it.

Comparative results corroborate the idea that universities have witnessed an organizational turn over the last 30 years. They started building identities, aims and means that more and more qualify them as "actors". Each individual institution is in position to better identify its specific partnerships and missions that may help addressing emerging problems caused by perceived pressures on their welfare state systems and face new missions, which have changed considerably over the last 3 decades. In continental Europe, some national university systems were able to postpone or resist reform in the 1980s, because they were more selective, better funded, closer to public authorities, etc. It was certainly the case in Switzerland, Germany or Norway. Others, such as Italy or France, were paralyzed by the political turn taken by higher education problems. Yet, they sometimes found indirect ways to incite partial modernization, as was the case in France. The UK appeared as a paradoxical exception when it started its radical reform during the Thatcherite area.

9.2 An Investigation into Diversity of Change

The common rationale for strengthening micro-management of universities is to enhance autonomy by abolishing outdated forms of public sector control, by substituting substantive top-down governance by more symmetrical governance relationships between central administrations and individual universities. It is also to get knowledge on the effective activities of rather autonomous professional bureaucracy in order to increase global efficiency of the system, by increasing reactivity of "agents" to ministerial "principals" governing from a distance. The remote but

governing centre attempts to 'steer but not row'. All countries try to adapt to new conditions and roles of higher education and research by inventing or fitting new tools within the frameworks of their higher education and research system. Altogether, they brought about similar solutions with the same intention of building or rebuilding stronger university organizations for the sake of ambitious objectives.

Yet, reformist efforts always face path dependency (Pierson, 2000) within local social orders. Path dependency occurs at the macro-level of national or regional systems as well as at the meso level of universities. Each of these levels has to be observed as political coalitions, with specific results rooted in path dependency and internal power balance (March, 1962). This section exhibits the varieties of paths to reform implementation within specific local social orders.

What appears at first sight as a striking convergence between European countries covers a great variety of implementation processes, in terms of rate and pace of change as well as in terms of path dependence of national patterns. It is tempting but probably wrong to infer from similar trends towards autonomy, rational management and control that reform outcomes result from implementation of identical ideas, the theoretical and operational model of which would have been provided by the UK. It would also be hazardous to conclude that European university systems will converge towards the same model in the future. So we conclude that the 'convergence' thesis in HE public management reform is at the very least partial and premature. At the beginning of the 1980s, communication between national university systems was quite poor and national issues were felt as very specific. Change has often been incremental rather than ex ante planned, as the French and Norwegian cases amply exemplify. In these cases foreign experiences were either ignored or rejected as inadequate, or radical reformist intentions were brought back into more traditional national trajectories. Yet to a certain extent there was more of a creation of a 'European space' in the later period. Benchmark and diffusion effects certainly increased with the role of EOCD, with the development of the European dialogue in associations like EUA or during EU working groups (one of which achieved permanence as it grew into quality assessment agencies' organization ENQA) or intergovernmental processes on higher education and research. Benchmarks are now explicit part of the EU's Lisbon strategy and the Open Method of Coordination. Therefore, benchmarks increased and national reforms came to use tools forged through European processes such as the Bologna process.

The determination of UK in organizing the reform of its public service according to the NPM doctrine has accustomed us to equate strong management with managerialism, as if the former should necessarily be the proof of the latter.[10] Does the

[10] Following Bryan Palmer'Oz politics guide (2007), managerialism rests on a "common sense view of policy as the pursuit of goals through a logical succession of stages- problem identification, goal setting, policy instrument selection, implementation, performance assessment along explicit standards using indicators of cost efficiency and purpose effectiveness and in-depth evaluation programs", incentives as economic rewards and sanctions, reconstruction of accountability relationships. Consequently, it promotes public administration reforms insuring congruence between the formulation of programs, organizational structures and budgets. By using performance budgeting, it aims

irrefutable effort of rationalization of universities and their related changing regimes of internal and external governance detailed in the first section necessarily lead to centralized domination of universities by institutional authorities, based on indirect but coercive supposedly politically neutral rules? What consequences has stronger management had for effective governance? Are other paths and patterns feasible, based on various arrangements and the intrinsically ambiguous nature of the steering rules described above? In other words, is it possible to imagine that top-down orientations and bottom-up strategies articulate in various ways in different countries?

9.2.1 Seeking Reform, Implementing Reform

Complaints about universities and their performance in the post WWII period started rising in various countries in the 1970s or even sometimes earlier. Some referred to shortages of financial resources and inflated costs in countries that experienced early massification such as France, Italy, Germany or the Netherlands. Others blamed the supposedly decreasing quality of students, in particular, in countries that did not possess a dual system of higher education such as Italy, or where no post-high school selection occurred such as France, Italy, Germany or the Netherlands. The third expression of discontent blamed the rising burden and inefficiency of bureaucracy. Complaints were higher where all factors cumulated, with France and Italy at the top of the scale, followed by Germany and the Netherlands. Norway, Switzerland and the UK were less affected, because they combined some protective traits, such as selective secondary school terminal degrees, dual educational system, better funding, and better administrative resources.

9.2.1.1 Repertoire[11]

As underscored in Section 9.1, when observed ex post, European countries share a common repertoire of reform instruments. To relax public regulations, they all introduced, or are in the process of introducing, lump sum budgeting and cost accounting. Some have made new legal statuses of foundations or networks available to universities on a voluntary basis. They have created new governance schemes. They have

at achieving fiscal congruence. Governance aims at reducing the scope of ministerial discretion in the administration of government agencies, distinguishing advisory, delivery and regulatory functions, using global accounting, capital charging, distinction between state's ownership and purchasing interests and decentralization of management control. University presidents can be assimilated to branch managers, who "have the flexibility to allocate their resources to the mix of inputs and processes that they have determined as best suited to the achievement of the agreed outcomes".

[11] The concept of repertoire is borrowed from March and Simon (1958) and redefined as a common set of reform instruments potentially mobilized by different actors negotiating and implementing public policies.

increased Rectors' and presidents' space of manoeuvre, both in terms of internal political organization and in terms of management. The number and professionalization of university managers have increased. Presidential functions have themselves been professionalized, up to the point where some countries have exchanged the elected president for a more CEO-like appointed president. Altogether, under certain public status constraints, universities are now allowed to develop human resource strategies. They can recruit staff on various types of contracts according to self-defined needs. They are entitled to decide upon annual numbers and allocation of new positions, generally under the control of their boards. Real estate has been or is being devolved under university ownership, or universities have been given more power regarding its management. Universities as organizations have gained power to negotiate an increasing part of their public budget and more of them get additional resources from non-state public entities like the EU, regions or companies. They now handle a rising share of their relationships with companies, private and public actors, which used to be in the hands of individual academics. Finally, with global budgeting, cost accounting, indicators, and ex post evaluation, universities benefit from new devices that entitle them to behave as organizations based on self-defined strategies and internal rules and tools, accountable to their stakeholders. These shared reform instruments are used to push universities toward becoming substantive organizations.

Public authorities have stimulated the creation of research programs, doctoral schools and research groups as ways to promote cooperation within the academic body, contain academic freedom and create more transparency in choices. To enhance competition for excellence, they have increased the share of competitive funds and encouraged diversification of funding. They have created new funding agencies where they were absent. They have reduced the share of input-based funding to the benefit of performance-based funding. They have created new schemes in order to enhance territorial rationalization. They have invented instruments to favour cutting-edge research. From the 1980s on, they have promoted policies of quality in higher education. At the individual level of scholars, they have promoted performance-based salaries. They have promoted assessment and evaluation, of universities, of departments, of research centres, of individual and collective contribution of scholars to research, undergraduate or doctoral education. They have developed indicators, or, are in the process of developing them. They have encouraged stronger integration of universities in society to make them address economic and social needs by creating funds for innovative research. They have pushed universities to acquire external resources, by supporting stakeholders' representation on university boards, supporting applied and strategic research, contributing to research parks or poles, etc.

All this is true. Yet, it does not say how these instruments have been invented, how far they are actually operating in each of the observed countries, and how much they have been manifested in specific national development trajectories.

9.2.1.2 Rate and Pace

With the exception of the UK, complaints did not prompt efficiency-oriented reforms till the nineties, when the students' rate of growth did not reverse but started

to decrease. In many countries, such as France, Italy, Norway, Germany, or the Netherlands, general legislation would typically pile up without offering operational tools efficient enough to rearrange power positions. On the one hand, implementation did not follow policy objectives. Its impact often was blunted by latent or open power struggles, and its failure discredited further reforming. On the other hand, deliberately or not, technical measures sometimes opened unexpected channels for change. Such was the case in France.

As a first consequence, in spite of some diffusion of the NPM recipes and with the exception of the UK and the Netherlands, reforms that developed during the 1990s were mostly disjointed and incremental, even though some tendencies to systematic reform have become perceptible since the turn of the century. Other countries are still trying to rebuild the new puzzle of higher education piece by piece, with policy successes and failures on the way. Italy conversion to NPM is too recently to enable a diagnosis. In one case, France's 2006 and 2007 acts can be understood as a trial to take advantage of incremental evolutions of values and norms to build new laws inscribing the change in the distribution of preferences among actors to set up institutions that would fit modernized conceptions of universities.

9.2.1.3 Implementation as Performance

Indeed, the repertoire of contemporary public management reform in higher education and research developed in the 1980s, as well as in other public sectors such as health services, but it was used and performed in various ways across countries. Variation relates principally to national visions of desirable change, political voluntarism and capability to shape rearrangements of power distribution within universities, and between the university and its stakeholders. In that regard, there are clearly major differences between continental Europe and the UK, as well as between Northern and Southern Europe, building on the historical heritage of British, Humboldtian and Napoleonic higher education national systems.

It is needless to remind the reader of the ferocious demonstration of political voluntarism exhibited in UK during the Thatcher era! However in disputable the display of strong political leadership, several contextual factors also contributed to its success. The Benthamite British political and social philosophy helped promoting reforms based on economic views of society, where quasi-markets and principal-agent relationships appeared to be the best substitute regulatory instruments to bureaucracy. The economic crisis at the time also bolstered the will to undertake radical innovation, with huge consequences that broke the path dependence built into a century long history. Continental European Welfare states have been more reluctant to have recourse to deregulation by the market, fearing that competition might be, at the end of the day, more destructive than regenerative. This may explain the precautions taken in most continental countries to protect the weakest universities, for instance by mixing input and output criteria into a single set of allocating resources, with the result of inciting universities to

develop catch-all policies by increasing size and internal differentiation rather that specializing.[12]

It also probably explains why Continental countries usually paid more attention (without getting better results!) to foster the education of underprivileged students than UK, where the situation only recently started to reverse at the beginning of the 2000s with a Blair initiative on equity, the project "Aim higher: Partnerships for Progression'. This national program values partnership at regional level between social actors linked to higher education (schools, colleges, employers and other agencies) in order to increase and widen participation of students from lower socio-economic groups. Universities, along with regional actors, thus become responsible for combating social exclusion.

Systematic reform was hard to achieve in countries characterized by institutional variation like Norway, Switzerland, the Netherlands or Germany. It also frequently happened that radical ambitions were anchored into the installation of new tools and failed because policy makers had not considered their implications. This is what occurred in Norway with the Quality reform of 2002. This reform has so far increasingly come to be regarded as considerably less beneficial to higher education than originally assumed. Partly it emphasized teaching at the expense of research, which has produced a backlash against the reform, partly it has failed to meet its goals regarding teaching efficiency, and partly the unified organizational reform was not implemented as intended. As pointed out by Bleiklie (2000, 2004), Norway appears thus as a "reluctant reformer" where old patterns seem to reassert themselves and slow down the process of planned policy change, taking advantage of a situation characterized by localism and incrementalism. Similar resistance against intended changes occurred in the Netherlands when an NPM style policy was set up in the 1980s. By vaguely formulating research programs, the Dutch academics (especially in humanities and social sciences) made the prescribed idea of programming palatable to their disciplinary traditions – and harmless at the same time. The second element of resistance was the peer review that was used as a protection against outside interference threatening the established distribution of power within academia: academics just did not give "excellent" marks and only gave bad marks to a few programmes, so that the whole policy failed to achieve its intentions of reallocating research funds and restructuring the national research landscape. Even at present, as "NPM reforms" are strongly developed, Harry de Boer, Jürgen Enders and Don F. Westerheijden warn in the Dutch national chapter of this book, that we should not underestimate the role of old fashioned consensus achievement in Dutch decision making at all levels, and more so when going from the top levels of government and universities to the floor level of faculties and departments. The same slow adaptation is apparent in Italy, where the 1989, 1996 and 1999 modernization acts that brought about important structural changes aiming at more university

[12] Basing allocation on outputs, the British RAE on the contrary increased specialization of universities by concentrating research resources in a limited number of institutions: about 20% of them get about 50% of research funding (Lepori et al., 2007). When specialization occurs in continental Europe, it is based on State regulation rather than competition (Bleiklie, 2003).

autonomy and created new manoeuvring space for universities without many of the intended effects in terms of differentiation of mission and governance. It was also the case in France during 2 decades starting at the end of the eighties, where the setting of technical tools such as 4-year contracts carried along incremental changes that were not fitted into a global plan and remained largely unforeseen by reformers themselves.

Because implementation of new tools is often recent and sketchy, we cannot yet assess results backed by hard facts. Looking for instance at the management of financial resources, one observes that they still often remain distributed using an ex ante bureaucratic input formula, although it tends to be paired by ex post evaluation procedures. Lump sum budgeting by public authorities is the new norm but it has not been implemented in the many cases where universities still lack cost accounting tools. Management by objectives gains ground everywhere. Yet it remains in its infancy in most countries, on the one hand because feasible indicators are often lacking, on the other because implementation is difficult where traditional Welfare state visions, values and organizational forms still often prevail.

Yet, in all countries, managerial reforms to a certain extent have relaxed bureaucratic substantive rules, allowing for some strategic diversification of individual universities. Therefore, diversified adoption of reform measures within countries must be considered as part of the changing landscape of universities. It can be argued that relaxation of tight substantive rules ensures diversification. It can as well be argued, however, that the expansion of incentives built into procedural rules encourages institutions to imitate the new structures introduced by pioneering institutions. Actually, both trends can be observed. On the one hand, the requirement to build a profile according to a specific strategy in mission-based contracts often leads universities to try to copy those that are seen as especially successful. This trend results in the repetition of strategic orientations from one individual university to the other, so much so that research programs at all levels, from regions to country to Europe, encourage repetitively the same fields of specialization. On the other hand, diversification is rooted in direct efforts by public authorities to increase specialization of universities in terms of concentration of resources in specific disciplinary or functional activities. It is particularly visible in small countries. In the Netherlands, one can observe specialization on functional activities, as exemplified by the creation of national doctoral schools. In Switzerland, the process of specialization rests on a disciplinary differentiation between some universities. Indeed, the number of universities in Switzerland (10, and 2 polytechnics), compared with the size of the country (around 7 millions of inhabitants), whereas access to higher education remain largely elitist, pushes toward a rationalization of the degree offer in order to improve institutional efficiency. Diversification is also based on the indirect impact of new rules and tools. For instance, by allowing greater exposure to various stakeholders, they open up for variations in the involvement and provision of resources by local actors. But new rules may also lead to diversification as a result of unequal ability or interest (or will) of individual universities to capture them as strategic resources. It is obviously the case with the use that French individual universities have made of the 4-year contract. Some have treated it as formal administrative requirements forced upon universities by bureaucrats,

thus refusing to make sense of the new organizational tool offered to them. Others have used the contracts as internal resources to enhance shared identities among university members and to sustain legitimate global organizational strategies. By appearing responsive and accountable, universities in the second category have gained the reputation of being sufficiently mature and thus deserving of more informal delegation of resources on their way towards autonomy. What appears to be true in all countries is that differentiation comes progressively to rely more on strategies than status, even if there is still a long way to go, as shown in the case of the most prestigious French Grandes écoles or British Oxbridge.

Differentiation has occurred but it has not been translated into strong competition between universities for the best students, probably because, most often, students do not yet perceive strong effects of their choice of university on labour market success. If student mobility rates have increased at graduate levels, the Welfare perspective expressed by the very low level of fees as well as non-selective access does not encourage much competition between universities. Competition has only been enhanced where tuition fees could be increased significantly and selectively according to the national origin of students, as in the UK, or lately in the Netherlands and a few Swiss universities. It is also rising nowadays at the national and international levels with the stagnation in student numbers, and the impact of good student recruitment on performance returns.

Variations in performance – timing, rhythm, instruments selected, impact of social negotiations on implementation, unexpected effects – have all contributed to diverse, path-dependent national trajectories, despite the common identity of the basic repertoire (Musselin, 2005). All countries provide many good examples of how local interpretation may lock intended reforms into national paths. Indeed, performance-based funding of universities was introduced in Germany. But its impact remains altogether limited to between 1% and 5% of universities' full costs and has had no direct influence on supply. Indeed, traditional budget calculation based on input formulae has been replaced by performance-based budgeting in some countries, while in most of them, it has been based on a mix of ex ante and ex post criteria. The effectiveness of formulae is very different across countries: while in the UK and the Netherlands, a substantial amount of resources is distributed through them, it only applies to a marginal quota of the State budget in Italy or Switzerland. Most certainly, decision-making competencies of rectors and deans have been extended in many countries, for instance in the 1990s in Germany, and in 2007 in France. Yet academic self-governance remains very strong in most countries, because daily operations are based on informal long lasting and non-hierarchical peer relationships, and academic contributions remain largely based on personal commitment. This is even true in the UK, however enormous pressure is exerted on individual academics through department assessment on research (Westerheijden, 2007) and teaching. Indeed, development of procedural tools is supposed to favour strategic differentiation between universities, but the German case shows that it may as well lead to mimetic isomorphism (Di Maggio and Powell, 1983). Most certainly, the rise of competitive shares in budgets is advocated as encouraging excellence. But its unanticipated consequences are visible in each country including

the UK, were they are serious enough to bring along reforms of the RAE: among which are heavy expenses in time and money for writing and evaluating proposals, reorganization of the division of labour between scientific leaders and lay researchers, demoralization and stress among teachers devalued by the increasing emphasis on research excellence (Abrahamsson et al., 2007).

