INSTITUTIONAL DIVERSITY IN EUROPEAN HIGHER EDUCATION

Tensions and challenges for policy makers and institutional leaders

by Sybille Reichert

EUA
European University Association

For ordering information, please contact publications@eua.be or write to:
European University Association asbl
Rue d'Egmont 13
1000 Brussels, Belgium
Tel +32 - 2 230 55 44
Fax +32 - 2 230 57 51

A free electronic version of this publication is available through www.eua.be

ISBN: 9789078997153

INSTITUTIONAL DIVERSITY IN EUROPEAN HIGHER EDUCATION

Tensions and challenges for policy makers and institutional leaders

by Sybille Reichert

Content

Foreword

The issue of institutional diversity has moved to the centre of policy discussions in Europe with such questions as how to ensure the competitiveness of knowledge-based societies and respond to the diversity of students' and stakeholders' demands and needs. Institutional diversity is seen as a positive goal; yet, when no parity of esteem exists across institutional types, institutional drift and mission overload set in.

This study, commissioned by EUA, compares institutional diversity in five higher education systems – in England, France, Norway, Slovakia and Switzerland – and seeks to understand, empirically, the complex interplay of factors (legal frameworks, funding incentives, QA procedures, etc.) that drive diversification or convergence, at both the system and the institutional level. In addition, one of the main values of this study, as compared to the existing literature on the subject, lies in its examination of the attitudes held and norms followed by a wide range of actors (policymakers, institutional leaders, academics, external stakeholders, etc.) regarding the issue of diversity.

This multidimensional, empirical approach results in conclusions that undermine accepted ideas, particularly regarding the concepts of social elite, excellence and autonomy in higher education, and should be of use to institutional leaders and policy makers.

The study shows that understanding and measuring institutional diversity cannot be achieved by looking simply at the number of institutions of different profiles and orientations within a system. It needs to take into account the complex reality of institutional responses and the internal mix of their institutional missions. Systems that impose a typology of institutions and missions are not necessarily more or less effective than those that allow institutions to develop their own mission mixes.

The study reveals that the opposition of binary and non-binary (or "post-binary") integrated higher education systems is often exaggerated. Depending on the mix of regulatory, financial and reward instruments, as well as the norms which underpin or undermine them, binary systems may be less rigid than non-binary or "post-binary" integrated systems. Neither one is necessarily a more adapted response to diversity of needs, or seems more effective in widening access.

The study also challenges accepted ideas about elite and access to higher education. In a sense, higher education seems to have difficulties with the idea, definition and support of social elites. It is "caught in the tension between the need to widen and broaden access and the requirement of some elite forms of provision". While genuine meritocracy, equity and social justice are professed policy goals, the need to produce elites in some form seems to be usually met "obliquely rather than explicitly, with differentiated, often separate higher education provisions". Thus, opportunities are lost to redefine the elite in more socially just and acceptable ways, and to implement effective measures to develop social mobility further.

The issue of funding is shown to be even more important than that of autonomy. Parity of esteem among different institutional types or missions can only be possible if a variety of funding incentives are available and if there is significant funding to support the expanded functions. Thus, assumptions that increased autonomy, market forces and inter-institutional competition will increase institutional diversity are simplistic. Systems in which institutional types and mission diversity are regulated by law should not be perceived as lacking institutional autonomy, provided the reward system is sufficiently differentiated to allow institutions to develop a variety of niches.

EUA will continue to work on these important issues, which are at the core of current policy debates in Europe, and in the context of EUA's broader work on governance, autonomy and funding.

Lesley Wilson
Secretary General

Acknowledgements

After more than one and a half years of work on this project, its completion seems as yet somewhat unreal. There were times when it seemed there was too much detail to be taken into account to ever rise again from the depths of complexity to the surface of overarching observations and conclusions. That the study rose to some form of coherence and turned out to be a stimulating and rewarding experience after all, at least for the author, and hopefully a helpful study for the reader, owes a great deal to the support, reflections and encouragement of a few key people:

The project was accompanied by a great team of European higher education experts who were responsible for the site visits to the five countries. The team was particularly helpful because it combined experienced internationally-versed higher education researchers, such as Pedro Teixeira and Lazar Vlasceanu, and higher education policy experts with international experience, namely Lars Ekholm and Jacqueline Smith, as well as experts from the national rectors conferences of the countries included in this comparative study, namely Maria Cikesova of the Slovak Rectors Conference, Oyvind Nystol of the Norwegian Higher Education Association, Harald Schraeder of the French CPU, Mathias Stauffacher of the Swiss CRUS, and Greg Wade of Universities UK. The multiple perspectives of this team proved to be invaluable for helping to tackle the complexity of the five national systems, for identifying key issues, debates, and tensions in the respective countries, for organising and conducting the site visits with its five-day marathon of 30 or more interviews, and as a sounding board for the overarching analysis and conclusions. EUA's and my own deep thanks go to them for their commitment, comments, reflections and dedication to this study. It is a pity such a team cannot last beyond the duration of this project!

In the last few months of refining, rewriting and editing the text of this study, tucked away on the other side of the Atlantic, I was fortunate to have had Andrée Sursock as my partner in crime. With her overview and sensitivity to the complexities of higher education systems and institutions, her clear mind and merciless eye for weak points in any text or argument, she was the most relentless, perfectionist, challenging and supportive reader and critic that I could imagine during that difficult final stretch. I do not regret any unforeseen labours invested in response to her comments and could not be more grateful for that dialogue.

Last but not least, I would like to thank Lesley Wilson, for supporting this difficult undertaking from the very beginning – a rare example of someone who lives and thrives in a world of institutional diversity every day and can cheerfully make sense of complexity without diminishing its importance.