9.3 Conclusion

The comparative analysis adopted in this conclusion leads to some major overall results which we recapitulate here.

First, a managerial approach to the governance of universities has increased over the last 2 decades in all countries, with a significant acceleration by the end of the 1990s. The repertoire of instruments appears to be shared between all governments. Yet, this does not mean that they spread by benchmarking or diffusion of good practices. It may be the case. It is not always the case. In other words, it is only ex post that we can evoke a "repertoire" since it did not necessarily exist as such before being called up to face local issues.

Second, in all countries except perhaps the UK, change does not result from linear implementation of a previous plan. In all countries, reform programs of instruments meet national and local political and administrative orders. They most often divert reforms from their intended trajectories, up to sometimes digesting new tools with old ways of doing things. The most radical reform programs may turn out to be counter productive each time they crash with the harsh realities of power distributions. Therefore, there is no evidence at this stage that national reforms will converge towards a common realized model, in spite of many similarities in discourse.

Third, the rise of management in universities is recent and far from being completed. It results from the will to reform multilevel steering by introducing new organizations in universities and new connexions to encourage and control action within universities by the state. Yet, it does not mean that implementing the organizational turn of universities necessarily leads to implementing managerialism. Many examples back this statement. As a consequence, the rise of management in universities may well lead to various forms of articulation with civil and political society. It is possible to imagine that it will result in managerialism here, in some withdrawal of the state or in democratic revitalization there. More likely, it will result in a mix of these models, with varying emphasis across countries that we will describe in the last chapter.

Chapter 10
Universities Steering between Stories and History*

Catherine Paradeise, Emanuela Reale, Gaële Goastellec, and Ivar Bleiklie

This last chapter brings us back to interpretation. An inadvertent observer reading governmental white papers from our seven countries could infer from their repertoire similarities[1] that convergence is on its way in Europe. Yet, by paying more attention to national histories of public policies implementation, the former chapter shows a paradoxical result: reforms of higher education (HE) in Western European countries have much in common and yet each is path dependent. In each of the countries studied, universities seem to have changed dramatically, although at various degrees, and exhibit new traits, compared to 25 years ago. The new traits are not stabilized, however: reforms continue everywhere. Change is still in process of redefining national higher education and research (HER) systems, in terms of their missions and operation. It is at least as evident as continuity. There is little difference in the pattern of high organizational turbulence in the HE systems between well known reform-prone countries such as those in Northern Europe, and supposedly rigid societies like France.

This significant shift from the expected pictures of high continuity, or conversely of radical reorganization, is as much due to top-down reform and shifts in steering

C. Paradeise
Université Paris Est/LATTS and IFRIS, Cité Descartes, France

E. Reale
CERIS-CNR, Rome, Italy

G. Goastellec
OSPS-University of Lausanne

I. Bleiklie
Rokkan Centre for Social Studies/Department of Administration and Organization Theory, University of Bergen, Norway

* The authors are grateful to Don F. Westerheijden for his participation in this chapter, especially in an early draft of the section on narratives.

[1] The concept of repertoire is borrowed from March and Simon (1958) and redefined as a common set of reform instruments potentially mobilized by different actors negotiating and implementing public policies.

C. Paradeise et al. (eds.) *University Governance*,

as to traditional bottom-up and academically-driven forms of micro-institutional change in national specific contexts. Therefore it is indeed important to expand the traditional micro focus of much writing in the HE sector with an awareness of macro forces shaping the sector as a whole, bringing in the public management and political science literatures. This leads us to explore diversity using the more generic concepts of public policies developed in Chapter 1, in order to reincorporate HE as a case consistent with a general approach of key public services reform.

The first section draws upon the possible redefinitions of the role of the nation-state since the 1980s, describing how concrete changes identified in many other public sectors are also observable in HE. As for other sectors, HE exhibits specific national mixes on three vital characteristics of political systems: multilevel governmental steering, the strength of the nation-state and the vitality of democratic institutions.

The second section returns to the theoretical questions raised in the book introduction by raising the following question. How may the pattern and outcome of processes of reform and change during the last decades best be understood? How much can the New Public Management (NPM) and Network Governance (NG) narratives account for HE national reforms during the last 3 decades?

10.1 New Steering Patterns?

Until the 1980s, the vision of university governance referred to the mix of bureaucratic steering and self-governance specifically seen in professional bureaucracies. On the side of bureaucratic steering, public sector policies can be seen as a translation of political will to be implemented by ministries; such as centralization of rule formulation and resource allocation and administration in ministerial bureaus specialized per item; steering by substantial rules as a top-down frame of communication between ministries and universities. On the side of self-governance, prominent academics will play a major role at the central level in defining resources to be allocated, implement and adjust the rules, and the local implementation of the rules will be collegially defined and controlled. This model was rooted in the prevailing faith in the prosperous post-World War II Europe that governments were able to design and steer society, as well as in a strong belief that no one except themselves could impose on professionals' ways of working. It usually did not interfere with self-regulation based on complex consultative structures and networks ensuring stability of professional power distribution. The state steering capacity was never seriously challenged until the 1980s.

In the 1980s, the increasing disbelief in the governing power of the national state, together with the need to adjust public expenditures, led to reformulating the basic steering paradigm together with the methods of steering. The challenge of public policies is now to identify and solve public problems rather than administer resources. Potentially affected actors are numerous, heterogeneous and localized. Problem solving involves emerging processes that cannot be simply channelled by

top-down linear processes. Thus, decentralization is required for problems to be processed by their own actors and in their contexts (Thoenig, 2005).

Such a vision implies a complete new design of steering by public authorities (Neave and van Vught, 1991). It turns local entities into more managerially administered organizations by decentralizing micro-management, leaving room for strategy by restricting the hold of direct prescriptions. It thus excludes top-down guidance by substantial itemized rules and ex ante control. The basically asymmetric relationship between ministries as principals and universities as agents has to be reconsidered and reorganized. As a consequence, central ministries as well as local entities have to reorganize and build new tools to articulate ex ante strategy building at each level, processes of ex ante allocation and ex post evaluation. Steering tools have to become procedural and non coercive. Steering thus becomes indirect, using ex ante incentives and ex post performance measures.

This evolution is often described as a win-win game based on simplification of regulatory and administrative procedures and separation of policy-making and management. On one hand, universities are emancipated from finicky prescriptions and controls, and gain strategic capability. On the other hand, public authorities reduce top-down management costs and concentrate on their steering functions. The structure of this game creates its ambivalence. Ideally each partner may gain based on a symmetrical relationship maintained by negotiation between equal players. But it may strengthen the domination of one of the two players if asymmetry of power is not taken care of, either because public authorities maintain their control over resources, or because universities find ways to escape controls by the new rules.

In principle the notion of a new steering system implies building coherence on its three complementary pillars. First, by pulling back the state from universities, as companies headquarters did from their "business units" to centre on their strategic functions; second, by transferring micro-management to HE "business units"; third, by basing steering on ex ante incentives and ex post performance assessment. Therefore, new models of steering cannot be assessed without considering simultaneously reorganization of universities, ministries and rules. E. Ferlie, Ch. Musselin and G. Andresani have outlined three patterns of effective steering in the introduction: stronger multilevel steering, hollowing out of the state and revitalized democracy. We examine them below.

10.1.1 Stronger Multilevel Steering?

At the beginning of the 1980s, the question of autonomy was not perceived as a problem to the same extent in each country. But there were clear signs everywhere that universities are experiencing an organizational turn that pushes them from dependent administrative bodies or loosely coupled professional bureaucracies towards autonomously managed organizations. Indeed, we have observed an increasing formal autonomy, as recent and uncompleted as it may remain. We have pointed out that this increased autonomy has usually been pushed by internal

reorganizations such as mergers, reforms of personnel structure, changes in funding models, etc. Yet, increased formal autonomy per se does not directly convey changes in the internal balance of power.

Emphasis on strong management does not necessarily result in more power for universities. In particular, turning universities into tightly managed organizations implies turning presidents into formal gatekeepers for internal and external interactions involving strategic deliberation and operational decision-making. There are definite signs that their roles did change in this direction. Not only did presidents strengthen their individual role, but they also strengthened their ability of collective action, benchmarking, quality control, and lobbying thanks to the rising importance of their representative bodies or associations. Nevertheless, their position often remains a fiction in terms of leadership. This is most common in cases where the university leadership is too weak for the presidential team to control agendas in order to reposition the internal political order. Variations in leadership are not simply a national or regional matter. It also relates to the history of each individual university (Mignot-Gérard, 2007). In a given country or region, the same set of management tools usually meet individual university path dependencies that shape their individual histories.

Correspondingly, it is not rare that departments, faculties, research centres keep living their 'inner life' out of reach of presidential incentives and controls without even being aware of their own university's policies. The academic profession itself has not given up the ideal of collegial autonomy, although reinforcement of controls by assessment and full cost accounting certainly increases the pressure on the profession in Britain and the Netherlands, the two only countries where they are fully operative. Self-governance of research and predominance of the chair system did not disappear with the development of managerial programs even if it faded in the two countries and even though it weakened collegiality (Henkel, 2000). In most countries, segmentation of the academic body in terms of salaries and job content according to individual performance has not occurred, leaving traditional hierarchies and individual autonomy untouched. Yet, the rising role of labour contracts and the transformation of academics into university employees, where they occurred, might well strongly impact the profession in future.

While being given formal autonomy, universities sometimes adopt a defensive position by not implementing provisions that might otherwise contribute to organizing this autonomy in a more consistent way (decentralization of power to internal basic units, self evaluation based on autonomously built procedures, etc.). Such cases are largely witnessed in Italy as well as in France or Switzerland. Altogether, universities remain fragile actors.

Symmetrically, reorganization of the state has only started, even though some reform in the steering methods supports the notion of a managerialist turn of universities' steering. There is a strong sign that the "old administrative world" has hardly receded: new procedural rules have not eliminated old substantive ones in most countries.

Two major changes can be observed. First, public authorities search for better coordination. In Switzerland for instance, the federal government concentrates on

research, where new funding instruments such as priority projects improve cross-cantonal coordination and transparency of action between state and cantonal levels. New entities emerged during the 2000s, the function of which is to act as intermediaries to co-ordinate a shared steering between the Swiss Confederation and cantons. In Norway, the Network Norway council was created in 1998 to take care of coordination, but did not survive long. The second kind of change concerns externalization of several functions formerly embedded within central government, which is achieved by developing external agencies for research funding, quality assurance, evaluation, accreditation, etc. What occurred in the 1980s in the UK is a dramatic change in the distribution of functions at the government level that has been largely reproduced later in other countries. Research agencies have been present since long in the UK, Norway, Germany, Switzerland and the Netherlands. Lately, France has joined the 'agencification' process, with the creation of the ANR (Agence Nationale de la Recherche) in 2006, as a lever to by-pass traditional gatekeepers of allocation and evaluation such as CNRS. Quality assessment and accreditation agencies are more recent, but they are now present in all seven countries. Of course, this does not tell us anything on the way these agencies are implementing the missions they were given nor on the effective rearrangements they provoke in the established distribution of power.

At this stage however, it is not that clear that the development of new intermediary bodies has taken place in all countries together with a reduction of ex ante control by ministries and radical changes in how they relate to universities. Implementation has often been blunted by power struggles. As a result, new agencies may support a new steering framework. The old one may as well digest them. We have mentioned above how peer review mechanisms made possible dissolution of performance-based programs in the Netherlands. We shall observe with interest the behaviour of the new French steering instruments in the coming years. Will the accreditation agency substitute new frames for assessment, evaluation and accreditation for the ones that already existed within research organizations? Or will it base its action on subsidiarity, and restrict itself to diffusion of good practices by inciting harmonization and coordination of performance indicators? Will research organizations keep or regain power in defining programs and controlling allocation mechanisms of the funding agency?

The concept of steering from a distance is linked to the mutation in the vision of the state, supposed to become "a catalyst, a coordinator, a facilitator" (De Vijlder and Mertens, 1990) rather than a planner, a controller or a censor, by "reduction of direct supervision, development of semi-structured interventionist policies, systems of positive and negative sanctions". In this new perspective, centralization of procedural steering at a distance would have transformed universities into one block agent, "HE organization", facing one block principal called "state" or "government". At the present time, each national HER sector exhibits a specific mix between both patterns, with a variable emphasis on both sets of tools. It is often the case that their transformations are less decisive than they claim to be when invoking principal-agent relationships.

Each country has developed, or is in the process of developing tools to enable government from a distance: indicators, plans, reporting, performance budgeting, etc.

Altogether, the sophistication reached in developing these tools varies widely across countries. Procedural instruments remain far from being fully developed. The case of indicators is a good example. They aim at opening the black box of professional bureaucracies by increasing transparency of resources, outputs and the relationship between both. Their very quality and usability certainly relate to various technicalities of their production and control process, but they also largely depend upon how much trust they inspire. Because they require commitment, their trustworthiness ultimately depends upon trust of rank and file academics in the dangers and advantages of transparency, especially during their first stages of development. Will they be used to constrain or to position and help negotiating? What positive and negative returns can self-governed collegial bodies expect from indicator-based transparency? Rank and file actors within universities may fear the impact of bureaucratic rationalization on traditional collegial values and habits, backing Michael Power when qualifying them as "technologies of distrust" (Power, 1997). Trust in and credibility of indicators depend upon how acceptable the vision of academic duties they provide, and consequently how threatening the steering system appears. It may explain why indicators have met or meet resistance in many countries, and why academics may try cheating on them or simply refuse to get seriously involved in gathering information: considering university functioning, they do not believe that credible indicators can technically be built, and considering public authorities organization, they do not believe that indicators can help positive rearrangement of their relationships with universities. As far as universities are concerned, very asymmetric top-down indicators strictly channeling resource allocation certainly build strong incentives, but may invite opportunistic responses and coerce mimetic postures rather than strategic behavior. Thus, they usually lead to ceaseless cat and mouse games between "principals" and "agents" in order to restrain perverse effects of agents' strategies, as testified in the UK, and to a lesser extent in other countries like Germany or France. More symmetrical relationships between public authorities and universities, based for instance on the negotiation of multidimensional positioning indicators with individual universities, may lead to a looser coupling between allocation and performance, but help diversifying and stabilizing genuine middle term universities' strategies.

Thus, the new instruments do not usually afford systematic means necessary for distant steering. The best example is that, even where indicators are established, total budgets usually remain only slightly impacted by performance evaluation. The rise of performance-based public funding can be quite impressive, as we have shown above. Yet, it only represents a limited share of universities' total budget when one considers both research and teaching, and includes salaries. Additionally, steering tools may be used in various ways. In the UK as well as in the Netherlands, they reinforce governmental control over higher education institutions and provide support for funding allocation. In other countries such as France, Italy or Switzerland, they are presently more used as a source of knowledge and visibility for universities than as a strong means for funding allocation.

It would be mistaking to consider that the creation of new instruments decreases substantial controls by the state. It clearly has not been the case in the UK, on the

contrary: contrasting with the pre-existing "gentle attention" of government towards universities, the bureaucratic burden resulting from RAE, TQA,[2] etc. has been so high that it provoked a revolt of the vice-chancellors at the beginning of the 2000s in the UK. More generally, the non-fulfilment of new instruments may provide good reasons for public authorities not to abolish control by substantial rules. Indeed, the number of rules stemming from government remains impressive in most countries. Targets are monitored centrally, especially where the principal-agent model has been extensively implemented. Altogether, public authorities carry on fixing many rules of the game, such as conditions of recruitment and careers, structure and size of faculties, minimal standards for opening teaching programs, etc., as a counterpart to its dominant role in funding universities. As public organizations, universities remain highly dependent on the resources of national or regional public authorities that maintain an overwhelmingly dominant role in terms of prescriptive regulation. They can also impose their political will up to the point of dismissing rectors, as happened in 2007 in Switzerland. Reforms remain largely imposed by laws and decrees. Hierarchical control is still clearly visible if not dominant. The introduction of quasi-market rules appears to be difficult.

Beyond technical explanations, government by substantive rules remains rooted in a difficult and long lasting transition from distrust to trust between public authorities and universities, each hesitating to make irreversible moves that could induce loss of power. While governance by top-down prescription is based on distrust, bottom-up operation of public bodies based on distant steering and control requires trust between the two levels of government. It takes time to build trust. Each party has to demonstrate that it respects promises and agreements. It is difficult when reforms would require additional resources in order to produce positive returns, while budgetary shortages lead to suspect that decentralization actually means transferring the state's financial burden to universities. It is a common objection in Germany as well as in Norway or the Netherlands. It is a point strongly raised in France in relation to the 2007 act on autonomy, for instance regarding the transfer of real estate to universities. Experience shows that decentralization as such is insufficient to build trust relationships. It requires not only new administrative organizations, but also new administrative cultures on *both sides*. While reform in the UK has been largely based on coercive means, some aspects of the Dutch experience show that trust can be achieved when quality assessment is in the hands of universities before being approved by government. The same idea governs the use of indicators as positioning means for universities rather than direct steering means by public authorities.

These remarks show that the present-day organizational turn of universities did not usually clearly relate to an actual managerialist turn in multilevel governance. Continental European universities are far from being agents unilaterally steered by a "principal", although the landscape reveals quite a lot of diversity. It is difficult to infer from the present mix of new and old instruments that university steering is actually moving from the old bureaucratic pattern to a managerialist one.

[2] The British sometimes use TQA for 'teaching quality assessment' in contrast to the RAE (Research Asessment Exercice).

Even where reforms have been pushed by managerialist visions, path-dependent systems revealed strong enough forces to resist implementation or transform expectations embedded into the most rational designs.

10.1.2 The Hollowing Out of the Nation-State?

While principal-agent visions of multilevel steering develop, the role of the state is challenged by the emergence of new actors able to influence HE system governance, the setting of new relevant levels of university governance, and the will to achieve complex objectives requiring the coordination of multiple actors. There is much talk everywhere about an increasing number of actors sharing interest in universities and supplying resources to involve universities in issues of interest for them: innovation, employment, citizenship, prestige, etc.

New actors come both from inside and outside universities. On the other hand, public actors and especially local public authorities share the floor with private actors such as company representatives or business authorities as members of university government bodies, as in Italy, UK, France or the Netherlands. Industrial associations advise the government on HE policies, formally as in Italy or informally in many other countries. Universities develop explicit attempts to strengthen ties with industry, local authorities and students in Norway, but also in France and Switzerland. Boards of trustees and HEIs' government bodies in some cases include representatives of local authorities and firms, as in France, Italy and the Netherlands. They integrate the state's decision making by taking into account economic and societal needs. Voluntary organizations, including trade unions, play a marginal role. Coming from inside universities, academia's involvement in governance increases, both within individual universities and in terms of political coordination between actors to influence and engage with public authorities' decisions. This often comes together with a reinforcement of the role given to presidents, vice-chancellors or rectors, or to university associations such as VSNU in the Netherlands, CPU in France, SUC in Switzerland, or NAHEI in Norway, aimed at coordinating actions and building collective visions to face the state. Students are also more directly involved in internal governance, e.g. in France, Italy, Switzerland and the UK. Students' feedback impacts both quality assurance system and university ranking in UK. Student involvement in internal governance is becoming more direct as well in France, Italy, Norway, Switzerland and the UK.

The relevance of multi-actor governance increased in the 2000s along with the differentiation of funding sources. The role of the EU is growing, thanks to the diversity of schemes included in the Framework Programmes (integrated projects, networks of excellence, technological platforms, Marie Curie actions, etc.), the recent creation of the ERC as funding agency for basic research, and the push towards integration through the ERA and EHEA frameworks. The EU level is both consolidating as an important level of funding for research as well as for professional training. Thus, competition for European funds between researchers and universities

becomes relevant for research centres and universities. Simultaneously, Europe has become a relevant level for building standards, for example through the Bologna process with the implementation of doctoral schools that formalize the content and the structure of doctoral studies. More extensively, within the Bologna process, with the goal of creating comparable degree structures, indicators are built to evaluate diplomas and research, and periodical assessment becomes an objective for the institutions (Ravinet, 2009). External accreditation may impact the national process of diploma recognition. Bibliometric assessment and peer review developed after the UK model, Italy, Norway, or the Netherlands for some disciplines, promote research-based university ranking.

Regional government also becomes more important in university governance. In Italy, changes in national laws allow a more prominent role of regions. Local representatives, especially in rich regions, may thus be involved in government university bodies. In the Netherlands, although local and regional governments remain unimportant legally, more attention is paid to the regional role of HE. In Switzerland, Cantons remain the principal authorities, but the role of the federal state increases. In Germany, Länder have always had the jurisdiction on universities, and cooperate to various degrees with the federal state and private foundations on research and innovation functions. They may also participate in the promotion of scientific clusters involving universities. In France, the share of local authorities in university funding has continuously grown since the 1980's first decentralization acts, in spite of the fact that research and HE matters remain under a national jurisdiction. Funding is framed by State-Region 5-year contracts targeting mostly real estate, as well as in specific regional policies taking care of scientific equipment, doctoral and postdoctoral scholarships, conferences, etc. Regions also contribute actively to new schemes such as cutting edge science thematic networks of excellence (RTRA), innovation clusters (pôles de compétitivité), as well as vocational or professional training in collaboration with local economic sector and public authorities.

These actors combine differently depending on national and local contexts, as well as on the functions considered. It is easy to show in the case of tuition fees, how changing the rules renews both sides of the interaction between university and its stakeholders. On the one hand, it keeps up competition between universities in order to attract good and/or foreign students (the Netherlands, the UK, Norway) because of their impact on funding. On the other hand, it changes the positioning of students towards universities on the basis of their value for money, i.e. their emerging role and power as customer. The importance of student judgment as users has turned into more involvement in internal governance in Italy, Switzerland and the UK, and more participation through quality assurance systems and less place for societal expression of opinion that dominated students' concerns in the 1970s and 1980s.

The involvement of multiple heterogeneous actors as potential university stakeholders questions the specificity of the state. Indeed, a new distribution of power between the various actors is observed. Vertically, stronger and more autonomous universities come together in associations to foster shared visions, share good practices and develop ways to defend their interest in relation to public authorities. So do professional managers, whose specialization, role and number grow within

universities. Jointly, the horizontal distribution of power within universities is changing. University governance bodies are enlarged to local representatives in Italy, to business and political authorities in the Netherlands, to industry, local authorities and students in Norway, students in Switzerland, and students as well as private stakeholders in the UK. Simultaneously these bodies often reorganize so as to clearly distinguish a board of trustees with decisional power from a senate representing a consultative academic parliament.

Is it sufficient though to consider the state as a stakeholder like others that now has to share its historical responsibilities for the steering of HE systems? To what extent can the state preserve its steering role in relation to universities? May multiple stakeholders balance to a certain extent the top-down initiatives of the state with new bottom-up approaches by universities that are taking advantage of resources offered by other stakeholders? To what extent do new stakeholders help overcome the growing legitimacy deficit of the welfare-state? Actually, observation across countries shows that state functions are repositioned rather than shrinking. The state does not lose functions, legitimacy and authority.

First, as far as the amount of funding is concerned, the contribution of non-state actors should not be over-estimated, even though marginal flexible contributions may well be decisive in the shaping of university projects, because so much of the state grant goes into (at the short term) fixed assets. But the national or regional public basic funding keeps up providing the major part of individual university resources in all countries, especially in continental Europe, though with a large variance between individual universities. So much so that the decreasing students' rate of growth since the beginning of the 1990s makes it less urgent to look for additional resources to fill the basic operating needs of universities, while university budgets rarely regress.

But financial matters are just part of the story. Other reasons explain why, with a few exceptions, the new actors that have emerged have not become able to counter-balance the role of states. First, they remain central in the traditional meaning of the term: they have not yet reorganized central bureaus according to a stakeholder vision of governance and it still largely governs by rules. Accountability devices are visible at the university level as a whole inasmuch as they relate to the use of public resources for training or research, and more so when the state pursues stronger public sector management by reinforcing the leadership capability of universities, as demonstrated by the UK in the index case. Policy tools have been devised to foster involvement of private actors in universities, but their contribution remains generally limited and often feared by academics defending education and research as public goods. Accountability requirements towards private stakeholders most often tend to be decentralized at the level of specific research centres or curricula, so that the part played by private actors in steering is hardly detectable in terms of policy building. Finally, the development of relationships with regions, wherever it occurs, which is more rarely than could be expected, in a roundabout way increases the legitimacy of the nation-state by pushing universities to focus more closely on local issues of public welfare.

Second, states remain dominant players because they carry on setting the rules of the game. Even though their way of doing is often, progressively but slowly, shifting

from a substantive to a more procedural way, using a mix of authority and negotiation with stakeholders. The two last French acts on research and on universities (2006 and 2007) provide a good illustration of the government's strategic use of both resources in changing the rules of the game for HER organizations. Inasmuch as implementation of the rules is concerned, it appears that the state in several countries is building new mechanisms for dialogue and negotiation as to ensure the legitimacy of its participation in the university system. It shifts to a position that makes it more of an arbiter among stakeholders. In Italy for instance the research evaluation exercise developed by the government at the national level succeeded because of the involvement of actors, CRUI and CUN that were representative of the HEIs' views. The same occurs in the Netherlands. The rising legitimacy of a vision of universities as demand-driven makes it more difficult for national or regional states to neglect stakeholders. Yet, it remains difficult to identify homogeneous trends across countries as to the steering of public organizations such as universities.

Third, the move towards decentralization of micro-management indisputably increases the autonomy of universities. Yet, it develops jointly with a corresponding centralization of authority at the state level by means of governance tools for steering at a distance, even though it remains weak in most countries outside the UK and the Netherlands. The new governing tools are most often ambivalent: they bring about resources for universities to emerge or reinforce as collective actors relating to multiple stakeholders, as well as they build resources for stronger state steering.

Ultimately, the state does not loose authority, but shares responsibilities. The hollowing out of the nation-state certainly takes place if one considers the increasing number of actors taking part in HER steering and the increasing influence of new levels of steering (European and regional) relatively to the national one. Simultaneously, in most cases, this reorganization is managed by the state that "holds the ring", opens it to new players and defines the content of the relationships and responsibilities among these new players.

10.1.3 Democratic Revitalization?

How do new steering instruments impact the relationship between universities and civil society? Do they incite citizen participation in policy and management? Such an evolution would require pairing the traditional model of responsive public administration with collaborative public administration promoting trust in government through enhancing shared ideas, knowledge and power (de Leon, 2005). The state would maintain its position, but experience a substantial revision of the traditional bureaucratic forms of public administration. The revision could be carried out, for instance, by reinforcing democratic innovation and public participation in the decision-making process, by including representatives of civil society in government bodies and by defining the agenda in order to deal with societal needs and problems. How much is internal governance of public agencies influenced by external civil society? Such dynamics could break out of a policy in search of efficiency by participation, with

the idea that persons or groups involved in decision making are more likely to support the outcomes of processes they have been part of, especially in present times when citizens' level of education is much higher than previously. Such revisions can be observed as counter effects against excessive coercive use of new instruments for vertical steering, as it has been experienced in the UK or the Netherlands. The emphasis of the New Labour on university cooperation rather than competition can be seen as mitigation of the original British managerialist paradigm. In this way, government interests can be reshaped or transformed as a result of engaging in dialogue with other relevant actors. They can also be imposed from citizens' movements "inviting themselves" for instance in the arena of scientific expertise and research funding and standing up for values such as equity, security, society openness, respect of nature and mankind, etc. (Callon et al., 2001).

Several signs of such a process can be acknowledged in HE that could as well be interpreted as symptoms of the hollowing out of the state. Public participation and democratic renewal can also go with typical processes of managerialism such as devolution, partnership, policy evaluation and long-term capacity building.

There are many signs that multiplying stakeholders favours a new vitality in universities. Instruments such as technology assessment arenas, consensus conferences, hybrid forums, deliberative bodies, may involve stakeholders in decision-making. In the present period, they are not customary in the relationship between the universities as such and the state. Participation of stakeholders in decision-making has been described above, involving rising interaction with local stakeholders in wealthy regions, networking in education and research with innovative firms, etc. New stakeholders may be invited to joint counseling or decision-making bodies as described above. They can also enter the arena by successful lobbying, entailing their recognition as legitimate participants in deliberative bodies at the local or at the state level.

A new vitality of HEIs is quite a common trend, due to the general reinforcement of autonomy, to increased room for manoeuvre and to rising involvement of stakeholders, with different levels of effectiveness across countries. Differences are related mainly to constraints deriving from state rules and regulations. As to the agenda, the emphasis on applied research and "useful" teaching activities is diffusing in most countries. It certainly promotes interaction with economy and society, notwithstanding academics and citizens' rising concern about the long term functions of university in research and education.

Do these changes lead to internal democratization in university governance?

Workplace democracy refers to participative decision-making by employees in organizational management (de Leon, 2005), with the purpose to enhancing satisfaction and thus effectiveness by increasing the internal flow of information. As mentioned above, hard data do not confirm that this trend is extensively at work in European universities. Internal democratization processes may exist here and there to a limited extent, by incorporation of stakeholder governing bodies or the Board of Trustees. In Italy for instance, the CdS (Consiglio degli studenti) is a consultative body participating in decision making as a compulsory advisor. Inasmuch as students are concerned, policy papers such as the one recently

published by their international union ESIB[3] (ESIB, 2006; CE, 2003), underline that "students have to be involved in the entire process of decision-making in HE on equal terms with the other actors in the HEI", invoking efficiency as a good reason since "efficiency must not be interpreted in cutting down on democratic principles … or the replacement of collegial decision-making structures with management bodies". Yet, such statements have remained without significant effect until now. Altogether internal democratization of universities, either in terms of representation or participation, is not obvious.

Does democratization actually take place, or is it simply a way to counter "isomorphic pressures, being more about presentation and legitimacy than a genuine willingness to transform decision-making process" (Newman, 2001)? The question is difficult to answer on the basis of available evidence. Some signs can be interpreted as symptoms of democratization in university governance as well in countries where reformist policy doctrines strictly relate to the NPM narrative as in countries where softer visions of university policies remains.

10.2 From Redefinitions of the Role of the Nation-State Back to Governance Narratives

Echoing Chapter 1, the first section has explored implications of the massive trend in Europe towards management in HEIs and the development of new steering tools by public authorities, on the place of national (or regional) states in charge as a specific actor among several emerging stakeholders. The final section goes back to the narratives the book starts with, to evaluate their ability to account for local trajectories and possible convergence between countries.

10.2.1 The Social Use of Narratives

Analyses of HE reform policies and their effects on HE systems come in different versions. How may the pattern and outcome of processes of reform and change during the last 25 years be understood best?

Policy makers and administrators responsibility for evaluating pressing problems in need of solutions tend to emphasize an actor's perspective. Scholars entertaining *an actor's perspective* often claim that policies are the product of the actions of major actors, like policy makers and affected groups, where policies are understood in terms of the preferences of the actors involved in the decision process (Ostrom, 1990; Scharpf, 1997; Tsebelis, 1999). According to these interpretations the degree and pace of change depend on the aims of the actors and

[3] Renamed ESU (European Student Unions) in 2007.

may be explained either by changing values and aims among actors or by changes in the constellation of actors involved. However, other scholars have depicted reform processes as complex, hard to delimit and difficult to interpret in terms of specific actors, choices, outcomes and consequences (Bleiklie, 2004; Bleiklie et al., 2000; Kogan et al., 2006). Such observations have often been taken to support *an institutionalist perspective* according to which policy change tend to be path dependent and slow. Change become abrupt only if circumstances create a situation in which existing policies are considered inadequate to sustain institutionalized values, norms and practices in a given policy field (Baumgartner and Jones, 1993; March and Olsen, 1989; Maassen and Olsen, 2007). A third perspective is based on the observation that structural change tends to be based on evolving needs generated by developing pressures on social systems. According to this *functional perspective*, change depends on external pressures and how social systems respond to them in order to remain stable (Ben-David, 1971; Parsons and Platt, 1973). The specific organizational forms of concrete universities depend on how society's need for cultural functions is expressed.

These perspectives inspire some of the major policy narratives that structure current policy discourses. Narratives are "stories or description of actual or fictional events".[4] Their strength is based on their internal coherence that affords cognitive frames used as policy models and theories for action (Dawkins, 1976). As explained in Chapter 1, two narratives presently dominate the stage as guides for action and understanding of public management changes. They are the ones that we explored throughout the analysis of national cases.

The NPM narrative is one of the most widely used narratives in social science analyses of public sector reform in the last decades. It represents a perspective that focuses on changing beliefs, whereby public agencies are induced to change their *modus operandi* from bureaucratic to entrepreneurial, and start operating as business enterprises in the market – *in casu* producers of educational and research services – rather than rule following bureaucratic entities (Bleiklie et al., 2000; Ferlie et al., 1996; Pollitt, 1993). The NPM perspective focuses on *changing beliefs about the instruments of governance* designed to increase the efficiency of service production. As it is applied here, the narrative assumes the following causal structure of policy driven change processes in public HE systems. Changing ideas about appropriateness of public steering, its purpose, its prominence and its instruments lead to redefinition of the policy problems with which governments are faced and the adoption of reforms that espouse new steering instruments reflecting the new ideas. Thus the NPM narrative bears a strong similarity to the normative or sociological institutionalist notion of policy change.

The NG narrative assumes a causal structure consistent with an actor's perspective. The NG perspective as formulated here refers to a situation where horizontally organized networks of actors formulate, administer and implement public policies rather than hierarchically organized public bureaucracies. This is assumed to

[4] The American Heritage dictionary.

have organizational implications as policies are implemented in a more non-hierarchical, discursive and open-ended fashion (Jones et al., 1997). In this case policy change is the outcome of changing actor constellations that lead to redefinition of policy problems, bring with them new ideas about the content and process of policy reform and adopt reforms intended to address these new or redefined policy problems.

Yet, NPM and NG are not alike. As it was born in the UK, NPM was built as ex ante theory for action, translating public choice theories in a systematic model[5] to plan and drive a new public service design. NG on the contrary is rather an ex post model built by social scientists to make sense of the development of policy networks. Yet, it can also inspire bits and pieces of action at the policy level.

Claiming to provide a plausible account of public policies, NPM and NG narratives "tell policy and management stories", mixing "technical, political and normative elements".[6] Their strength is based on their internal coherence that affords cognitive frames used as policy models and theories for action (Dawkin, 1976). The ideas, frames and tools they are made of emanate from, and circulate among networks (such as the OECD) usually connecting policy makers and experts, aiming at organizing or correcting action.

10.2.2 Narratives Versus Hard Facts?

It is a constant temptation to label what has occurred by the name of narratives. Ex post, what has occurred may look for instance like the result of implementing an NPM policy, even though policy-makers made incremental changes, moving step by step without much vision on what the next moves could be, as was the case in France during the 1980s and 1990s (Bezes, 2005). It can also well be that, considered in context, some 'policies' were not real choices, they 'just happened' as unintended consequences of the addition of disjoint decisions. Only meticulous historical study can disentangle hard historical facts from ex post rationalization in cognitive frames built by narratives, and check if interpretations embedded in narratives fit in general theories without 'degenerating' ad hoc hypotheses. Actually, any event can logically be assigned to any ex post reconstruction. Let's take an example. NPM theorizes reduced 'unit contribution per student' by the state as a way to force universities to be evaluated "on the market" by increasing mutual competition towards "clients". It could also be asserted that NG emerged from the necessity for local actors to compensate for the loss of resources induced by the limitation of state basic funding per student, by finding new contributors to cover HE costs. But then again, these two theorizations could simply provide ex post rationales for what happened when policy makers in the post-World War II European countries were confronted simultaneously with rising student numbers

[5] With several versions.