Sybille Reichert, September 2009

Chapter 1:

Institutional Diversity in Higher Education – Aims of the Study in Light of Key Concepts and Previous Research

Institutional diversity or differentiation is one of the most intensely debated topics of higher education policy and research. In Europe, these debates tend to focus on the diversity of institutional profiles and their capacity to address diverse needs and societal demands, which usually are associated with the expansion and massification of higher education (Trow, 1979)[1], and the increasingly diverse profiles, competences, and qualifications of students. Institutional diversity is becoming more central to higher education policy as higher education institutions are moving to the centre stage of political and public attention, with the expectation that they should fulfil a wide range of demands linked to the emergence of knowledge societies. New roles and tasks have developed that go well beyond the traditional functions of teaching and research. In addition to widening access in order to produce a greater pool of qualified workers for the knowledge economy, business innovation, knowledge transfer and continuing professional development have become increasingly important dimensions of higher education activities.

The combination of these diverse needs leads, in many cases, to institutional resources being spread thinly over a wide range of missions. Indeed, such mission spread may become "mission stretch" (Scott 2007) or even "mission overload" that may be threatening institutional coherence, integrity and efficiency. Hence, in competing for limited resources with other institutions, and in responding to their key stakeholders and to their own norms and values, institutions (or units within them) feel pressurised to prioritise some dimensions over others, i.e. those dimensions which they feel will most easily provide access to resources and rewards. The resulting institutional orientations and profiles will reflect the diversity (or homogeneity) of the environment and its influencing forces.

These influences may derive from the practices and developments of science and scholarship itself, i.e. the demands of disciplinary and labour market specialisation and differentiation (Clark 1983, 1996). They may also derive from state regulation and funding sources and instruments or from the reward structures within higher education systems. While these intentional instruments of government regulation, funding and quality monitoring act as incentives for the behaviour of institutions and their constituent actors, less conscious, implicit values and attitudes may also exert powerful influences on the behaviour of individual teachers, researchers, or institutional leaders, and thus on overall institutional behaviour, as well as on national policy-makers and their choices. As often observed by higher education researchers, institutional diversity will thrive only if both the system of regulation and funding as well as the values which underpin institutional development do not favour a particular profile or particular dimensions of institutional activity over others. These values encompass academic values and the values of the society at large.

That institutional diversity may need help from policies and incentives has been observed by many higher education representatives and higher education researchers. Hence national policy-makers, institutional leaders and managers and their stakeholders increasingly ask themselves how to promote institutional diversity. This issue has become more pressing in the rougher winds of international competition which raises its own diversity-related question: given the high costs of internationally competitive research, the question is often associated with the systemic conditions needed to allow for the emergence of a few internationally oriented research-intensive universities. The high expenditures needed

[1] Trow observes that the emerging mass systems address the continuing need for elite functions through the creation of new institutions or units which are not primarily oriented at mass access, thus leading to increasing diversity within higher education systems.

to sustain such universities seem to demand some concentration of resources. At the same time, however, policy makers and institutional representatives raise the concern that other dimensions of higher education must be attended to urgently, such as the need to educate and train qualified and adaptable workers in an ever more diverse range of areas and to develop continuously the skills and knowledge of already qualified workers, or the need for higher education and research to fuel the innovative capacity of business. How, then, can national higher education systems and institutions answer such diversity of demands, while still responding to an increasingly interconnected world in which nations, institutions and individuals compete internationally for higher education resources? What kinds of incentives should higher education systems and individual institutions provide for these diverse needs and functions? Should they promote more differentiation of institutional profiles, in terms of functional emphases or missions, or subject areas specialisation? And how can they ensure that all the necessary functions are still attended to, if some profiles receive higher public recognition and are more highly esteemed than others, resulting in emulation by others and mission drift?

1. Introduction to the Study: Aims, Research Design and Structure

1.1 Focus and Aims of the Study

This comparative international study, commissioned by the European University Association (EUA), lies at the core of these questions. Against the background of a wide body of literature on institutional diversity in higher education, it focuses on institutional diversity in five different higher education systems in Europe – England, France, Norway, Slovakia and Switzerland – in an attempt to shed some empirical light on the complexity of forces that influence institutional diversity.

While the research literature on the topic of institutional diversity has been primarily preoccupied with theories and historical accounts of diversification across institutional types, little empirical attention has been paid to the complexity and interplay of the factors which drive diversification or convergence at different levels of higher education systems. Focussing on the values attached to different aspects of diversity by different groups and the instruments used to promote them, this study addresses the question of institutional diversity not only at system level – as the diversity of institutional types and profiles and the influences which shape them – but, unlike other studies, also at institutional level. Indeed, the values that institutions attach to diversity or convergence may differ significantly from those prioritised at national level. Moreover, the policies and methods chosen at system or institutional level to foster diversity or convergence with respect to different aspects of higher education provision are not necessarily commensurate or complementary. Thus, this study combines a focus on the system level with a focus on institutional level policies, conditions and attitudes in order to identify divergent emphases on diversity and to untangle mutually reinforcing or conflicting forces between institutional and system levels. Thus institutional diversity will be studied both as external diversity – i.e., the diversity of orientation and profile that exists between institutions – and as internal diversity – i.e., the diversity or orientation and profile that exists between different components or groups within the same institution.

The combination of external diversity (between institutions) and internal diversity (within institutions) as foci of this study sheds more light on the nature of the challenges that institutions face internally to address different aspects of diversity, both in their reactions to national policies and implementation instruments and in so far as their own diversity or convergence priorities are concerned.