[6] See above, Chapter 1.

and the fear of political discontent relative to possible rising fees, as was clearly the case in France, Switzerland, Germany[7] and even UK. Counter-forces do exist in society that may block the implementation of policy instruments that policy makers could consider as desirable. In a further variation of the latter interpretation, it could also well be that public authorities did not consider increasing fees as desirable, because they strongly believed in the virtues of free access to HE. Finally, repeated policy decisions taken in moving political contexts and in varieties of cultures, create hybrids that derive from the fact that Ministries of Education, of Finance and parliamentarians have different perspectives, are fuelled by a variety of narratives, ideologies, views of interests and anticipations of reactions of constituents (Allison, 1969). While the narratives present ideal types of reforming, the empirical cases also suggest hybrids and locally influenced trajectories.

Thus narratives tell stories that should not be confused with history of policy building or implementation. Talk, decision and implementation are three different things in political organizations (Brunsson, 1989). Narratives prefer to develop systematic ex post theories of facts rather than to deal with their actual chronologies. Narratives are systematic while histories of public policies most of the time display contradictory and contingent behaviors, as a result of tensions between values in the political arena, in civil society and in different parts of the state apparatus. In real life, the capability of any single actor – including the "state" or the "government"– to impose its vision is limited. The value of narratives, or idealized visions, is with providing us with a cognitive framework that enables us to look at detailed histories through a different pair of eyes and to assess empirical evidence accordingly.

10.2.3 The Resistible Rise of New Public Management as a Benchmark?

Recent changes do show clear signs of universities moving from administrative institutions towards managed organizations, based on diversification of funding, development of management tools, and external steering by incentives and performance (Kogan and Hanney, 2000; Kogan et al., 2006). But change is not restricted to the rearrangement of vertical relations between central authorities and individual HEIs. They also reveal symptoms of the types of horizontal rearrangements described by the NG narrative, as we observed pervasive hybrid forms across a number of the cases. Finally the shift from ex ante direct regulation to indirect regulation by means of incentives, evaluation and accountability procedures in many cases demonstrate the versatility and strengths of the central government regulation capacity.

Yet, it has become all too commonplace to think of these changes in terms of the NPM narrative alone. Indeed, individual policy tools have been discussed and to a certain extent developed in all countries, which can be considered as belonging to

[7] This is not any more the case, since UK extended fees in the early 2000s and Germany in 2006–2007 in almost all Länder.

the NPM narrative repertoire. Such is for instance the case of the 1985 Dutch HOAK policy paper (Maassen, 1987). Yet, until the mid-1990s, they were not implemented in an NPM cognitive frame as was the case in the UK, i.e. as a weapon against collegial professional bureaucracies. Outside the UK and possibly the Netherlands, they did not have the ambition of building an exhaustive system of operational instruments springing up from a highly elaborated ex ante theory for action. The UK must be understood as a NPM outlier, out of which the diffusion of most radical NPM ideas proved problematic. The interest for new policy instruments in other places resulted mostly from the increasing cost-awareness of activities in HER in the first place. It pushed governments to create or appropriate new instruments in view of reducing costs by better decentralized management, more selectivity in funding and creation of new tools of distant control by the state. Changes appeared slowly, developed step by step, and were at first largely contained into national traditions of HE. Many supposedly new levers of action were simply digested by the environment they were supposed to impact. Implementation of change revealed incremental rather than radical trajectories. In opposition to the clean design of the NPM narrative, what public authorities did or did not implement over the last 30 years had to do with explicit or implicit pressure or resistance of actors, both from within and outside HEIs. Yet, the NPM design contributed to the diffusion of neo-liberalism, by progressively or suddenly changing the state's agendas and the power balance among social actors. Clearly, the deployment of new instruments was a second step in that direction, that took care of the vertical relationship between central authorities and individual public institutions. They increased at the end of the 1990s, and benchmarking accelerated with international circulation of public management models over the last decade. But by no means did implementation simply mean applying a systematic model of management that claimed to rebuild public service as an all-encompassing quasi-market within the NPM perspective, for at least two reasons. First, outside the UK and the Netherlands, governments did not possess the political resources required to develop an agenda of the sort and have it efficiently implemented in the very sensitive arena of HE. Second, in some countries like France,[8] public decision-makers and high civil servants often just could not even cognitively consider regulating the public sector through quasi-markets, and were not socially feeling like getting rid of forms of state authority in which their traditional power was rooted. It is only during the last decade that NPM as a narrative largely invaded the reflection on change in the public sector in much of continental Europe and even here reception was locally contingent.

At the same time, competing narratives such as NG have developed to make sense of the rise of horizontal rearrangements within HER systems, in relation with the emergence of new actors in new arenas, and their impact on the regulation of HER.[9]

[8] It was clearly not the case in others like the Netherlands for instance, where this point was extensively debated in the first half of the 1980s, between some 'visionary' civil servants and some (neo-)liberal and social-democrat ministers.

[9] In this study, initiated before Pollitt and Bouckaert's (2004) ideas gained influence, we formulated network governance as an alternative to the NPM narrative.

Ewan Ferlie concludes the UK national chapter by stressing that British NPM certainly cannot be reduced to a policy fad, considering the strong impact of policy instruments created in the 1980s on size, management and internationalization of universities. He also mentions clear signs that the NPM doctrine has now reached dangerous limits in terms of its own operating costs and, even more damaging, in terms of its consequences on the ability of HEIs to accomplish their multiple and contextual missions. He explains the apparent rise of some elements of NG narrative in the UK by the need to counterbalance the excesses of NPM by restoring some freedom to HEIs. This is an analysis of the UK case, which as we have seen remains a NPM outlier. Would that mean that the reform of the post-World War II welfare-state should necessarily imply some ineluctable and generalizable historical policy sequence that can be applied generally, one first step conforming to the NPM narrative, followed by a second phase of necessary adjustments, such as NG?

The answer is no. The full set of cases suggests there is not a natural curve at the policy level, leading from 'old-Weberian' bureaucracy to NPM and 'back' to NG. The NG narrative may be a counter-effect of the NPM narrative and a reaction to NPM policies, as suggested in the British national case. But NG may also directly result from shortcomings in the practice of HER, while maintaining some basic axioms from the welfare-state policy regime. Pollitt and Bouckaert (2004) propose the same type of vision with their "Neo-Weberian model (NWM)" as a continental alternative to the NPM British model.

Neo-Weberianism focuses on the *functions* of governance and reform processes whereby new aspects of public activities are formalized and made accessible to outside administrative and political control (Ferlie, Musselin and Andresani, 2008). Whereas the two former narratives tend to assume that the changes mean that the state and public authority are weakened, the latter assumes a positive role of the state, a distinctive public service and a particular legal order. Changes, therefore, might testify to the adaptability and resilience of state structures faced with a changing environment and new challenges demanding new organizational arrangements. This line of reasoning is consistent with a functional perspective as it assumes the following causal sequence of policy driven events. Pressures from the environment of HE, e.g. greater demand, results in growth and differentiation that make it necessary for public authorities to implement structural change in order to stabilize the function of HE provision by controlling costs more efficiently and strengthening the efforts to steer the increasingly diverse sector more tightly.

The British intellectual climate, with its tradition of empiricism in philosophy and with a clear dominance of economic reasoning even when it comes to 'government delivering the goods', was certainly a better breeding ground for the NPM narrative than found on the continent (Neave, 1982). In continental Europe, the overarching metaphor (and organizational culture) was not economic, but rather legalistic and procedural: as different as they were from each other, the Humboldtian and Napoleonic HE systems shared the view of HER as part of public 'service' to its citizens. And this view has not been destroyed by the use of new management tools in HEIs.

It may be (and seems to be quite often the case in many of the countries studied) that NG developed as the result of evolutions of the classical bureaucratic

state relaxing substantive constraints, for instance in order to compensate for its loss of financial resources, without requiring to first implement NPM as a theory of action.

As demonstrated in the national chapters, all countries present a mix of signs and symptoms of NPM and NG. Even the index case for NPM, the UK, shows relatively strong development with regard to NG indicators. And France, that has recently become an index case for NG, equally has developed a good number of implicit NPM characteristics over the years. Altogether, outside extreme cases such as the UK, and to a certain extent the Netherlands, effective HER policy reforms are moderately strong on both the NPM and NG dimensions. And it is difficult to tell whether which came first.

For many reasons, including probably the "aesthetics" of NPM intrinsic systemic design, rationales for reform tend nowadays to be absorbed by the NPM narrative. Yet, as we have shown, it is not a fair account of the overall historical development of new policy instruments. Indeed, our study uncovered international trends of more or less parallel movements in many countries, though two seem to be following a somewhat different route (the UK and the Netherlands). These movements or routes constitute trends that can be expressed as different mixes of the two dominating narratives of this day, NPM and NG. The differences derive mainly from the path dependencies of the movements in each country. Moreover, the narratives get twisted to some extent in the different intellectual and policy debates, probably due to variation in national political and administrative traditions, to the influence of individual authors and consultants but certainly also due to political coincidences, such as which party gets elected to power in a given country at a moment when a certain element of a certain narrative is *en vogue*.

A similar conclusion was reached by Pollitt and Bouckaert (2004). They spoke of multiple goals ('omegas' in their parlance), multiple trajectories and unforeseen developments. In our study, the goals and trajectories are distinguished in more detail as narratives and policy instruments – and the complex relationship between the two. But the result is the same. In their effort to establish to what extent public management had been reformed in the last decades of twentieth and the very first years of the twenty-first centuries, Pollitt and Bouckaert focused mainly, in our terms, on the replacement of the welfare-state policy regime with the NPM narrative. By inductively arrived at proposing an NWM as an alternative to, and not a correction of NPM (Pollitt and Bouckaert, 2004: 99–100), they assessed that realities in the different countries did not quite conform to either the 'old' Weberian model nor to the new NPM one. They sorted out two variants of NWM, a Northern European one with more emphasis on the democracy elements, and a central European one that was more managerially oriented. This new model can be read as integrating properties subsumed under the labels of NPM and NG narratives. On the 'Weberian' side, it reaffirms the role of the state in providing public services, working under (modernized) administrative law, and legitimized by representative democracy. On the 'Neo' side, it includes a turn to results for external stakeholders (who in some countries tended to get more direct influence), supported by a new

quality culture in the re-professionalized[10] public service. We suggest to add the NG to this landscape, that enhances two aspects of this neo-Weberian transformation: on the 'Weberian' side, it stresses the increasing part played by participative democracy in terms of legitimization; on the 'Neo' side, it considers the new ways of setting public agendas in emerging public action arenas enabling horizontal arrangements between heterogeneous actors.

NPM and NG narrative emphasize change away from traditional policy instruments and the adoption of new more market like instruments in multiple and heterogeneous stakeholders environments. They insist on change, by stressing traits that may weaken traditional state steering and represents a move towards governance by networks that include state as well as non-state actors. On the contrary, the NWP narrative emphasizes continuity. Policy change is interpreted as an expression of the continued strength and versatility of the state. This is demonstrated by its ability to adjust to new kinds of pressures by adopting new policy instruments, yet retaining and strengthening its efforts at maintaining and extending its bureaucratic influence over an increasingly complex and costly HE sector.

10.3 Conclusion

It is striking that changes in HE follow the same routes during the same period of time, as trends in other public sectors such as health, social care, security, justice, etc. Also striking is the fact that the present situation displays, with various weight depending upon the country and the sector, all three possible types of regulation: by substantive rules, which was dominating the "old Weberian state", by markets or quasi-markets as described by in the NPM narrative, and by institutionalization of collective action, as in the NG model. As different as they may be, these regulations coexist in the HE sector as well as in most public sectors, and all require some form of involvement by the state: to write the rules, to warrant markets, to offer institutional and legal devices. Thus, the weight of each mode of regulation does not naturally bring about the hollowing out or the reinforcement of the state, but different forms of expression of public authorities, different ways of being a policy actor.

There is not one single story to narrate the same history of continuity and change of public sectors regulations. Yet, the preference for a specific story as a cognitive frame for thinking and organizing reform may have huge influence on action, because narratives are theories for action. Restricting the 'good government', to a uni-dimensional vision supplied by a given narrative, precisely when, more than ever, reality seems multidimensional, is probably a factor of risk rather than a solution to public management issues.

[10] We prefer '*re*-professionalized' to Pollitt and Bouckaert's term 'professionalized', because the traditional bureaucrat was schooled in the legal *profession*, which now is not supplanted but complemented with other competences taken from the organizational or managerial professions.

Thematic Charts[1]

LAWS, DECREES… PROCEDURES

	1980s	2000s
France	National and public universities (Faure act, 1968), with detailed substantive and compulsory steering confirmed by Savary act, 1984. Public or private self organized Grandes écoles. More procedural steering of separate research organizations since 1945 (CNRS general, many others by issue), confirmed by Chevènement act, 1982.	No legal responsibility of Regions over public HERI in spite of decentralization acts (1982, 2002). No new acts on HERI before 2006, but new procedural instruments (e.g., contracts). Goulard act (2006) creates new procedural institutional (evaluation and accreditation agency), organizational (PRES, RTRA, pôles de compétitivité, instituts Carnot) and legal frames (FCS, EPCS), that are added to the old ones. LRU (Law "responsibility and liberty of universities", 2007) increases university presidential and executive board's authority on universities that are to become autonomous and accountable.
Germany	The Federal Ministry for Education and Research regulates core organizational structures, conditions of access to universities, degrees and categories of academic personnel and salary via Federal Framework Law (from 1976). Universities are public institutions under the jurisdiction of the German states (Bundesländer)	In the realm of an overall reform of legal responsibilities inside the German federal order, the Federal Framework Law on HE finally gets abandoned (in 2008). Beneath the financial responsibility the states receive the full legal responsibility for the HEIs. In 1998, the Federal Framework Law was hollowed out to give governance responsibilities

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[1] Coordinated by Catherine Paradeise, Emanuela Reale & Gaële Goastellec. Updated September 15, 2008.

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	1980s	2000s
	with each state regulating its universities via a more detailed state law inside the framework of the federal law. Universities have own charters, regulating their specific internal governance under the law. Universities receive their recurrent institutional funding from the state ministries for cultural affairs and education. This is not sufficient the federal ministry helps with additional money distributed via temporary project programs in consent with the state ministries.	back to the states and to the universities themselves. The Federal Government is still involved in funding universities via new forms of temporary project programs ("Excellence Initiative", "Hochschulpakt"). After three states won a legal case against the Federal Ministry before the Constitutional Court study fees have been introduced in many states since 2005.
Italy	University reformed by laws (1980) creating new career paths for professors, dedicated research budget, organizational changes of departments as structures in charge of research, management, doctoral degree. Substantive rules (as recruitment and professors appointment) still defined by the State.	Creation of a Ministry of universities, research and technology (MURST later MIUR) (1989). More procedural acts, with more degrees of freedom for universities and some increase in the national steering capability.
Netherlands	HE national policies mostly based on a 1960 act. Procedural laws and derived regulations. Substantive issues usually left to academic freedom. Substantive steering may occur (e.g., appointed ad hoc academic committees to agree on national plans for specific disciplines).	Substantive issues still left to the university management. Orientation towards institutional autonomy and ex post evaluation confirmed and strengthened by a policy paper (1985) and a new HE law in 1993.
Norway	Before 1989, universities and research governed nationally, colleges regionally. Research funding and responsibility for research institute sector is national and divided among different ministries.	HE act (1995) unifies colleges and universities at the national level and under the ministry of education, with a common council. No change in the formal status of universities but more freedom of internal organization and less direct regulation. Research funding and responsibility unchanged.
Switzerland	Public cantonal universities steered by laws of their corresponding home canton and different ministries at the Confederation's level (1st Law on Universities (LAU) in 1968). The inter-cantonal agreement is the third funding mechanism for the	Revision of most cantonal laws, providing a legal framework for global budget and contract with HERIs. Revision of the Universities act (1999) creates input formula based budgets and reforms the CUS (Conference of Swiss Universities): while this

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	1980s	2000s
	cantonal universities (1981). Its *raison d'être* lies in the necessity to integrate all cantons in the financing of universities: each canton pays a given amount of money per "own" student to the university canton the student registers. Federal Institutes of Technology (FIT) are national and steered by the Confederation (since 1854). Since 1983, a Federal research law: no substantive, but only coordination and planning role for Confederation in the HER system.	conference was previously bringing together policy makers and academics, it becomes exclusively composed of policy makers. Its aim is to create the basis of a shared steering between cantons and Confederation through more coordination. Academics are then located in the CRUS (Conference of Swiss Universities' Rectors), being in charge of implementing CUS policies. Introduction of a Law for UAS (Universities of Applied Sciences) in 1995. The inter-cantonal agreement was revisited (late 1990s) in order to differentiate the allocation per type of disciplines and thereby to better adjust the allocations to the actual costs. Revision of the federal law on research creating performance-based contracts (2000). First law on FIT (1991) codifying the two FIT's as well as the national research centers' organisation.
UK	Steering through national and long established University Grants Committee, based on planning and financial incentives. HEIs are quasi autonomous institutions. Very occasional substantive primary legislation (e.g. 1988 education reform act turns Polytechnics into New Universities, 1992). Research is steered by series of Research Councils set up around disciplines (e.g., Medical Research Council).	Same basic pattern in England but national Funding Councils set up in Scotland in Wales, given devolution in the late 1990s. New Universities set up as independent Corporations, 1992. A new subagency (OFFA) established by the HE Act in 2004, to ensure fair admission policies with introduction of top up fees and policy concern about access.