Hence, in an attempt to do justice to the empirical complexity of institutional diversity, the study aims to:

- Identify the different values attached to different aspects of diversity (mission and institutional profile, outputs, student profile, staff profile, disciplines and programmes) at different levels in the system, and to understand how the different values attributed to institutional diversity shape the public HE policy debate in the five countries. Consequently, rather than taking diversity as an inherent good or normative value, this study does not take the value of diversity as a given but makes such values of diversity themselves an object of inquiry.
- Shed light on the relation between "external diversity" (diversity between institutions) and "internal diversity" (diversity within institutions) and raise awareness of the different degrees of external and internal diversity of HE activities along different dimensions of their missions.
- Gain a more differentiated understanding of the complex ways in which institutional diversity is

fostered or undermined and, in particular, the ways in which the different influences interrelate or may even be in conflict with one another with respect to their effects on institutional diversity. Such influencing factors include institutional definitions in laws and regulations, funding streams, criteria for institutional or external funding, accreditation criteria, human resource policies, staff recruitment and promotion policies, student selection, and national and institutional reward structures.

- Raise awareness of the intended and unintended mainstreaming effects which many national, regional or institutional framework conditions may cause, comparing rhetoric of diversification with the realities of implementation.
- Compare expectations and reality behind the call for "parity of esteem" of different institutional missions against trends of vertical (hierarchical) differentiation.
- Identify good practice with respect to fostering institutional diversity between or within institutions (or with respect to differentiating between intended and unintended diversity).

1.2 The Structure of the Report

The report is structured in three parts. A first part serves as an introduction to the research design, key concepts and research questions, as derived or distinct from previous research literature. A second part consists of the five country case studies. It discusses in detail the values attached to institutional diversity at system and institutional levels and the drivers of diversification and convergence that shape institutional profiles in these national contexts. The third part takes up the questions of the introduction and attempts to derive answers from the empirical data offered by the country studies, taking the findings to a more general discussion of the values and drivers of diversification or convergence, their interplay and the key challenges and open questions which remain for policy makers, institutional leaders, and higher education researchers.

1.3 Research Design

This study will identify the values attached to institutional diversity at different levels within different national systems as well as examine empirically the forces at work which drive diversification (or convergence), in the context of the hypotheses that have been put forward by the abundant research literature on institutional diversity. The drivers of diversification that have been identified in previous research literature on the subject (see 1.5) are taken as points of departure for the research design in this empirical study of different approaches to diversity in case studies of five European countries. The choice of England (i.e. not the whole UK), France, Norway, Slovakia, and Switzerland, as case studies, aimed to achieve not only a geographical spread across Europe but also a mix between smaller and larger, as well as unified or binary HE systems.

In order to be able to study the full effect of all forces, the case studies only look at public institutions which are subject to the whole array of governmental regulations and funding instruments. This limitation is justifiable since the private sector constitutes less than 5 % of student enrolment in four of the five countries and less than 10 % in France.

Three sets of data are used to illuminate the different approaches to diversity in higher education at national and institutional levels in the five different national contexts:

1. Background data on laws, regulations, funding sources, accreditation and quality assurance standards and criteria, as well as major higher education policy documents in the five countries, and strategic documents of the HEIs which were visited in the five countries.

2. A survey of institutional approaches to diversity was conducted via an on-line questionnaire. All institutions (university and other higher education institutions) in the country were invited by their national rectors' conferences to fill in this user-friendly ("tickable") questionnaire. The questionnaire was designed to capture the views of rectors and central institutional leadership, and was filled in predominantly either by rectors or their immediate advisers, after consultation with the latter. The return-rate was excellent to satisfactory in four countries (covering 33%-70% of public HEIs in these countries) so that for these countries a representative sense of the values and instruments used to promote diversity or convergence in higher education could be obtained. Only in France did a low return-rate result in a less representative sample, although the spread among the return sample covers all types of institutions to be found in the country so that the data can be qualified as moderately representative. In the chapter on France, the references to the questionnaire results have thus been formulated more cautiously. For all countries, an overview of the questionnaire results as well as of the divergences from the average across all five countries was produced by the author.

The survey questions addressed a wide range of dimensions of institutional diversity, including diversity with respect to explicit and implicit missions, functional diversity relating to the relative emphasis on teaching, research, innovation, continuing education and other services, student profile (socio-economic, ethnic, international, gender, religious, full-time and part-time learners), staff profile (especially functional differentiation of staff positions), institutional target groups, governance structures, subject and programme range, funding sources, internal reward structures and quality assurance criteria.

To pursue these questions in greater depth, an extended, more detailed, version of this questionnaire (including many open questions) was also used as a guideline for the interviews at institutions (see 3. below).

3. The most important source of data, the backbone of the study, derived from more than 100 semi-structured interviews held during 5-6 day site visits in each of the five countries. These interviews were conducted by five teams of two experts each, supported by a representative of the national rectors' conference. The latter helped to identify relevant material, select sufficiently diverse types of institutions, and organised the visits and interview schedules. Each expert team consisted of one higher education researcher and one international HE policy expert to allow for complementary perspectives on the subject. To ensure a comparative sense of the findings, most experts conducted two visits (for practical reasons one expert conducted only one, which was compensated by the author of the study conducting three visits). The team met first for an introductory seminar to develop a common approach.

   The site visits comprised 3-4 days of interviews with different groups within different kinds of higher education institutions, followed by two days of interviews with various national level agencies. These were semi-structured interviews, i.e. following common guidelines but adapted to the conversation and background of the interviewee. Different questionnaires were developed for interviews with the following groups:

   - Rectors' conference(s),
   - National funding agencies,
   - Relevant ministries (those directly responsible for higher education, as well as others which provide substantial funding for HEI),
   - Accreditation and/or quality assurance agency,
   - Relevant coordinating bodies or representative HE groups.

   The interviews at higher education institutions usually comprised interviews with the following groups:

   - Institutional leadership (rectors and vice-rectors),
   - Chief financial officer or functional equivalent,
   - Quality coordinator,
   - Heads of technology transfer, continuing education service, career service,
   - Dean and academics at one faculty,
   - Dean and academics at another faculty,
   - Postdocs and mid-level academic staff.

For each team, one team member produced a report of the key findings, following a common structure. On the basis of these reports and the survey data, the author drafted a synthesis of the key findings which was submitted to the team for additional comments, review and discussion. A report was then drafted by the author pulling together all of these data sources and comments into an overall analysis, synthesis and conclusions. The report was submitted to the team and the national liaison persons for corrections.