EXTERNAL GOVERNANCE

	1980s	2000s
France	National, under M. of education and research. All allocation and organization decisions on universities are taken with the help of advisory boards at the ministry level. More self-organization and strong identity in Grandes écoles and research organizations.	HER institutions come closer by creating joint research centers mainly located in HEI (1990–2000). CPU (Conference of University presidents) has become a collective actor for lobbying and promoting best practices.

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	1980s	2000s
		New procedural tools and agencies, either specific to HERI (ANR, 2005, AERES, 2006) and public management (LOLF, 2006) self-organization of HERIs at the local level (Research Pact 2006, LRU 2007) national steering by ex ante contracts, transfer of micromanagement tools to universities and ex post evaluation. Increasing role of public research organizations (CNRS in particular) as funding agencies (mostly funding of human resources).
Germany	National and federal. Federal Framework Law regulates core issues, the states regulate via state law and institutional funding. Intermediary bodies like the "Wissenschaftsrat" (WR) give policy advice for structural innovations. According to financial pressures agencies which provide third party funding – like the "Deutsche Forschungsgemeinschaft" (DFG) – are getting more important. The HE sector is strictly separated from the strong extra-university sector (MPG, FhG, blue list institutes (today: WGL), national research centres (today: HGF).	Since a reform of the Federal Framework Law and the enforcement of the Bologna process by the Federal Ministry in 1998 new bodies for external governance have been established in and for universities. Internal: Boards of Trustees were established via state law in many universities, involving external stakeholders from industry, society and politics. One state – Lower Saxony – established regular and standardized evaluations of teaching and research. Others proceed with more or less incremental evaluations. Autonomous accreditation agencies replace state accreditation for B.A. and M.A.-study programs. A national accreditation council has been established to control standards. The "excellence initiative" brings universities and extra-university research institutions with their different governance regimes closer together (in "Clusters of Excellence"). In some cases institutions get merged (like KIT in Karlsruhe, which is a merger of parts of the Technical University with parts of the local Helmholtz-Research-Centre). A national Academy of Sciences has been introduced in 2008.

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	1980s	2000s
Italy	National, under M. of public instruction. National advisory board of elected academics (CUN). Weak national government authority, none or very limited role of regional and local bodies, heavy fragmentation of the academic system. CNR acts as national advisory body for research activities through its 15 disciplinary-based National Advisory Committees.	New steering tools by the MIUR to be fully designed (financial incentives, accreditation, evaluation and control). New evaluation bodies created at ministry (National Committee for the evaluation of Universities – CNVSU and National Committee for the evaluation of research - CIVR) and at university levels (NUV = nucleus for internal evaluation). In 2007 the Agency for the evaluation of University and research (ANVUR) was created. Universities gain some managerial autonomy. CNR loses its role of advisory body.
Netherlands	National, by the M. of education and science. Programs controlled by the Academic Council. Non-university professional training under the secondary education legal regime. National research institutes, mostly administered apart from the university policy, by the Royal Academy of Science (KNAW). No role of regional and local authorities.	M. of education still dominant (ministry of economic affairs becomes a minor actor). Increasing steering by institutional autonomy and ex post evaluation (e.g., control by the Academic Council replaced by NVAO, an accreditation agency, 2002; research evaluation of universities operated jointly by VSNU, NWO and KNAW). New associations of the universities (VSNU) and colleges (HBO-Raad), with a role of self-regulation, lobbying and (until 2002) external quality assessment. Increasing role of Boards of Trustees and advisory committees as ways to align institutional strategies with external stakeholders.
Norway	National, mainly by M. of education and/or research, but public governance of the colleges regional. Coordination and promotion of national level initiatives by the U. rectors' conference (Council of Norwegian Universities, 1989) 5 specialized research councils.	M. of education controls entire HE sector (1995). Councils for colleges and universities merge (1997). Merger of research councils (1995). Creation of an agency for accreditation and quality assurance – NOKUT (2003).

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	1980s	2000s
Switzerland	Cantonal universities are ruled by Cantonal and federal authorities and administration: Federal Department of Home Affairs and CUS (Swiss University Conference), which is the Confederation-cantons body, enforcing decisions relative to programmes, diploma recognition, etc. The Federal Institutes of Technology (FIT) are ruled by the Federal Council through the Federal Institutes of Technology board. FITs,	Cantons remain the principal authorities for universities, but increased activity of the Confederation as an external governance actor, through the Accreditation and Quality Assurance of the Swiss Universities (OAQ) intervening indirectly in the HERI governance process. No real changes on FIT. Creation of networks of Universities of Applied Science (UAS, former tertiary institutions upgraded to university status) which are placed under the Federal Department of Economic Affairs and the corresponding cantons. The SNF (Swiss National Science Foundation) contributes more to Universities and FIT, using new instruments.
UK	National by M. of education. University grant council (UGC) is the main agency acting as buffer institution between universities and government. Limited role of local government at the level of Polytechnics. Sub-agencies set by UGC (for instance for QA). Micro autonomy of universities Research councils steer research through the allocation of public funding and evaluation of project outputs.	Same basic pattern in England, but devolution of HE policy in Scotland and Wales. Polytechnics become universities and their boards lose their regional representation. New role of the Department of Trade and Industry as a major actor in promoting policies enhancing university third mission. Research councils increasingly steer doctoral training. Reinforcement of research councils control, through the creation of Research Councils UK (RCUK) in 2002, a joint venture between research councils and the Office of Science and Technology (OST).

STAKEHOLDERS

	1980s	2000s
France	Few formalized relations of universities with industry (no contracts, patents or licenses). Research contracts mostly with ministries.	Academics, students, firm representatives gain formal access to university governance bodies (Savary act, 1984), but remain weak actors at the level of universities.

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	1980s	2000s
	Civil society impact through students' voice at the societal level but are not influential at the university level. No role of inexistent or weak local governments.	Their role in the newly created executive University Boards (LRU, 2007) is reaffirmed. Regional and local governments get involved in HERIs as local assets (CPER, regional or local programs). Marginal % of funding, but increased impact of the local economic sector (third mission, vocational programme targeting local labour market, applied research for local firms, research contracts with public sector at regional, national, European levels and with large firms increase).
Germany	No remarkable influence of external stakeholders apart from state ministries and intermediary bodies (WR). Students and non-academic personnel were represented in the self-governance-structures of universities ("Gruppenuniversität").	Boards of Trustees were established via state law in many universities since 1998, involving external stakeholders from industry, society and politics. Accreditation agencies and funding agencies become more important as external stakeholders. The external funding of research projects takes a drift toward thematically focused, big and collaborative programs. The Federal ministry enforces the need of industry collaborations in its funding programs. The "excellence initiative" involves stakeholders from university, extra-university research institutes and industry in "clusters". Students have in one case a say in the spending of the money from their study fees.
Italy	No national or local representation of students influencing teaching supply or university policies. Universities generally separate from the economic world.	CUN enlarged to students and technical and administrative staff; asked to make propositions on university planning and new criteria of resource allocation (1997). Local representatives may be involved in university government bodies. Industrial associations may advise government on HE policies. Firms and NGO gain in some universities a prominent role in funding and thus decision making.

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	1980s	2000s
Netherlands	Students, considered as members of the academic community, and staff have a strong position in democratic councils in universities and faculties that are strong in university governance. Few lay members in the U. councils. No national level input.	Loss of power by the democratic councils and dissolution of the departments weaken students' and staff's positions. They retain some power by being represented in study program councils. Education specialists in employers' associations take stances on HE issues. Boards of Trustees made up of external members connected to business and various levels of political authorities. Local and regional governments remain unimportant legally but more attention is paid to the regional role of HE. NWO (ex-ZWO), the most important funding organization in fundamental research, gets a larger share of research funding and increasingly focuses on strategic research.
Norway	No explicit stakeholders. Students are members of the academic community. Relations with industry in science and medicine, invisible because they do not provide contracts, patents or licenses.	Universities perceived as stakeholder organizations: explicit attempts at making relationship to industry, local authorities and students. "External representatives" on boards of institutions from 1995.
Switzerland	The integration of students in internal governance varies among universities. In general, external stakeholders do not take part in internal governance but sometimes personalities of science, economics, policy and the arts are represented in university bodies or may have some influence on internal governance. Stakeholders can intervene during the pre-parliamentarian procedures or use initiative and referendum.	No real change. According to the institution, students are more directly involved into internal governance.
UK	Stakeholders' role is not prominent. Student national representatives are active but do not actually impact university governance or decision making. Universities are mostly far from society. More linkage of	Slightly increasing role of some stakeholders. Students feedback impacts both the quality insurance system and the university ranking. Government stresses the importance of university third mission,

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	1980s	2000s
	Polytechnics with economic actors, moreover at the local level. Weakly developed democratic culture.	generating research collaboration with firms, technology arrangements and commercialization of results, with different race and pace in different universities. Regional level of government increases Erosion of local authority and trade union representation on Boards of the new universities.

DECISION MAKING ON INTERNAL ORGANIZATION

	1980s	2000s
France	The law allows reorganization of faculties and status, but with the very difficult condition of a 2/3 positive vote in the university body. The ministry has to agree.	LRU (2007) increases organizational autonomy to universities.
Germany	The state controls establishment and closure of faculties.	Due to financial pressures and target agreements between states and universities the latter try to establish certain profiles. Regional overcapacities in the supply of disciplines are getting reduced, single entities become merged. In the case of the University Duisburg-Essen two universities are merged into one. The new higher education-law in Northrhine-Westphalia (from 2007) allows the universities under this jurisdiction autonomous decision-making on internal organization. However, target agreements still exist.
Italy	Universities can reorganize faculties. The ministry must approve.	Universities are free to reorganize research and training by modifying teaching supply with the minimum requirement procedure. Universities can also design their internal organization by modifying statutes and regulations.
		Value and type of funding for research and diversify. Co-financing for strategic research and promotion of inter-universities cooperation, European cooperation.
Netherlands	State controlled, e.g., the state controls establishment and closure of faculties.	Within the boundaries of a nationally imposed frame, HEIs decide about their internal organization.

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	1980s	2000s
Norway	Reorganization may be decided by institutions. Ministry approves.	2005 act gives institutions the right to decide on their internal organization.
Switzerland	Reorganization may be decided by institutions.	Change occurs on who has the power to reorganize the HERI. (see external organization, both are related). Some institutions can decide to reorganize themselves, but in general no major changes.
UK	Proposal for internal reorganizations are developed within each university. They may be politically controversial and in that case, other stakeholders get involved and may slower or stop the process. Some HEI reorganization driven by financial cutbacks (e.g., Aston).	Few market entries. No increase of the number of private universities. Emergence of regional collaborative alliances and consortia. New powers to award degrees to a wider range of independent providers in 2006 which erodes HEI monopoly. Some development of the strategic management core in HEIs and its internal capacity to steer a HEI.

PROPERTY OF REAL ESTATE, EQUIPMENT, CAPITAL

	1980s	2000s
France	Universities buildings and land belong to the state. No capital. Equipment funded by operational budgets. When they manage contracts, universities may perceive overheads as a percentage of the total amount of contracts.	LRU (2007) transfers property of real estate to voluntary universities. Increasing part of contract-based equipment funding. Some capital in new foundations. Emergence of full cost accounting and overheads.
Germany	University buildings and land belong to the states. No capital. Equipment is funded by institutional budgets and provided by the states.	In most states no change. In Lower Saxony universities can choose to organize themselves as foundations with ownership of real estate and own capital.
Italy	Universities own buildings and land or sign rent contracts. No capital. Equipment is funded by operational or research budgets. Contracts cover temporary needs for teaching and research.	Universities own buildings and land or sign rent contracts. Possibility for universities to act as members of consortia and societies and possess capital. A rising number of contracts covering temporary needs for teaching and research.
Netherlands	Real estate of public HEIs belong to the state. The church related private HEIs possess their own real estate.	All real estate has been devolved to HEIs. Universities can (and do) possess capital.

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	1980s	2000s
	No capital. Equipment is funded from national funds with help of the Ministry when necessary.	Equipment is funded from lump sum or from project funds.
Norway	University-administered real estate belongs to the state. They are not allowed to accumulate capital, but may establish foundations and companies. Equipment is funded by operating or research budget, with very limited contribution from industry sponsorship.	Unchanged. The proposition to put all HEIs buildings under one common national administration was turned down in 2006. Universities are not allowed to accumulate capital, but may still establish foundations and companies. No change in equipment funding.
Switzerland	University-administered real estate belongs to the state (cantons). Universities are not the owners but may use them commercially. They are not allowed to accumulate capital. Equipment is funded by operational or research budgets.	Capitalization of public budgets is authorized in narrow limits. Internal agency in Federal Institute of Technology board for funding projects' equipments. Some universities are given more power in the management of their properties (buildings, lands).
UK	Real estate owned by the universities, in the standard public sector manner. Equipment is provided on university operational budgetary cycle, or by research grant applications. Overheads are added to research grant bids but not calculated on a full cost basis.	No major change, but some more private property. Equipment unchanged. Some increasing investment by private capital in HEIs, including ownership of assets and land. Emergence of technology spin offs and patents. Much more explicit and elaborate full economic costing for research getting more overhead money in research.

EXTERNAL ALLOCATION OF FUNDS

	1980s	2000s
France	The national state pays salaries of university staff (that are civil servants). It is almost the only provider, through line item operating budgeting and a student enrolment based formula (GARACES). No competition between universities for resources: principle of equality of public service. Fees, contributions of firms, regions and Europe are very low. Research funding of universities is partly based on the basic grant of the universities. The rest is based on competitive public grants or	The share of public money per university student is among the lowest in Western Europe, while it remains good in GE. Competition for students remains low in spite of the demographic decrease of student numbers, and fees remain very low. The national state remains the major budget provider. Budgets become mission-oriented and global with the LOLF (2006) and LRU (2007). The rising integration of contractual negotiation between universities, Ministry and national research organizations favours the

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	1980s	2000s
	private funds, often managed outside universities. Budgets increase in absolute numbers, but decrease per capita. In GEs, budgets per student remain quite good (they avoid massification). Public funding of strategic research outside universities in relation to major initiatives ("grands programmes").	development of university policies. In addition, universities are allowed to collect 15% of all research contracts for internal reallocation of resource. Starting 1983, an increasing proportion of university budgets, mostly research funding, is contract-based (3% in 1985, 20% outside salaries in 2005 and directly allocated by the M. of research (and whenever joint ventures, by research organizations) to labs without the university having its say. The creation of the national evaluation agency (AERES, 2006) should increase the impact of performance on budgets. The share of competitive grants (regional, European, private), mostly for research increases at various race and pace across universities. The creation of a national research council (ANR) in 2005 increases the tendency towards "hidden differentiation". The so-called "campus campaign" (Spring 2008) aims at increasing diversification by allocation 3,5 billion euros to 10 universities on a competitive basis.
Germany	The states pay the salaries of university personnel. Nearly all professors, some senior lecturers ("akademische Räte") and many administrators are civil servants with tenure positions. Other academic staff is mostly employed on temporary contracts. The states provide institutional funding through line item operating budgeting and a student enrolment based formula ("Kapazitätsverordnung"). There is no competition between universities for resources: principle of equality of public service. No study fees; contributions of firms, regions and Europe are very low. Research funding of universities is partly based on the basic institutional grant of the universities.	The states remain the main budget providers. As the financial capacities of the states are limited the Federal ministry helps with additional money distributed via temporary project programs in consent with the state ministries. One of these programs is the "excellence initiative". Based on a nationwide competition on the best concepts for graduate schools, research clusters and future development this initiative distributes a total sum of 1,9 billion euros to those universities, who were successful in the competition. 9 universities, who were successful with their future development concepts (which also required success in one of the other two categories) are now the

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	1980s	2000s
		publicly so called "excellence- or elite universities" in Germany. Parts of the university budgets are distributed in most states according to performance formula, in most parts involving enrolment, teaching and graduation indicators and sometimes research indicators (in most cases the amount of third party funding). Each of the 16 states uses a different formula and distributes differing percentages of the operational budget according to performance indicators. Some states changed from line item budgeting to lump sum budgeting. Third party funding gets more and more important for conducting research. Since 2007 the Federal ministry and the states have started to establish the funding of overhead-costs for research projects approved by the DFG. Some states started to introduce modest study fees. External income from royalties and patents remains low.
Italy	The national state is the major provider. Line item budgeting. Low fees, no competition for students. No competition between universities. Teaching input based funding. Research funding is part of the basic grant of the universities. No incentives. Ex ante and top-down budget control. Little research regional and industrial funding, except in specific autonomous regions (ex.Trentino). Public funding constantly grows during the 80s.	The national state remains the main provider. Creation of a lump sum budget (2000) (FFO). A little share of FFO (about 0.5%) is allocated according to a formula based on production costs per student and production performance of students and graduates. 30% of the formula is dedicated to research. The share of students fees is increasing (should not exceed 20% of FFO). Rising competition between universities for funding. Increasing share of private funding (8% in 2002) and European grants, marginal but increasing role of regions in rich regions in professional training and technology transfer of local interest. No changes on budget control.
Netherlands	Public universities (as well as the 3 'private' ones) mainly funded by the state through a student enrolment based formula (varying across disciplines), with rising	HEIs receive lump sum budgets, based on a formula putting main emphasis on teaching output but also on input, still decreasing on a per unit basis.