The project stretched over one year, from the development of the research design and questionnaires and the selection of case studies in the first quarter of 2008 to the report writing phase in December 2008 - April 2009. The survey results were collected between June and August 2008. Site visits were conducted between June 2008 and October 2008, with site visit reports submitted by November 2008. The data analysis was conducted by the author between October and December 2008.

2. Introduction to the Key Concepts, Guiding Questions and Previous Research on Institutional Diversity

The following section offers a review of the key questions and concepts of institutional diversity or differentiation in the previous research. It attempts to show clearly how the guiding questions and concepts of this study are either derived or distinct from the previous research. It is punctuated by highlighted paragraphs that explain how this study uses key concepts discussed in previous studies and how its approach differs from available research.

2.1 Identifying the Multiple Values of Institutional Diversity: From a Normative to a Descriptive Approach

The concept of "institutional diversity" is rarely used as a neutral, descriptive term. Most often it is treated as a normative value, one that should be espoused by HE systems and individual institutions in their policies, funding and framework conditions, in order to adapt to their scientific and social environments and respond to their stakeholders successfully. Diversity is associated with adaptive behaviour toward environmental conditions, comparable to the dynamics of biological populations, which is often used as a basic analogy for the investigation of diversity in higher education (Huisman, 1995). Birnbaum (1983) is among the earliest to present a population ecology model for his study of diversity in higher education, emphasising the importance of environmental factors in shaping populations of organisations which are viewed as evolving through three stages: variation, selection, and retention. Building on this analogy of adaptive behaviour of populations, Birnbaum provides a first list of arguments in favour of diversity that many later studies have adopted and built upon. According to Birnbaum, institutional diversity within a higher education system is a normative value since it allows it to:

1. meet students' needs
2. provide opportunities for social mobility
3. meet the needs of different labour markets (with an increasing variety of specialisations)
4. serve the political needs of interest groups
5. permit the combination of elite and mass higher education (cf. also Trow 1979 who argues that the survival of elite HE depends on the existence of a comprehensive system of non-elite institutions)
6. increase the level of higher education institutions' effectiveness (cf. Carnegie Commission 1973)
7. offer opportunities for experimenting with innovation in a few institutions thus limiting the high risks connected to the failure of such an experiment

Most studies and policy approaches to institutional diversity in higher education have espoused this positive value attached to diversity (e.g. Huisman 1995 and 2000; Meek, Goedegebuure, Kivinen and Rinne 1996; Van Vught 2008): "Diversity has been identified in the higher education literature as one of the major factors associated with the positive performance of higher education systems" (van Vught 2008: 154).

Only few researchers have attempted to present institutional diversity more critically by analysing conflicting motivations and forces of convergence and divergence in higher education systems (Kivinen and Rinne 1996) or pointing to additional systemic features, such as flexibility, which are needed in order to ensure the responsiveness of HE systems (Douglass 2004, Guri-Rosenblit, Sebkova and Teichler 2007, Teichler 2008). Most forcefully, Neave takes a distance from the normative use of the term "diversity" through a historical and ideological critique. He ascribes the emergence of a normative use of the term "institutional diversity" to the second stage of massification during which policy makers evaluate the role of higher education mainly in terms of economic return:

"Diversity has acquired new overtones of desirability and has taken on the status of an article of policy – a desirable end to be achieved and sought after, a goal to be implemented as a natural and accompanying institutional condition in a market determined world of learning. In effect, diversity as a slogan has become the equivalent in HE to de-regulation in industry. From being an analytic descriptor, it took on additional weight. It carries with it a certain normative overload." (Neave, 2000: 18)

Neave's critique ends on a cautionary note: "Diversity is not necessarily desirable particularly if, in the name of differentiation of resources, one lets slide into penury those institutions which bear the brunt of mass teaching and learning whilst creating poles of excellence for the fortunate few. How does diversity of resources for instance, square with the notion of equality of access to public service across the national territory?" (2000: 19)

However, in spite of these few attempts to restore the neutrality of the term diversity, there is an overwhelming concern with the positive effects of diversity, to such an extent that diversity debates and studies tend to focus on how best to achieve such diversity or on the deeper drivers of diversification or convergence.

Rather than taking diversity as an inherent good or normative value, this study does not take the value of diversity as a given but makes the values of diversity themselves an object of inquiry. The study investigates which values are attached to different aspects of diversity at different levels in higher education systems. It explores in which contexts institutional diversity is seen as a negative feature of an HE system or institution, and under which conditions diversity is valued as an asset.

In fact, the values that are attached to different aspects of diversity – such as diversity of student or staff profiles and their needs or the diversity of institutional

profiles – differ not only across national contexts but also between different levels within each system as well as among institutions. Fostering diversity may mean something entirely different for national policy makers than it does to institutional or departmental leaders. Indeed, the diverging values of diversity at the national, institutional or departmental levels may even act as conflicting forces within a system.

Underlying the consensus within the larger part of the HE research community that diverse institutional forms would respond better to diverse educational and scientific needs, little consensus exists as to the most appropriate levels at which such diversity should be fostered. In this context, we should point to the key distinction between "external diversity" as the differences between institutions, and "internal diversity" as the differences which can be found within a given institution. This distinction was introduced by Birnbaum and continues to be used in all the relevant literature. Interestingly, with the exception of Clark's studies of disciplinary differentiation (1983) and Becher's and Trowler's seminal "Academic Tribes" (2001), most of higher education research and policy papers focus on external diversity (Birnbaum, Meek, Goedegebuure, Huisman, van Vught, Morphew, Kivinen and Rinne), most often studying it as the variety of institutional types and their distribution, or looking at institutional differentiation as a process in which new entities emerge in a system (Huisman 1995, 1996, 2000, Huisman, Meek and Wood 2007). In particular, in recent policy debates, heightened attention has been paid to the role and conditions of particular types of institutions, such as the internationally oriented research university and the systemic conditions in which they may thrive, the idea of a teaching-only university or higher education institution and its (un-)desirability, or the future of vocationally oriented higher education institutions and the conditions needed to sustain their separate profiles (through dual sector definitions or other mechanisms), as well as emerging new or redefined types of institutions such as "business-facing universities" or "regionally engaged higher education institutions".