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	1980s	2000s
	public money lagging behind student growth. Line-item budgeting, hierarchical bureaucratic, top-down relation. Private financing of teaching is almost absent. No competition for students. Some competition for infrastructure money. Symbolic fees around 1970 provoke heavy student protest. Research funding is part of the basic grant of the universities. Some private, no regional, very little European funding of research. Funding of strategic research with regard to major research initiatives (KNAW institutes for instance). Some research projects can be funded through the national research council (ZWO).	Infrastructures are part of the lump sum budget and may be improved by specific initiatives and funds (e.g., ICT). Teaching and basic research ministry grants are based on (teaching) performance (i.e., lump sum). Some regional funding in colleges, not in universities. Rising share of private funding and tuition (6% of universities, 18% of college budgets). Competition for good students and foreign students (higher fees), because of their impact on funding and the shrinking of recruitment. Increasing research funding becomes very competitive without concentrating in specific universities. Funds come from the national research council (NWO), Europe, contracts with private and public partners (20% of budget), grants from the ministry of economic affairs for national HRM in R&D.
Norway	2 parts in budgets (1) number of academic staff which each institution is allowed to fill, proposed by institutions budgets and approved by the ministry; (2) operating line item budget + ear-marked grants for new construction projects. Students funding with differentiation based on history and disciplines. Budget increase pulled by the college sector (by counties) and university sector stagnation, compensated by new vocational programs. Some lobbying of universities for infrastructures. National research funding, partly allocated by the ministries according to the "sector principle", partly by 5 research councils on a competitive basis. Growth in research funding in sciences, medicine and social sciences. Few European funding.	No major change in the percentage of public funding. Budgets are global, and still into 2 parts: personal costs and operating costs. Addition of student and research output incentives to budgets (1990) (40% of total allocation nowadays). Rising competition for students with the introduction of performance based incentives. Rising competition on external research funding, from research councils, ministry, increasingly EU-funds (with a good rate of return), handled by universities or their entities. Insignificant regional funding, increase of European funding especially in research universities. Gradual shift of budget control from ex ante to ex post.

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	1980s	2000s
Switzerland	Universities resource allocation mostly from cantons, but also from Confederation (LAU). Based on historical and input criteria (student, staff, etc.). Beside these two resources, the inter-cantonal agreement is the third funding mechanism for the cantonal universities (1981). Really low tuition fees covering a small part of the administrative cost of student. Federal Institute of Technology resource allocation only from Confederation, also based on input and historical budget. Competitive research activities, funded by two agencies, one for basic research (SNF), the other for applied and industrial research (CERS). Little European research funding.	Universities resource allocation still mostly from cantons, but with the revision of LAU and cantonal laws (and the introduction of contract) they are more based on output criteria related to activity (70% teaching, 30% research activities). Since 1991, performance mandate between the CEPF and EPF introduced by law: 70% based on research, patent and education output and 30% on input criteria. Increased private funding of research (between 7% and 24% of the total budget in 2004; 45% in St Gallen). Considerable increase of competition for research grants from European programmes (15% of the total research activity). Funding agencies are reorganized.
UK	Overwhelmingly funded by the state, few regional contributions. UGC funds universities based on an input formula basis. Relatively small scale additional stream of income from premium fee and overseas students (in addition to public money). Public funding per student falls and development of a policy of "efficient expansion" squeezing university finances. No performance based funding for teaching. Incentives to comply with particular policy streams in student recruitment, for example (approved student numbers). Strong competition for structural funds. Research councils play an important role for research funding. Some industrial funding in engineering, few European funds.	Public funding still critical, with UGC remaining the main body in charge of funding. UGC reinforces its steering role due to a strong application of the value for money principle with the (RAE) from 1986 onwards. Still a steering mode based on financial incentives. But a definitive long term shift to a more diversified funding base for teaching (industrial sponsorship on applied subjects, influence of regions on UGC schemes). Design of teaching funding changed as top up fees introduced in 2006 to rectify decades of under-funding of teaching. Students get loans instead of grants. Increase of the deregulated sector of education (ex: MBA, overseas students) where much higher fees are charged. Intense competition for this type of students. Strong competition for structural funds, eased by the private finance initiative (for students residences) and RDA. Research funding improves in relation with technology transfer objectives with rough competition. Limited European funds.

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	1980s	2000s
France	Universities are free to allocate budgets among, but most of them replicate the GARACES formula internally. Part of research resources remain hidden in the hands of research centers or individual academics.	Internal rules of allocation emerge in relation with the discussion on contracts. It should develop in many universities thanks to LRU (2007). More flexible management of research grants and patents in newly created university SAIC (2000) and new foundations escaping public accounting rules in PRES and RTRA (Research act, 2006). Both favour the internalization of research funds by reducing the pressure of public accounting rules.
Germany	The internal allocation of budgets is dependent on the line item budget plan of the state parliament and on the appointment contracts of the universities with their professors (with regard to associate staff, equipment and other issues of recurrent funding for chairs/professorships).	The turn from line item to lump sum budgeting gives most university administrations more leeway for an autonomous internal allocation of funds. Many faculties implement or discuss performance indicator based allocation systems. However, these developments are not coherent, not even in the same university.
Italy	Funds are equally distributed, following national rules.	Internal allocation of research funds is partially transferred to departments and sometimes rests at least partly on comparative internal quality evaluation. For doctoral training, allocation is usually equalized between professors within the departments.
Netherlands	Funds are equally distributed, following national rules.	HEIs decide about their own internal allocation. Quality assessment reports give managers legitimate information to diverge from the national formula, together with institutional strategy formulation when they come to allocate resources internally.
Norway	Allocation of personnel costs according to fixed rules defined by distribution of positions. No other rule of internal allocation which is determined historically. External research funding (public or private) often managed directly by researchers and therefore not visible on university budgets.	Considerable freedom of allocation by institutions: global funds and income from overhead charges give institutions more leeway in allocating resources internally in relation with their own priorities. Allocation in practice influenced by historically established practice.
Switzerland	Usually no internal funding instruments.	Most institutions tend to (increase or) introduce internal allocation mechanisms supplied within

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	1980s	2000s
		faculties and departments budgets as strategic monies reserved for specific, institution-oriented projects.
UK	Each university is free to use its funding as it wishes through its internal allocation process. Students get grants through their local education authorities.	Some more ring-fencing of Funding Council allocations (RAE allocations to departments as well as HEIs; access funding). Student financing – grants give way to loans and top up fees.

ACCOUNTING, AUDIT

	1980s	2000s
France	A priori control, according to the rules of public accounting, under the control of the Cour des comptes. No analytic accounting, no provisions for depreciating, no ex post evaluation. Each training program leading to national degrees is accredited for 4 years by the ministry. Accreditation of programs is the key to operating budgets. Research budgets (including in mixed labs with CNRS) often have no visible relationship with evaluation. Their effect on total budgets is very limited.	Development of global budgeting, cost accounting, performance evaluation and ex post assessment (LOLF, 2006, Research Pact, 2006, LRU, 2007).
Germany	A priori control, according to the rules of public accounting, under the control of the Bundesrechnungshof (BRH).	Development of global budgeting and cost accounting in many states. Universities produce strategic plans, activity plans and annual reports to show if they reached the target agreements they contracted with the states. However, there is no standardized control of contract fulfillment.
Italy	A priori control, according to the rules of public accounting, under the control of the Corte dei Conti.	Managerial autonomy of universities. Development of ex post accounting control.
Netherlands	Public HEIs are part of the state apparatus and fall under standard bureaucratic agency accounting rules.	HEIs follow general accounting rules for not-for-profit organizations. External auditing takes place annually, also with an eye on European funds. Financial accounting to state has been simplified (marginal check and annual reports).
Norway	A priori control, according to the rules of public accounting, under the control of the Riksrevisjonen (Auditor General).	Situation is changed into ex post reporting. Institutions produce strategic plans, activity plans and annual reports.

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	1980s	2000s
Switzerland	Itemized funding, taking history into account. No ex post evaluation.	Development of cost accounting with the introduction of global budget and output criteria based on contract. Recently introduction of internal audits by political authorities.
UK	Traditional internal and external audit systems (HEFCE), in the usual public sector manner. So ex post checks for probity and value for money and well developed procurement processes. Each HEI also has its internal audit section and external auditors which sign off annual accounts. HEFCE monitors for financial risk at institutional level.	Traditional systems remain and accelerated in the 1990s. In the 2000s, HEFCE is aware of the audit burden and tries to introduce a lighter touch regime based on risk management. Full Economic Costings introduced in research which gets more resources into the system.

EVALUATION

	1980s	2000s
France	When they also belong to the CNRS, research labs and full-time researchers are evaluated by disciplinary commission (CN). No evaluation of departments and teaching staffs. The CNE (1984), dedicated to the evaluation of universities as wholes. It has no influence on funding but on the building of university identities.	Development of indicators based evaluation of diplomas and university research centers as a basis for ministry accreditation. Evaluation of research activities of teachers belonging to mix research centers (2006). Creation of the national Evaluation and Accreditation Agency (AERES, 2006), in charge of institutional evaluation, with the mission to harmonize evaluation of departments, research centers, teachers and researchers across all higher education and research institutions. HERIs remain in charge of the evaluation of their own individual academics. Timid development of evaluation of courses using indicators jointly built with teachers.
Germany	Establishment of degrees and professorships must be approved by the state ministries. No research or teaching evaluation, no performance indicators.	Parts of the university budgets are distributed in most states according to performance formulae which make evaluations necessary. In most parts quantitative indicators like enrolment, teaching and graduation rates and sometimes research indicators (in most cases the amount of third party funding) are conducted. The "excellence initiative" can be

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	1980s	2000s
		regarded as a nationwide competitive evaluation effort to figure out places for excellent research. Most universities have regulations for the evaluation of teaching but not for research. In Lower Saxony a standardized state wide evaluation procedure for all universities and disciplines regarding teaching and research is established and controlled by a regional commission. Accreditation agencies evaluate the prerequisites for the establishment of bachelor- and master-programs according to the Bologna rules in the accreditation process.
Italy	Ministerial accreditation of training programs that lead to national degree. No evaluation system of universities. Evaluation starts for research projects in the frame of the Progetti di ricerca di interesse nazionale project funding (40% funds).	Formally development of evaluation since 1994, by didactics questionnaires and accreditation procedures (requiring minimal numbers of students, professors, lecture halls, etc). No much control on data and no impact of evaluation. Creation of a peer evaluation process of research quality (2004), impacting the research share of universities in the FFO. A new Agency for the Evaluation created in 2007. Audit of the educational function by CUN and of university governance by CRUI.
Netherlands	No research or teaching evaluation, no performance indicators. Intention of basing reallocation by research evaluation (1982) does not work much.	Individual teaching evaluation for HRM since late 1980s. Accreditation by the newly created accreditation agency of degrees is a prerequisite for funding (2002). But no systematic use of performance indicators in evaluation and accreditation although number of graduates may play some role. In research, bibliometrics may be used in appropriate fields. Research evaluation (1993) for internal management that may impact internal allocation. Evaluation of doctoral schools by KNAW (1992), with some financial incentives at the beginning only.

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	1980s	2000s
Norway	Establishment of degrees must be approved by the Ministry.	Evaluation system established through a comprehensive planning and reporting regime based on documents produced by HEIs (see accounting, audit). Research publications are reported to a national database. Teaching programs are evaluated by externally appointed program sensors. National evaluations of disciplines are organized by the RCN. Development of an institution for evaluation and accreditation, focusing on quality of internal evaluation and accounting systems (NOKUT).
Switzerland	Some universities or department have introduced evaluation of teaching activities, with no constraining consequences.	No HEIs-wide teaching or research evaluation. Teaching evaluation is the responsibility of institutions. Accreditation of study programmes favored by the Bologna process makes institutional evaluation more common, often on a voluntary basis. Institutional audits are required for Federal funding. Periodical evaluation for QA is becoming an objective of the institutions. Creation of the Accreditation and Quality Assurance of the Swiss Universities (AAQ) in research and teaching by the Confederation.
UK	Explicit and external evaluations start to increase in scale, impact, frequency. System wide evaluation of both training and research quality start developing, based on site visit and review of internal produced documents including key data and peer review of publications. Regular cycle of externally driven QA audits of each department. RAE occurs every 3 years from 1986 onwards. Teaching audits are published but do not link to teaching grants.	Increased selectivity linked to RAE results. Attempt to damp down transaction costs in both training and research audits, but they are still high. Reduction in frequency of RAE, change from peer review to a metric based approach in research is heralded after the 2007 RAE; attempt to shift to a "lighter touch" QA regime on teaching and a more developmental approach with Departments. New indicators reflect concern with fair access and widening participation

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HRM

Labour market regulations

	1980s	2000s
France	All HR are civil servants. Traditional public sector regulations. Full-time researchers become quasi-civil servants (1982).	LRU (2007) allows universities (with some limitations in terms of budget ratios) to recruit part of their teaching, research and administrative staff on long or short term contracts.
Germany	All professors are civil servants. Traditional public sector regulations for other academic staff but decrease in non-temporary (tenured) positions below the level of full professorships.	Newly appointed professors are regularly still public servants. The salary system of professors has been changed in 2004. In the new scheme the basic salaries for professors were decreased. Possibilities to upgrade the basic salaries via good performance have been established but are not used coherently (depending on the money a state or a university can spend). The majority of academic staff has temporary work contracts. The salary scheme of the public sector is still applied to academic staff.
Italy	All HR are civil servants. Traditional public sector regulations.	No changes for professors. Collective agreements for technical and administrative staff, as in the rest of the public sector.
Netherlands	Traditional public sector regulations (all civil servants).	Collective agreements, same for all HEIs, for academic staff, as well as for the technical and administrative staff. Universities are employers.
Norway	Traditional public sector regulations, collective agreements, centralised wage negotiations collective agreements with three different unions, Union of civil servants (organises all kind of university employees), Researchers' union (organises most academic staff) and a union of public administrative staff.	Changes in public sector regulation with more decentralised negotiation and local wage negotiations. Individual contracts for administrative and academic leadership positions.
Switzerland	Cantonal (universities) or federal (FIT) traditional public sector regulations for all staff: collective agreements ruled by the cantonal administrative employees' law.	Decrease of public sector regulations and collective agreement in favour of more individual and contractual relationships. The legal employees status still depend on the cantonal framework, but institutions may in some cases choose the level of salary scale at which they recruit and provide additional resources.

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	1980s	2000s
UK	Highly traditional public sector HRM systems across the sector. Faculty are employees of the University and not civil servants. Nationally agreed pay scales through collective bargaining. National pay bargaining involving trade unions and national salary scales. Very little local discretion and few individually negotiated contracts.	Basically the scheme of eighties persists. National pay bargaining still in place but a few universities have left national salary scales. A University demand for more regional and local elements in pay emerges. A little experimental diversification at local level: by introducing some changes in remuneration scheme by adopting more private sector style.

CHANGES IN THE COMPOSITION OF THE LABOUR FORCE

	1980s	2000s
France	Suppression of the temporary contracts of teaching assistants (1984). All teachers are tenured, except for doctoral students and for teaching "per hour".	Important rise of permanent teaching positions since 1981. Most teachers are tenured, except doctoral students with yearly contracts as teaching fellows (ATER and "moniteurs") specific medical staff (20% of the HE faculty members) and staff teaching "per hour" (no figures available) that increased with massification. 3-years labour contracts for an increasing part of doctoral students with M. of research or co-funded by M. of research and firms (CIFRE). Slow rise of post-docs funding since 2000. Short-term contracts on research grants (ANR, 2005).
Germany	Permanent status (civil servant) is standard for professors and some other tenured academic staff ("akademische Räte"). Most other academics on temporary contracts.	The "Junior-Professorship" has been introduced as new status category in 2002. A Junior-professor does not need a "Habilitation", has – in most cases - the same rights as a full professor but limited teaching duties and the lowest salary among professors. Junior-professorships can be tenured but are in most cases limited to 3 + 3 years (the latter time is given after a positive performance evaluation in the middle of the term).

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	1980s	2000s
		Graduated academics below professorial rank can hold regular university positions no longer than 12 years on temporary positions. Otherwise they must be promoted on a tenured position or financed via third party funds. No differentiation between "teaching- or research only" positions yet.
Italy	In the eighties, stabilisation of teachers who were recruited on temporary contracts, and setting up of a three levels professor career from researcher to full professor.	No variation (but ageing) of support staff and academics. Increasing number of temporary teaching contracts with diversification of teaching supply. New flexible temporary research positions, remaining in fact in the long term.
Netherlands	Permanent status (civil servant) is standard. New status is temporary such as "scientific assistant" for PhD candidates.	Permanent status much scarcer than in the 80s and has less protection (formally no longer civil servants). PhD trainees all on temporary contracts, as many post-doc.
Norway	Nearly all university sector academic positions are tenured professors and associate professors with 50/50 teaching and research obligations. In the College sector, nearly all the academic positions are tenured.	In addition to tenured staff, rising number of: - Temporary and permanent positions in research centres and externally funded projects. - Doctoral fellowships, temporary and permanent research positions in research centres and externally funded projects. - Some increase in temporary staff teaching positions.
Switzerland	Mainly tenured faculty (civil servant) but other status than professors and tenured middle-range academics (MER) may exist on short terms contracts.	Development of part time positions. Slow introduction of tenure track in some HEI. Promotion of women in academia and creation of tenure path for junior members as institutional and political objective.
UK	Mainly tenured faculty but with some shorter term research positions.	Rise of non-tenured staff for both teaching and research activities. Growth of short-term-contracts for flexibility. Rise of women in faculty especially at the junior level and ageing of faculty in some subjects.

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DECISION FOR RECRUITMENT AND PROMOTION

	1980s	2000s
France	Academic positions formally created, signed and managed by the ministry. Hiring by disciplinary elected local committees under the final control of a central mostly elected academic disciplinary national body (CNU). Administrative and technical staff are recruited at the national level by civil servants exams.	Remains the same until 2007, but the CNU has less power because the local committees have the final say. Academic positions to be recruited are recommended to the Ministry by the presidential team and university bodies. More and more university presidents are allowed to freely allo cate a small percentage of positions. Periodic projects intend to enlarge the autonomy of university management on human resource. Major change with LRU in 2007. Local ad hoc recruitment committees replace nationally ruled "Commissions de spécialistes". Choices of positions to be offered, employment status and recruitment are in the hands of the president and executive board.
Germany	Universities faculties have the right of self-recruitment but need the approval of the state ministry for the professorial candidate they want to appoint. The faculties set up commissions for recruiting new professors. Once employed a professor can only bargain for an upgrade (of his rank or his staff/equipment) when he gets a call from another university. A doctoral degree and a "Habilitation" (a second book + an additional graduation) have to be passed to become a potential candidate for a professorship. The recruitment of in-house-candidates for professorships is in most cases forbidden. Academic staff below professorial rank is chosen by public competition and hired by the individual professor for whom the candidate will work. However, the work contract is with the university as a public sector entity. A formal promotion or career path is not existent in the German university system.	In many cases the central university leadership together with the newly established boards of trustees have a say in recruiting new professors according to the universities profile in a certain discipline. The ability to win or to engage in large collaborative research grants of the EU or the DFG is deemed to be a strong indicator of excellence, and valued accordingly in the decisions of recruitment commissions. In some states approval of candidates by the ministry is no longer necessary. A successful evaluated Junior-professorship equals the habilitation. However, the habilitation is still in practice and in many cases obligatory. No changes for other academic staff, still no formal career path.