This study will investigate how different systems approach the challenge of developing different institutional profiles rather than promoting one type of institution to the detriment of another. Increasingly, HE policy makers and observers envision systems in which, rather than feeding hidden hierarchies between different institutional types, thus promoting vertical differentiation, diverse needs could be addressed in a horizontally differentiated landscape of institutions with diverging mission mixes, institutional types or profiles, which would benefit from some "parity of esteem" rather than be seen as part of an institutional hierarchy. This challenge of institutional diversity will be a key focus of this study.

As the main focus of the research literature has been on diversity of institutional types at the level of the overall system rather than on the internal diversity of institutions, little attention has been paid to the motivations and attempts of institutions to differentiate internally, not only with respect to their programmes, but also in terms of different services, policies and other organisational responses to the diverse profiles of students or to diverse qualifications and orientations of academic staff in research, teaching, business innovation, continuing education, or outreach. While such internal differentiation and diversity could be seen as part of mission stretch, it could, at least theoretically, also be seen to create more flexible learning, teaching and research environments and to release creative potential.

While most studies have focussed exclusively on external diversity of institutional types or profiles, this study seeks to shed some light also on internal diversity, i.e. diversity within higher education institutions, and on the relation or interdependencies between external and internal diversity. The study explores the interplay or conflicting forces that influence institutional diversity or convergence which may exist between the different levels of a higher education system, in terms of different values and policy goals as well as different implementation methods.

In this context one should add that it is not entirely self-evident that the diverse societal expectations would have to be met by a wide variety of different types of institutions that should be relatively coherent internally and homogeneous in their missions, as is so often assumed. One could just as well imagine a diverse HE system in which the diversity of needs is met by diverse institutional responses which vary more within than between institutions. One may even ask why the focus of diversity discussions has shifted so strongly to the desirability of external diversity of institutions, rather than examining also the challenges, advantages and disadvantages, of internal diversity. The assumption tends to be that external diversity and internal homogeneity would make the ideal couple of higher education system functioning. But, apart from mentioning the difficulty of combining diverse missions within one institution, the nature of the challenges of internal diversity remains unexamined. Given the fact that so many higher education institutions are often constructs that have been created from the agglomeration or mergers of different faculties, institutes, or even institutions with different histories

and institutional identities, this "blind spot" in the debates and the research on institutional diversity is all the more surprising. Hence, institutional diversity studies should try to address the following questions:

- How coherent are institutional profiles in reality and to what extent should institutions be made as internally coherent as possible? To what extent should the identity of an institution be sought in its central institutional "identity", leadership and policy positions, rather than in the sum of its possibly diverging cultures? Are there some types of diversity which would be acceptable to institutional coherence and adaptive capacity whereas other types of diversity could be regarded as detrimental?
- Building upon the discussion of how to define the external boundaries of higher education systems by Guri-Rosenblit and Teichler (2007), one may ask what exactly the external boundaries of higher education institutions are. Especially in light of the recent proliferation of mergers, poles of excellence, joint provision, and a whole range of cooperative forms and provisions, the idea of institutional identity may deserve to be looked at afresh, with multiple and softer boundaries than commonly assumed. This, in turn, may shed new light on how to meet the challenges of diversity.
- On the more speculative side, one may ask why a high degree of external diversity in an HE system would be a better reflector of the responsiveness of an HE system than the sum of institutions with a high degree of internal diversity. What makes the latter alternative less desirable? Is it the demands of efficiency and competitiveness, or the risk that "missions pile up and functions add on, [and] institutions, perhaps most particularly in Europe, run a risk of turning into hybrids – wanting to do more than they may be able to do, at least able to do well"? (Bleiklie, Laredo and Sörlin 2007: 500)

2.2 Taking Account of Multiple Dimensions of Diversity

Institutional diversity studies as well as higher education policies focus on different aspects of diversity. Again, a first list of possible dimensions of diversity was proposed by Birnbaum (with some more concrete examples added by Fairweather):

- System diversity is usually differentiated according to diversity of mission, student clientele, size, source of control (public and private), and regulatory conditions.
- Structural diversity refers to institutional differences resulting from historical and legal foundations, or division of authority among institutions.
- Programmatic diversity refers to degree level, degree area, comprehensiveness, mission, and emphasis of programmes. The latter may also be distinguished, as Fairweather does, by title, content, approach to learning, specification of student requirements, locus of control for decisions about curricula, quality.
- Procedural diversity may be identified with different ways of providing teaching, research, and services. These may include both instructional and research practices (Fairweather).
- Reputational diversity. This dimension has been promoted indirectly through the media and policy attention to international rankings.
- Constitutional diversity is linked to the different groups that constitute the institutions, e.g. students, faculty, administrators.
- Values and climate diversity concerns different aspects of the social environment and institutional culture, as reflected, for instance, in the make-up of faculty and students, decision-making styles and reward structures

To the above list, others have added:

- Diversity of funding sources (Goedegebuure & Meek (1997), Meek (2000)) and the conditions needed to allow their successful use has become the focus of much institutional attention in recent years[2]. With decreasing unit costs and an increasing variety of tasks and stakeholders, the pressures and opportunities accrued through new forms of support for teaching, research and services has entailed a whole range of strategic, managerial, accounting, and sometimes even ethical challenges for institutions. The choices of funding sources may exert a far-reaching influence on the institutional profile, thus contributing to institutional differentiation.
- Organisational Diversity (Fairweather) refers to the diverse forms of governance and organisational cultures which characterise institutions.

As mentioned above, most often diversity studies focus on diversity of institutional types or programmes, discussing system, structural, programmatic and reputational diversity. But there has not been any systematic investigation of which aspects of institutional diversity are actually valued and addressed at which level and which organisational methods are employed to promote these values and how the different

[2] EUA has just published a study on full costing which sheds light on the increasing diversity of funding sources and the challenges it poses to institutions, and has just launched a major new survey within the framework of its project "European Universities Diversifying Income Streams" (EUDIS).

responses at different levels may mutually reinforce or counteract each other.

This study seeks to provide more detailed information about the dimensions or aspects of diversity to which different actors within higher education systems attached value, including apparent or hidden divergences between such value attributions. The following aspects of diversity are taken into account:

- Student profile: ethnic, religious, or social background, gender, previous qualifications,
- Staff profile: ethnic, religious background, gender, previous academic and professional qualifications, functional emphasis, e.g., time spent on education, research, continuing education, innovation services,
- Institutional mission and core tasks: including emphasis placed on teaching, basic and applied research, services, continuing education or professional development, outreach,
- Internal organisation: governance, functional orientation of different units, funding mechanisms, reward structures,
- Programme profile: attention to diversity of disciplines and their interactions, professional and academic orientation, pedagogical programme profiles.

Looking at the different values attributed to various aspects of diversity, one should not fail to mention the remarkable difference between the diversity discourses in Europe and the USA. Whereas there is an increasing convergence of many higher education debates across the Atlantic, the debate on institutional diversity in higher education has very different focuses. While the European discussions are mostly concerned with system diversity and diversity of institutional types within a system, and addressing the changing role of higher education institutions and the diverse functions which they have to fulfil, the American diversity debate, which is certainly not less charged, is concerned with the ethnic and gender diversity of student and staff bodies. While both discussions emphasise institutional diversity in view of enhanced social and economic responsiveness, the discussions have otherwise very little in common. In the USA, the European concept of institutional diversity is referred to as "differentiation" and is less charged as an issue, since the historically grown differentiation is so large and institutional market segments so varied that no observer of the system has a problem with insufficient degrees of institutional diversity. By contrast, the concept of institutional diversity in the USA is concerned with inclusiveness and has succeeded earlier discussions of the inherent problems and most effective methods of affirmative action, adding attention not only to the need for an expanded pool of qualified graduates, but also to promoting and measuring learning outcomes and competences that an effective orchestration of learning and research with a diverse student body or staff may bring about (Siegel 2003). In the USA, the discussion of institutional "diversity", as it would be called in Europe, is subsumed under the heading of institutional "differentiation" and is not perceived as urgent, given the high degree of differentiation and, in some states, even of articulation among institutions. In Europe, the American diversity debate resonates only in small institutional niches, usually far from central public policy attention, and the integration of diverse ethnic groups is only rarely a prominent institutional concern in our sample. The only obvious overlap of both European and US discussions may be found in the concern with gender inclusiveness.

2.3 Tracing the Interplay of the Drivers of Diversification or Convergence

For European policy makers and institutional leaders interested in diversely responsive systems or institutions, the key challenge consists in identifying the most effective methods which would incite or consolidate institutional diversity wherever it is deemed valuable. Their interest in effective policy instruments is mirrored in the deeper research questions which higher education researchers have been trying to answer in the last decades: what are the key drivers of diversification or convergence in a higher education system, i.e. in an increase or decrease of diversity in a given system?

In this context, a key distinction is usually made between formal and informal methods of promoting institutional diversity. Here diversity usually means external diversity, i.e. referring to the differences existing between different institutional types.

Formal methods of promoting diversity emphasise the role of state regulation for sustaining the separate institutional types. In addition to distinct legal definitions of institutional types, separate funding authorities and instruments and different accreditation and quality assurance criteria for the different categories of institutions can be laid down by law. Funding instruments are differentiated according to the different institutional types with their distinct status, mission, and tasks and changes of institutional status are usually not foreseen. (Among the five countries in this study, Norway may be regarded as an exception since it formally regulates institutional types, but allows university colleges, which are subject to a separate legal status, to change status if they fulfil certain conditions.)

In contrast, informal promotion of diversity is realised

through inter-institutional competition for people and resources and through soft norms of quality assurance and different reward structures, e.g. career development and promotion policies. While public and private institutions usually offer different kinds of competitive resources for different purposes of HE provision, all institutions generally emphasise and develop those institutional activities for which they expect the highest rewards and in which they feel they are best positioned to obtain such resources.

Formal diversity (of institutional types) is usually linked most prominently to the establishment of dual sectors which were created in the 60s (polytechnics in the UK), 70s (Germany) or even 90s (Austria, Finland, Switzerland), and which, with a few exceptions such as Italy, Spain and the UK, now characterise most Western European countries (Kyvik 2004). The professional sector of higher education was created to absorb the substantial increases in higher education enrolments and to allow for widened access of more diverse student clienteles, but also to improve the quality of professional tertiary education, for which an explicit demand was identified. An exceptional situation can be found in France where the professional sector enjoys a different legal framework (clearly a case of formal diversity laid down by law) but caters mostly to the reproduction (or development) of the elite. In France, it is rather the university sector which has to face the challenges of massification and expanded task portfolios.

Since their creation, many binary systems have undergone major changes. In some, the binary divide has proven to be quite unstable, in terms of either the definition of institutional missions and strategy development or the contents of the educational offer. Many studies have described the academic drift of professional higher education institutions (Skolnik 1986, Huisman 1998, Morphew 2000, Codling and Meek 2006). At the same time, especially recently in the context of the Bologna reforms, employability has been promoted as a key goal of higher education so that a vocational drift by the university sector is noticeable.