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	1980s	2000s
Italy	Competitions for positions at national level according to national rules. Faculty councils ask for positions/ promotions, Rectors send the request to the Ministry that decides. Political power of the professor fostering recruitment or promotion has a decisive influence on Faculty choice.	Competitions for positions at university level according to national rules. Plans of university development include HR plans, to be approved by the Ministry. Annual number of new positions fixed by rectors in cooperation with the university senate. Hiring and promotion decisions taken by rectors based on Faculty council propositions. Still central role of full professors and disciplines.
Netherlands	Number and levels of positions based on students numbers through a normative formula. Funded by government. Research and teaching staff appointed by universities. Full professors are formally appointed by the Crown. Promotions below professor by the university depending on available positions.	The university decides on budget availability for new staff posts as well as for promotions. This authority can be devolved to the Faculty Dean.
Norway	Recruitment and promotion depend on the availability of new positions allocated annually to each institution, but usually dedicated to a specific discipline and department. Disciplinary committees make recommendations based on review of academic qualification. Formal decisions on full professor positions are made by the ministry, on associate professor positions by university board.	Recruitment depends on the availability of funds at faculty level which then are allocated internally according to some kind of needs based formulas. Recommendations by disciplinary committees. On full professor positions, formal decisions by the institution board, on associate professor and other positions by the faculty board. Increasing proportion of full professors after qualifications instead of fixed number of positions determined promotion from 1990.
Switzerland	Full professors recruited by the cantonal or Federal government (Universities or FIT) based on academic commission proposition; assistant professors by the academic department commission;	No general change, but some universities get more autonomy, such as the university of Lausanne that now appoints all members of its staff. Due to transparency requirements the publication of the available

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	1980s	2000s
	assistants by the professors. Promotion rules vary across universities and cantons. Internal promotion is not the rule. External recruitment.	academic positions for assistants and middle range professors is compulsory. Internal promotion is not the rule but can be codified by the university to be used in some cases.
UK	Faculty positions created by each University, based on strategic choices on subjects to be developed. Recruitment decisions by senior panel members inside the university, advised by senior external academics acting as peer reviewers. Promotion: internal panels of academics advised by academic externals for senior posts.	No change except that RAE creates a sellers' market for research stars.

RECRUITMENT AND PROMOTION: INTERNAL VERSUS EXTERNAL LABOUR MARKETS

	1980s	2000s
France	Labour market largely internal and national, but no regulation prohibiting the recruitment of local candidates. Promotion and good career may require mobility. Deans are academics. Internal national labour market for administrative middle and top staff.	Idem. Individual and institutional performance assessment might increase mobility as a resource for both individual academics and universities.
Germany	Labour market is largely internal and national. Strong regulation prohibiting the recruitment of local candidates. Promotion and good career require mobility. Deans and members of the rectorate are academics. Internal national labour market for administrative middle and top staff.	In many cases presidents and rectors can now be appointed from outside the university and must not necessarily have the status as a full professor (although most of them still are members of the academic profession). Efforts are taken to open the national labour market for academic positions to international candidates. The recruitment of local candidates for professorships remains unusual.
Italy	Internal national labour market. Professors begin the academic career generally in small university then moving in larger ones. Internal labour market for the managerial career.	Internal national. Actual privilege to local candidates. New rules for recruiting high level scientists and foreign high level professors, with a ceiling universities make propositions submitted to the approval of CUN.

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	1980s	2000s
Netherlands	Internal labour market. Little staff mobility across universities. No university management career; Deans and rectors are internally elected academics.	Staff mobility across HEIs stimulated by short-term contracts. Increased number of part-time teaching contracts in the college sector. HEI management gradually becoming a career; former deans/rectors may become governing board members/ presidents at other HEIs. Most deans are professors, though no longer always from the same faculty or HEI.
Norway	The academic labour market is internal and characterized by a low level of mobility. Small administration made up of secretaries and support staff.	The academic labour market remains the same in spite of many policy declarations in favour of increasing mobility. Transformation of administration from secretariat support staff to university educated staff in all functional departments.
Switzerland	Mainly internal but, depending on the situation of the HEI on the national market, recruitment can be partly external.	External labour market gains in importance depending upon the prestige of university, and to a larger extend for "ordinary professors" compared to other categories. Generally, faculties or departments local recruitment remains the norm.
UK	Labour market is mainly internal and national. Long established careers inside the sector and not much cross sectoral movement.	Some opening up of the labour market at the most senior level to key personnel from other sectors, countries or with experience of other countries, especially the USA (e.g., new VC at Cambridge).

PROMOTIONS: PERFORMANCE, STATUS AND SENIORITY, REWARDS TO "PUBLIC SERVICE"

	1980s	2000s
France	Important role of seniority even in supposedly merit-based procedure. Union affiliation can also play a role.	Merit-based promotion + networking.
	Salary is fixed according to the same bureaucratic scale in all universities and disciplines.	Some specific rewards for administrative loads, extra teaching and doctoral tutorship.
Germany	Status and seniority play a stronger role than performance. Salary is fixed according to national	The salary system of professors has been changed in 2004. In the new scheme the basic salaries for professors

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	1980s	2000s
	regulation and it is the same for all universities and disciplines.	were decreased. Possibilities to upgrade the basic salaries via good performance have been established but are used incoherently (depending on the money a state or a university can spend). The majority of academic staff has temporary work contracts. The salary scheme of the public sector is still applied to academic staff.
Italy	Status and seniority play a stronger role than performance and rewards to public service, in the frame of ministerial income schedules. Salary is fixed according to national regulation and it is the same for all universities and disciplines.	Marginal changes. Rector's salary can be increased, under Senato's and Consiglio's approvals. Specific rewards for extra-teaching or for administrative loads.
Netherlands	Seniority plays a much stronger role than performance. It determines pay scales and pay rises. Little additional income for taking up the temporary roles of dean or rector.	Salaries are based on nationally agreed scales but performance and market forces influence heavily initial scaling as well as pay rises, depending on institution's HRM which increasingly includes performance aspects. In certain areas/cases, salary additions to compensate for "market demand" are possible. HEI managers may have substantially higher incomes than teaching/research staff.
Norway	Merit based promotions of academics and administrative staff, depending on competitive evaluation of applications to vacant positions. Restricted differentiation and pay set according to a fixed bureaucratic scale, the same everywhere and in all discipline.	Idem, but increasing wage differentiation depending both on market situation and performance evaluation, and promotion to full professor increasingly after nationally organised individual evaluation of qualifications of applicants for promotion.
Switzerland	Promotion depends on status and seniority. Limited salary differentiation.	Idem. FIT develop flexibility to attract high flyers academics.
UK	Seniority plays a very important part in promotions, especially at the middle levels (senior lecturer).	More individually negotiated contracts at professorial level. Senior staff pays tend to be more differentiated and unequal (e.g., VCs). Experiments of performance based pay system are developed. Public service is less important than research performance in promotion.

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THE ACADEMIC PROFESSION

	1980s	2000s
France	Weak professional organizations in HEIs, except in professional fields. Weak trade unions with power resulting from co-management on HR at the Ministry level. Direct relationship between the Ministry and disciplines, through national disciplinary expert groups or influential individual academics acting as advisers on HR and curricula. In research, specific management of HR and accreditation by powerful nationally elected disciplinary commissions based on a mix of union affiliation and scientific reputation.	More relationships between researchers and teachers with the increasing proportion of joint labs since the beginning of the 1990s. Evaluation of research centers, based on indicators and peer review, is transferred to the National evaluation agency (AERES, Research Pact 2006), LRU 2007), while individual researchers evaluation remains in the hand of research organizations. Evaluation of academics is expected to be developed. Evaluation of university departments is created and taken in charge by AERES (LRU 2007). Evaluation of teachers develops within individual universities.
Germany	Strong and influential professional organization of the professors ("Deutscher Hochschullehrerverband"/ DHV) in general. Labour unions don't play a role, other academic staff has no lobby. Strong presentation of academics in public funding agencies (DFG) and advisory bodies (WR). Disciplinary associations are not highly involved in policy making.	The power of the academic elite and the disciplinary associations increases since allocation decisions are more and more based on evaluations and funding shifts from recurrent funding of institutions to temporary and competitive funding of projects, making informed peer review necessary. Newly appointed professors can get object to regular evaluation of their performance since 1998 with parts of their recurrent funding depending on the results of such evaluations.
Italy	Disciplinary professional associations play a prominent role by influencing government decision making. University national council (CUN) is another relevant body representing all the HEIs on a disciplinary basis. CUN has a strong power advising the government for recruitment and curricula. Peer review and trade unions play a minor role.	Professional associations still important. New national representative bodies, especially the university rectors conference (CRUI) as a buffer between the government and universities. CUN composition is enlarged by including non academic members. Peer review, based on national panels, is growing, insuring the visibility of the universities and enlarging their influence on the government. Trade unions influence remains weak.
Netherlands	The Academic Council has lost its integrative power for the academic community. Peers review takes place in national research councils and disciplinary associations.	Disciplinary and professional associations have maintained their positions as forums for the (inter)discipline. Increasing role of external evaluation committees within the VSNU (since

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	1980s	2000s
		2002 no longer VSNU but under aegis of NVAO), with a new role for establishing the committees regarding performance by major research organizations. Increasing role of international publication and academic external visibility in identity building and career.
Norway	Merit based promotions of academics and administrative staff, depending on competitive evaluation of applications to vacant positions. Restricted differentiation and pay set according to a fixed bureaucratic scale, the same everywhere and in all discipline.	Idem, but increasing wage differentiation depending both on market situation and performance evaluation, and promotion to full professor increasingly after nationally organised individual evaluation of qualifications of applicants for promotion.
Switzerland	Academic profession organized in broad disciplinary "academies". They support different disciplines by various means. In universities, major decisions taken by elected bodies that may include a various proportion of academics depending upon the issues.	No change, but peer review becoming more important in career evaluation.
UK	No major influence of professional associations or trade unions. TU must be consulted and may be included in the governance structure of universities. They try to counterweight decisions on restructuring and closures. Major influence of national disciplinary peer review through RAE, with indirect influence of academics as panel members and experts in advisory bodies.	No significant change apart from the erosion of the TU influence and representation. Peer review subject panels continue in RAE. Learned societies influence research policy (RAE review) and also protect their subjects by opposing plans for departmental closures (e.g., chemistry).

INTERNAL ORGANIZATION (DECISION MAKING BODIES, ACADEMIC ORGANIZATION)

	1980s	2000s
France	Defined by Savary act (1984). 3 bodies with large formal largely fictive representation of stakeholders (academics, administrative staff, students, firms) (Board, scientific council, students life council)	Since the 1990s, presidents and VP more often elected as a presidential team that may gain some power of decision. The university bodies may work better. Functional administrative departments expand.

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	1980s	2000s
	+ President elected by the 3 bodies + VP + expanding functional administrative departments. Universities organized in UFR (sort of faculty) mono- or multidisciplinary, small or large, sometimes subdivided in departments, including doctorate, masters and research labs.	LRU Act (2007) increases presidential authority, downsizes and empowers Boards. President as well as most members of Boards remain elected. Scientific council and students' life council are restrained to an advisory role.
Germany	Defined by Federal Framework Law. All leadership positions are elected by and held by academics from the respective university. The rector represents the university as a corporate body of academics while the chancellor – as the head of administration – represents the university as a public service entity. The chancellor is responsible for financial and administrative decisions and is member of the rectorate. The senate represents professors, other academic and technical staff and the students and decides on all major issues of the university. Professors keep a majority in all issues concerning teaching and research. Faculties are organized accordingly, with deans being professors elected by their colleagues.	Boards of Trustees have been introduced in many cases, which work closely with the rectorate/president. The role of the senates has been weakened from decision making to only advisory function. Rectors and deans have been granted more rights to regulate and allocate resources. All 16 state laws have somewhat different regulations in this respect.
Italy	Defined by law. Rector (the head of the university) elected by the university professors. Two government bodies: Senato (the professors' parliament) and Consiglio di amministrazione (board) with formal participation of representatives of stakeholders. Head of the administrative staff appointed by the Ministry. Departments as basic level for research coordination and management (1980).	Partly defined by the University statute (limitations from the national law). Government bodies substantially unchanged, but increasing role of Rectors. Senato includes students' representatives and Consiglio includes external stakeholders, which can influence decision-making. Units for evaluation (NUV-Nuclei di valutazione) introduced in all universities with a support staff. NUV's members appointed by the rector. Head of the administrative staff appointed by the rector and coordinated through a conference (CODAU).

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	1980s	2000s
Netherlands	By law, all universities are divided into faculties, faculties into departments. University Council, with representatives from academics (34%), students (32%) and technical & support staff (32%), controls Governing Board with many decision-making rights (model inspired on local council law). Governing Board consists of rector elected by and from academics, and 2 Ministerially-appointed members (president and vice-president). Similar in faculties: Council elected by staff (academic and technical & support) and students controls dean elected by academic staff.	Top oversight by Ministerially-appointed Board of Trustees (BoT). BoT appoints rector and other members of governing Board. Governing Board appoints deans. Representative bodies at university and faculty levels reduced to advisory powers mostly, as in companies. Seat distribution: staff 50% and students 50%. Institution itself decides on number of faculties and on lower-level units (departments are no longer prescribed).
Norway	Defined by separate laws for each university and specialized university institution and one common legislation for regional colleges. University institutions organized with elected leaders at all levels (rector, dean, department head, and parallel but subordinate administrative positions), and elected governing bodies controlled by the academic staff; The Academic Collegium, faculty councils and department councils. The College sector following partially same pattern, but under stronger regional political influence on institutional board.	Common legislation for the public higher education sector leaves choice of internal organization to institutions. The majority have an elected rectors and appointed academic leaders at lower levels. All major stakeholders, academic and administrative staff, students and external representatives are represented on institutional boards, but no single group have a majority.
Switzerland	Internal organization defined by cantonal university laws. Universities councils' compositions vary according to HEIs. Nominated rectors/presidents and bodies (commissions representing academics, administrative staff, students, firms). By comparison the FIT have a more powerful direction. But in both cases, participatory procedure exists.	In the last years, the cantonal authorities give more power to the direction to manage the academic life.

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	1980s	2000s
UK	No law. Each university's governance is specified in the Charter and Statutes held from the Privy Council. Typically there is a non executive Council, a VC and senior management team, faculties and departments. Vice chancellors appointed by Council and not elected.	No major shifts. Appointments rather than elections of senior management staff continue. Some attempts to increase the strategic role of Councils and to develop senior level leadership (via the new Leadership Foundation in HE).

ORGANIZATION OF TEACHING AND RESEARCH

	1980s	2000s
France	Decisions on curricula at the department level, very rarely filtrated by the university level, examined by the academic experts of the Ministry. Ministry makes final accreditation. National programmes and individual decisions are the main drivers on research priorities.	No change at college level. The so-called UFRs (Unité de Formation et de Recherche, usually grouping several disciplinary entities) restricted to teaching missions. Masters still belong to UFRs, but are based on research centres. Autonomy of doctoral education from UFR. It is organized in doctoral schools based on research centres consortia outside UFR. University bodies act as gatekeepers of the ministry on curricula and recruitment by UFRs and DSs. Rationalization and harmonization of research priorities at the level of universities within the four-year contracts.
Germany	Teaching hours are regulated by Federal Framework Law. Research is not regulated within universities and left to the individual decision making of researchers. Decisions on curricula are taken on institute and faculty level and have to be approved by the state ministry. Doctorates are usually organized as an individual master-apprentice-relationship.	Teaching hours were increased by Federal Framework Law in 1998. Research is still not strictly regulated within universities but object to target agreements and research output of newly appointed professors can be evaluated. Many universities give their researchers incentives to develop proposals for large collaborative research grants from the EU or the DFG. The "excellence initiative" too turned research in many universities and disciplines from an individual to a collective venture. Doctorates are transformed from individual to collective in graduate or doctoral schools including regular study courses on doctoral level.

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	1980s	2000s
Italy	Curricula accreditation by Ministry based on CUN advices. Little differentiation between universities due to the lack of organizational autonomy. Teaching organized within faculty. Professors free to determine their own agenda, set priorities and manage. Low implementation of departments within the university system. Doctorates as first level of the research career (1980).	Universities gain substantial autonomy. Faculties remain the teaching management level, defining curricula under a set of minimum accreditation requirements defined by the ministry, based on CNVSU recommendations checking for teaching coverage. Incentives for creation of doctoral school (with autonomous management, co-ordination of courses, interdisciplinary studies), which should progressively replace doctoral courses. High degree of individual freedom in research, but expanding departments (co-funding projects and purchasing equipment), co-funding European project by executive organs of the university, external providers (firms, public or local bodies).
Netherlands	Universities organized into faculties and departments (disciplinary fields and subfields) with much autonomy regarding teaching and research. Not much direction at university level. Autonomous decisions on curriculum change in existing programmes by its professors. Establishment of new programmes under control of a national academic council, checking academic level. Research is the professor's prerogative.	Organisational autonomy of HEI. Faculties/schools organise education (bachelor + master + Ph.D.). Faculties and lower-level units tend to remain defined by disciplines, but less strictly so than until 1980s. In a few universities, institution-wide 'colleges' exist for broad liberal arts bachelor programmes aimed at internationally-recruited top students. Curriculum design is in the hands of middle managers (programme directors, deans). Less national control over new curricula but regular checks through NVAO's accreditation, controlled by academics. Doctoral schools, organised nationally since 1990s, mostly disintegrated to Ph.D. training in faculties. Research programming in the hands of middle managers (scientific directors of institutes, deans). Growth of research institutes as separate units inside/across faculties; many different organisational models exist as this is institution's autonomy.

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	1980s	2000s
Norway	Universities and some colleges organized teaching and research in faculties and departments as tenured academic staff is supposed to devote equally much time to teaching and research. Departments predominantly disciplinary in the sciences, humanities and social sciences, although some were pluri-disciplinary and divided into disciplinary subsections. Decisions on curricula made by departments, to be finally approved by the Ministry. Research priorities are tied to ministerial research programs and national programs under the research councils. Research centres started to emerge partly alongside departments within universities and partly as separate organizational entities owned by universities partly funded by publicly funded research programs, partly by commissioned research.	Same organisational structure. But tendency to merge disciplinary departments into larger multidisciplinary departments (1990–2003). Responsibility for teaching programs moved to program boards where several disciplines and departments may cooperate (2003). Faculties or institutions decide on curricula and must be approved in some cases by the ministry. Doctoral schools organizing within faculties. Approval from ministry now needed for master and doctoral studies offered by institutions that are not yet accredited as universities. An institution need to have minimum five master programs and four doctoral programs in order to qualify for accreditation which is carried out by NOKUT (2005). Tendency to organize in thematic research groups (2003), within or across disciplines. Many research centres established for externally funded research often organised within larger research organisations owned by universities. Research priorities are made at several levels (EU, national government, individual ministries, research councils, HEI).
Switzerland	Universities organized at the faculty and/or department level. Not many prerogatives at the direction of universities level. Decisions on teaching activities often taken in commissions at the faculty and/or department level. However, decisions on curricula are managed by the HEI except for medicine. Generally, prevalence of the principle of the unit of teaching and research. Organization of research based on chairs in social and human sciences, on research teams in natural sciences. No national research priorities, but the historical distinction between Federal Institutes of Technology and universities applies.	Introduction in most universities of the Bologna rules, which intervene on the curricula, the duration of the degree, the exams, etc. Mostly, universities can prioritize research by themselves. However, they are also determined by local, national and international contexts, including the funding possibilities. Department, faculty commission and the HERI direction set more and more research priorities, while professors' freedom regresses.

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	1980s	2000s
UK	Faculties and departments as internal levels of teaching and research organisation. Below "subject groups" may organise teaching and some research centres. No formal Doctoral School. Few research 'labs' located outside university structures. Decisions on curricula are in the hands of professors, and typically are agreed by internal university teaching committees, with advice from external academics. Vocational degrees may also be accredited by outside bodies. Research priorities determined at individual level. Research councils influenced the choices through call for proposals.	Some faculties and departments have moved to a single intermediate layer – the school –bringing together departments in a multidisciplinary arena. No major change for decisions on curricula. Internal university pressures to remove low enrolment courses and to secure less fragmentation of teaching arrangements. Formal doctoral schools located within university structures. Individual academics remain important to determine research priorities. But under pressure of RAE toward a more strategic management of research priorities, growth of large multi disciplinary collaborations and collective research centres.

UNIVERSITY LEADERS AND MANAGERS

	1980s	2000s
France	Heads of university and faculties are academics accepting the job with no counterpart as a temporary and usually additional occupation (presidents owe half of a professor's teaching obligation). Weak leadership based on consensus building, in spite of the university reorganizations (1968, 1984): national steering schemes and tools focus on disciplines rather than universities; unclear jurisdiction divide between presidents and university bodies; very narrow corridors of action for university leaders. Senior administrative staff selected by the university among candidates on a national list. Contrast with appointed public GE directors with real authority. Very small and weak management level, strong role played by academics in management.	No change in statutes. Leaders still elected academics. Authority of presidents increases strongly with LRU (2007). Leadership gains recognition, from the president to faculty directors (reduction of teaching load and financial rewards). Recognition of the university leadership and rising coordination between presidents as political actors and managers through their national Conference (CPU). Development and diversification of professional management by administrative staffs, by training and coordination by professional associations.

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	1980s	2000s
Germany	All leadership positions are elected by and held by academics from the respective university. The rector represents the university as a corporate body of academics while the chancellor – as the head of administration – represents the university as a public service entity. The chancellor is responsible for financial and administrative decisions and is member of the rectorate. Deans are elected among their peers in the faculties. Members of the rectorate and deans usually serve for 4 years and then return to their chairs. Accordingly their leadership remains weak and is focused on consent decision making. Line item budgeting and state approval of recruitment decisions leave no leeway for autonomous decisions.	In many cases presidents and rectors can now be appointed from outside the university and must not necessarily have the status as a full professor (although most of them still are members of the academic profession). The tandem of rectorate and board of trustees is principally in many states and universities empowered to take top down decisions without the consent of collegial bodies. However, they usually don't act that way. With the change from line item- to lump sum budgeting rectors/presidents and deans have more leeway for decisions concerning structures and resource allocation. Recruitment policy is now a task where rectorates, trustees and deans are heavily involved.
Italy	Rector and most members of governing bodies (Senato accademico, Consiglio) elected by professors. Weak leadership based on consensus building. Management level very small and weak, strong role played by academics in management. The head of the administrative staff is a bureaucrat appointed by the Ministry, and has a dominant position as compared to the rector. He handles relationships to ministry, while the rector links to the political arena.	Same situation. But the rector's power has significantly increased in some cases, mainly through the use of steering tools (new governance arrangements, evaluation practices, funding rules). The rector links to the political arena, with the help of the CRUI. Head of the administrative staff appointed by the rector, who has lost his power to link with the ministry but increased their internal managerial power. Coordination through a conference (CODAU). Creation of foundations in some universities to improve education and research by catching new resources, improve management and facilitate interactions with external actors.
Netherlands	The elected rector works in close connection with the M. of education. No effective collective actor like Conference of rectors at the national level.	A new vertical system based on appointment replaces the old representative system. Board of Trustees appoints the rector and other members of the governing board, which in turn appoints the deans and other

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	1980s	2000s
	Senior administrative staff selected by the university.	academic managers. Tendency towards stronger rectors and presidents. Increasing importance of the central management. Administrative staff: no major change. Universities have developed an association (VSNU), active in quality assessment (teaching: 1988–2002; research: 1993-now), HRM (1997-now), and lobbying. Governmental steering moves towards more competition and institutional mission diversification. State has few ex ante control but increases ex post control. The number of stakeholders increases.
Norway	Shared leadership and elected leaders. University rectors are institutional integrators lending academic legitimacy to university decisions. Directors generally handle relationship to ministry and politicians. Elected decision making bodies embed most levels of academic staff, administrative staff, and students.	Strengthening of internal decision-making hierarchy by introduction of appointed leaders at faculty and department level, replacement of elected decision making bodies by advisory boards (2005). Partial decentralization of authority at the department level and strengthening of department leadership. Gradual transition from ex ante to ex post control. Gradual devolution of authority to the institutions.
Switzerland	Rectors are appointed with limited leadership except for the FIT presidents. Elected commissions embed most levels of academic and administrative staff and students. Two agencies in charge of coordination; the conference of Swiss universities (gathering public authorities at all levels) and the conference of rectors of the Swiss universities and FIT.	The Swiss Confederation encourages reinforcing steering by tools set by various public authorities in charge of HE. Some rectors gain power of managing budgets. Acting as buffers between deans and public authorities, they may reinforce the university as an organization.
UK	University leadership shared by non executive council, vice chancellor, senior management team and (academic) Senate. Sometimes successful attempts of the government to increase managerial role of vice chancellor (on a CEO type model) by adopting a more private sector orientation in management.	Shift from election to appointment at senior posts. Power shift upwards from rank and file academics and senate to VC and senior management teams, at various degrees across universities. Strong VCs rather common.

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	1980s	2000s
	Administrative staff are selected by the university and headed by a registrar. Parallel hierarchy to the academic domain. They maintain a facilitative rather than directing role.	Heading departments becomes more demanding. Administrative staff: no major change. National agencies are set up in order to improve HE leadership capabilities (Leadership foundation for HE).

NARRATIVE AND IDEOLOGY CARRIERS

Reformist Policy Doctrines/Narratives

	1980s	2000s
France	The 1984 act aims at democratizing the university governing structure. Failure to annihilate this reform by reinforcing the power of professors. No governance narrative outside traditional free welfare good and democratic ideology ("liberté, égalité, fraternité") but emergence of the notion of assessment (with the CNE for instance, the research contracts, etc.) without explicit (and little implicit) implications in terms of funding.	Reforms are led but they are not inspired by the NPM or governance rhetoric until the mid 2000s. Yet, new concepts such as performance, evaluation, assessment, and third mission shape the policy doctrine. Need of autonomy claimed as necessary for flexibility and reactivity in front of new requirements of knowledge society, based on transfer of micromanagement of individual universities, new organisational opportunities, mostly by networking in PRES or RTRA, and increased opportunities of industry–research cooperation (Pôles de compétitivité, institutes Carnot).
Germany	The dominant idea of the German university is teaching and research in "Solitude and Freedom" which means a strong self-governance of universities by the academic oligarchy under the supervision of and financial support by the state. With the latter not intervening in questions concerning teaching and research. However, the political call for "relevance" of teaching and research gets louder in the 80s.	Since the reform of the Federal Framework Law on HE in 1998 all reform attempts operate under the key word "more autonomy". The NPM narrative is implicitly hidden in the political call for universities autonomy or "the unchaining of the university" but not explicitly used because of the strong resistance it provokes among the majority of professors.
Italy	No consistent narrative on HE reform, neither relevant experiences. Autonomy of Universities is the major objective to be achieved. Governance is not the core of the debate, which remains ideological and bounded to the continental model of HE.	Principles of NPM governance gain a prominent position (end of 90s). They impact policy practice through measures aimed toward modernization, using funding and evaluation as main instruments.

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	1980s	2000s
Netherlands	Expansion toward mass higher education is the main axiom. Democracy (a la 1960s) is the main ideology until early 1980s. The government introduces the concept of "steering from a distance" (1985), in which the principles of regulation, planning mechanisms, government coordination, were meant to be replaced by a philosophy of a government confined to setting boundaries and strategic dialogue between minister and HEIs, with evaluation of performance as major feedback mechanism.	Self-regulation diminished in favour of "good governance". Shift of attention from vertical relationship (state–HEI) to horizontal accountability (to social stakeholders). "Entrepreneurialism" and "consumerism" become important metaphors in the 1990s, in the frame of neoliberal ideology. Ambiguity/conflicting political values: equity of access, HE as a public good (uniform fees), autonomy of HEI as non-profit enterprises, vs. HE as a private good for students, HE as a private good on a global market for services, state's interest in macro-economic growth.
Norway	Policies defined regarding perceived national labour market needs. Focus on educational efficiency, vocationally oriented teaching program and applied research. Federal government and administrative bodies are considered as coordinators of national policy.	The role of the government remains unchallenged. But rhetoric shift from HE as a welfare good to some efficiency concerns, connected with the emphasis on HE&R as economic growth factor and as political tools for internationalization and globalization. In line with: introduction of activity planning in 1989; use of European frameworks as crucial justification for the debated 2002 Quality Reform; university and college act (2005) giving more autonomy to institutions; strengthening of external representation on institution boards but markets or third sector not emphasized. "Competition and Cooperation" becomes the leit-motif.
UK	Era of Thatcherism. Policy narrative dominated by NPM but with a lower direct control than in other public sectors. Principles of value for money, efficiency and productivity are stressed. In 1989 an attempt to introduce quasi market in HE fails. Universities are still publicly funded. UGC control over funding allocation is enforced though the RAE. Senior management is empowered and local participation to the HE government removed (reform of Polytechnics)	Era of New Labour. NPM moves towards a more hybrid governance model. Key aspects of the Thatcherian period are reinforced (RAE, QAA and top up student fees). Participation of civil society and social inclusion are now pursued. In the second period of the New Labour the government NPM rhetoric is revitalised but modernisation tends to be paired with new concepts on diversity and choice (student satisfaction surveys, audit systems, inter HEI networking).

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	1980s	2000s
		New emphasis on university cooperation rather than competition. Subnational government levels tend to diversify HE policies. A certain policy orientation toward enhancing democratic participation.

NARRATIVES BEARERS

	1980s	2000s
France	Strong political role of the Ministry and the central level Reformist politicians and academics play a role of advisors at the ministry level. The long lasting rhetoric of crisis of French universities is reactivated in the media with a large contribution of intellectuals.	Apart from politicians and academics, new institutions and collective actors play a role as reform vectors at national level (CPU, the ministry of finance) and international level (EU, OECD).
Germany	Strong consent of academics and politicians on the freedom of teaching and research and about public funding with no strings attached. This consent breaks up by the middle of the eighties but could be renewed through the circumstances of the German unification, where the old system was completely transferred to and established in East Germany. The massification of university education started to become a big issue in the 1980s, forcing the federal ministry to intervene with succeeding temporary programs.	Although universities are financed and under the jurisdiction of the states the Federal ministry of education and research has played the part of a major promoter of reforms, using the possibilities of framework legislation (until recently), project and program funding, the Bologna Process, salary issues and last but not least the "excellence initiative". Some states like Lower Saxony, Baden-Württemberg and recently Northrhine-Westphalia play the role of forerunners with regard to innovative HE legislation. The Wissenschaftsrat (WR) – an intermediary advisory body – gives reports and policy advice to shape the HE-agenda. Civil society actors – usually foundations supported by influential industrial or commercial organizations – were successful lobbyists, agenda setters and resource providers for NPM-like reforms in the HE-systems. Such foundations are: The "Centrum fuer Hochschulentwicklung" (CHE), the "Volkswagen-Stiftung" and the "Stifterverband für die Deutsche Wissenschaft".

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	1980s	2000s
Italy	The Ministry shapes the reform design of 1980. Academics influence narratives and ideologies as well as politicians, in particular the Advisory Disciplinary Committees within CNR, and CUN.	The Bologna process promotes HE reform. Implementation by the Ministry, with the help of CUN, CRUI, Cultural Commissions of the Parliament, CNR and other major public research agencies, and additional information provided by CNVSU. The role of academics is still very important: they are prestigious consultant, chief of institutional bodies and counterpart in the debate. The minister is often a professor.
Netherlands	Important role of Intelligentsia after 1968, slow decline after 1977. Reform-oriented politicians (Labour Party) mix with intelligentsia. Early 80s: a minister of education and a senior civil servant shake up higher education and begin major top-down reforms.	At national level, the ministry steers reform, following neo-liberal/neo-conservative main lines. Parliament is open to lobbying by national student unions and HEI lobbying clubs, and has a general control-oriented outlook. Individual academics open major new avenues (university leaders). HEI managers influence institution's profile.
Norway	Politicians, officials at the National directorate for civil service organizational development, university administrators. Academics, national level media.	Politicians, unions and academics in the press and in books. Rectors, individually and collectively have become important players. National level media.
Switzerland	Politicians and administrators at Federal level.	Funding agencies such as FNS contributed to the production of such kind of discourse, especially in terms of network and accountability. But also the state secretary for adaptation to the European scheme. Besides them, politicians and administrators at federal and cantonal levels. Experts in HER policy studies.
UK	No clear division of tasks between different levels of power. Attempts of the central department to influence all the spending departments (including education). At the local level the role of VCs is relevant. Closed policy networks and guru play an important role.	The Third Way ideology does not clarify who is in charge to down the policy narratives to specific HE reforming. Key thinkers contribute to stress concepts such as "knowledge based economy". VCs remain important for reform implementation at local level.

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MAJOR QUESTIONS ON THE AGENDA

	1980s	2000s
France	Mainly on organization statutes, massification and integration of human resources in the civil service.	Interdependency of all dimensions of universities on performance (missions, funding, organization, human resources, control). Ability of presidential teams to sustain individual university autonomy. Relationship between research organizations and universities.
Germany	Massification of university education. Missing relevance of university curricula and research for economical purposes.	Enrolment rates should be further increased to international level. Funding gets more dependent on performance, measured in quantitative indicators. Regional overcapacities in certain disciplines and institutes with low student demand are reduced. Increasing efforts in internationalization. Emphasis on "excellence" in research and increasing importance of third party funding. Trend towards the rewarding of big, collaborative research projects. Introduction of efficient and effective management and governance-structures in universities.
Italy	Need to increase the system capability to face massification and increase external resources.	Problems of self-financing. Capabilities of universities to promote economic development. Strong attention to the productivity of the system, both quantitative (graduates number, CFU, students) and qualitative (research evaluation, VTR). Rising attention to third mission.
Netherlands	Need to increase the system capability to face massification and increase external resources. In the 80s, discussion on merger policy, quality assessment in return for institutional autonomy, governmental budget cuts.	In the 1990s: institutional management, diversification of institutional missions. In the 2000s: Bologna process/ adaptation to European standards and – increasingly important – Lisbon strategy.
Norway	Resources and funding. From the late 80's, on the steering organization. Activity planning and department mergers.	Emphasis on efficiency, organization, funding models and internationalization.
Switzerland	Site concentration, task sharing, and role of the Confederation. Nothing done in practice.	The principle of competition and cooperation.

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	1980s	2000s
UK	Use of funding by HEFCE as a basic instrument to drive university behaviour. Emphasis on management, efficiency and value for money.	Still strong efficiency and performance orientation. New stress on getting more resource into the system, HR development and the need to better the leadership capability of universities. Access and knowledge transfer also become more important policy goals.

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Author Index

Subject Index