It should be added that the original definition of professional HEIs as purely teaching institutions has been abandoned in most national contexts. In some cases, this change of mission was initiated by the institution themselves. In others, such as Finland, Norway and Switzerland, the state itself has promoted the expanded institutional definition (Lepori and Attar 2006, OECD 2003, Kyvik and Skovdin 2003). In all cases, the expanded mission of professional HEIs concerns the right to develop research activities, though such research is usually thought to be different in character from the predominantly academic research pursued at universities. In all binary HE systems, the research mission of professional HEIs emphasises the applied character and orientation toward regional needs, in particular of small and medium enterprises (SME). As Lepori observes, the introduction of an explicit research mandate to professionally oriented non-university higher education institutions has added complexity both at system and institutional levels. In contrast to many previous studies, Lepori emphasises that this complexity cannot be reduced simply to the notion of academic drift. Rather, Lepori observes a dynamic of specialisation and differentiation concerning research that could lead to either convergence or to stronger differentiation or even reinforcement of the binary divide, depending on the implementation methods (Lepori 2008). Thus, in some cases the introduction of research and particular kinds of more business-oriented research training into the mandate of professional HEIs contribute to dissolving the differences between the two sectors while in others such research is defined and pursued in sufficiently distinct forms so that an alternative norm to the university model is being created, with different stakeholders, different competitors, and different research niches. To add to this complexity, whether or not the sectoral divide is dissolved or simply redefined in a new manner may also depend on the different subject domains. Thus, in the same national context, one may observe academic drift in one subject domain of the professional HE sector while seeing institutional distinctness and complementarity in another.

Informal methods of promoting diversity are focused on funding instruments and their criteria. The underlying assumption of such approaches usually liken HE systems to markets in which institutions compete for resources. If these resources are limited, each institution would seek to identify the market niches in which it would have the best capacity to increase its resources (according to resource dependency theory). Hence, policy makers and institutional leaders interested in promoting institutional diversity would just have to define funding instruments in such a way that different financial sources would respond to the core strengths of different mission mixes or institutional groups.

However, in discussions and policies which compare HE systems to markets, it is often overlooked that HE systems do not fulfil most conditions that would justify the label "market" (Texeira, Jongbloed, Amaral and Dill 2004). It is also often forgotten that even if HE systems are likened to markets, they would have to be conceived as consisting of multiple markets, governed by different actors with different inclinations, constraints and sources of information. In other words, there would be markets for students, for research grants in the various subject domains, for HE lecturers, young researchers, or

senior international research stars, markets for business partners, etc. There is even a market for major scientific infrastructures where investment decisions after a national competitive call may become part of major regional development policies. Therefore, to diversify HE systems or HE institutions, one has to take account of the multitude of these markets, actors, and their conditions, in order to influence the behaviour of the relevant groups of actors.

As may be expected, higher education research is divided over the question as to which approach, formal or informal, would ensure or develop institutional diversity most effectively. On the one side, Birnbaum (1983), for example, makes government regulation (formal approach) responsible for convergence in several higher education systems. His comparative assessment of changes between 1960 and 1980 finds that diversity of institutional types had not increased because differentiation processes had been hampered by centralised state planning and application of rigid criteria for the approval of new institutions and programmes. He concludes that governmental policies contribute to decreasing the level of diversity. On the other side, Huisman, in his study of the effect of Dutch government policies on institutional diversity, observes that such policies, or the second-guessing of government policy, actually contributed to increasing programme diversity noticeably. Thus, Rhoades (1990) and Huisman (1995, 1996) find that increased government control over mission and scope differentiation (Rhoades) or programme orientation (Huisman) has played a positive role in maintaining the differentiation of study programmes or has contributed to new forms of differentiation (Lepori). Regarding informal methods of differentiation, Skolnik (1986), Huisman (1998), Morphew (2000), Codling and Meek (2006), and others point to the convergence effects that can be observed in systems which do not use formal methods of promoting diversity, and rely only on competitive resource allocation without mission regulation.

To move beyond these apparent contradictions and search for the most effective methods of promoting institutional diversity, one thus has to reach more deeply into the nature and combination of forces at work in driving diversity or convergence.

Beneath (and beyond) the distinction of formal or informal differentiation between different institutional types, one can distinguish a set of different conditions and measures that influence the level of diversity in a given HE system. These may be described as the drivers of diversification or convergence, some of which can be manipulated to produce the desired effects while others exert a less predictable force on the HE system. These drivers, which will be taken as a guiding framework for the survey, interviews and analysis in this study, are detailed below.

1. As mentioned above, the regulatory framework may lay down distinct missions of institutional types, as is the case in formally diversified systems. These missions may differ legally not just in the scope of functions attributed to HEIs as core dimensions of their institutional missions, such as research training, continuing education or knowledge transfer. They may also regulate access and recruitment conditions for exercising particular functions in higher education, e.g. the status of professors or other groups of academic staff. Laws and regulations may also influence diversity by specifying regulations on student recruitment, admission and support, sometimes including explicit, non-discrimination articles regarding the students' religious and ethnic identity or gender. Such regulations may also be expressed in institutional or programme accreditation/evaluation criteria.

2. Public funding instruments may comprise a multitude of different funding channels, such as:

   - institutional grants which are usually distributed on the basis of some input or output indicators, which may act as strong incentives for institutional behaviour
   - additional development grants for special purposes or projects, e.g. widening participation, introducing new learning technologies, particular reforms
   - competitive research grants distributed after open calls for projects
   - scientific infrastructure resources granted ad hoc or competitively

   These instruments, depending on the funding level and the allocation criteria, may exert a stronger or weaker pull.

3. Student clienteles have diversified with the increased participation rates, comprising now a wider range of talents and qualifications, but also of socio-economic and educational backgrounds. Hence programme orientations, pedagogical methods and support services may diversify to respond to the various needs. There may also be development affecting the emphasis placed on particular student groups. In the UK, for example, the attention paid to inclusion and widening participation for students from socio-economically disadvantaged backgrounds has led to a range of additional support schemes at national and institutional levels.

Another example is the recent reform focus on graduate research training across Europe which has led many institutions to introduce new organisational forms in the shape of transversal courses to foster generic skills training for Master or Doctoral students or overarching support structures, such as graduate schools that incorporate interdisciplinary exchange forums, transferable skills training and support services. Diversity is an issue here in at least two respects: it is reflected in the idea of intensifying exchange across diverse specialisations, but also in the concern to include new kinds of courses to prepare Doctoral students for diverse career paths. Thus, awareness of new or newly discovered student clienteles may lead to diversification of programmes, organisational forms and support services.

4. Societal and stakeholder demands may change significantly over time, influencing policy choices and student, staff and curricular orientation. The extent to which these changes influence HE provision and choices, however, may also vary significantly. As a recent study showed (Kaiser et al. 2007), governance changes in HE in many countries in Europe have most often implied an increase of direct influence of stakeholder and societal demands on HE development, through stakeholder boards or external members on executive boards at institutional level, and even at the level of individual programmes. Indirect influence is being exerted through the perception of such societal needs by academics and students, which informs their teaching or study choices.

   An important dimension of stakeholder needs is reflected in the developments of different professional sectors and the organisation of their input into HE, which may influence HE policy at national, regional or institutional level. In the UK, for example, sector skills councils have been established to allow a more regular direct articulation between educational offer and vocational/ professional sector needs. At institutional level, professional associations may exert direct influence through accreditation requirements of the regulated professions or again, through membership on programme boards.

   Regional needs may exert a direct influence on HE development, in so far as channels of communication have been set up between HEIs and regional stakeholders. In many countries, executive boards or programme boards have been set up in recent years to provide such direct channels for regional input.

   In addition to direct stakeholder influence, institutional or national attitudes to diversity are also influenced more generally by national histories and cultural norms and values which, as Meek underlines, should also be regarded as important aspects of the environment.

5. Scientific developments may be regarded as drivers of diversification as Clark already observed more than thirty years ago (1978, 1983). The growing complexity of bodies of knowledge brings along with it increased fragmentation within and among HEIs. This complexity is an outcome not only of the increasing variety of the student population and the growth of the labour market for academic graduates but also of the emergence and growth of new disciplines. An interesting example of growing diversity in response to disciplinary developments may be noted in the implementation of the Bologna reforms which, in many institutions, has led to an increase in the number of Master-level programmes reflecting new interdisciplinary interfaces and specialisations. Disciplinary diversity has also become an explicit concern at many universities in response to the challenge of orchestrating a genuine interplay between different disciplinary orientations and the support for new interfaces between disciplines, but also with respect to the subject portfolio in which the emphasis on institutional strengths has to be balanced with a sufficient variety of fields for teaching purposes.

6. International developments have exerted considerable influence on national HE structures and policies in Europe, often resulting in convergence of HE structures, but sometimes also triggering new institutional choices and developments, thus promoting diversification in some countries.

   The most obvious example is the Bologna Process which proposes and imposes a number of structural convergences on the European national HE systems. While there have been some studies on policy convergence through the effect of the Bologna reforms (Bleiklie 2001, Huisman and van der Wende 2004, Witte 2006), it remains unclear whether the curricular reforms or related Bologna national implementation have brought about convergence or diversification with respect to programme definition, student clienteles or target groups for HE offers, or even with respect to institutional profiles. Only the effect of convergence between institutional types has been noted (Witte 2006).

Other international developments are not less important. Thus the emergence of international ranking schemes and global markets for researchers, research training and research products at least in some scientific areas (such as the natural sciences and medicine) have had profound effects on the perception of HEIs of their possibilities and the urgency of their choices as well as of the characteristics needed to sustain a "competitive" HE system. In these contexts, diversity has become a key term, often associated with the demand for increased vertical differentiation within HE systems, which would allow those institutions that are best positioned in these global markets to obtain sufficient funding to increase their competitiveness and thus the visibility of their national HE systems. The UK Research Assessment Exercise and recent debates about "concentration of resources" in England, the German "*Exzellenzinitiative*" which selects the most competitive structures and institutions to expand their competitive potential, as well as the French "Plan Campus" in 2008 which supports ten HE clusters that are particularly well placed in international terms, can all be seen as such attempts to increase diversity by promoting more vertical differentiation between (and, in the case of the UK and Germany, within) HEIs.

7. Quality assurance criteria and standards may affect diversity in so far as they may or may not take account of different institutional missions, diverse staff careers, student clienteles or diverse programme aims and orientations. Apart from a certain convergence with respect to institutional quality assurance processes, the recommendations arising from institutional or programme evaluations may contain assumptions about mission emphases or programme orientation which could promote convergence. Some quality assurance methods may be more neutral than others with respect to diverse missions, such as fit-for-purpose quality evaluations, which take the missions and aims of an institution as a point of departure. Depending on the nature of the evaluation focus and process as well as the composition and attitudes of the peers, fit-for purpose evaluations may even recommend institutional developments that would strengthen the uniqueness of institutional profiles and thus promote differentiation. Other methods, such as accreditation, may impose particular standards of institutional structures, size, staff profiles and even curricular content and thus are likely to result in more convergence.

8. Academic norms and values have been recognised as key factors contributing, most often, to convergence since the reproduction of the professoriate tend to follow homogeneous selection and reward criteria. According to several researchers (Riesman 1956, Birnbaum 1988, Clark, 1993, 1996), faculty members, especially the so-called tribe of "cosmopolitan faculty", identify more closely with their discipline than with their institution and department. Success for academic staff is thus achieved primarily through behaviours and success that are nationally and internationally recognised by their peers in their fields or disciplines.

As an example of such norms, which may inhibit diversity in higher education profiles, one may point to the dominance of research success as the primary measure of academic career advancement, which can be found in most countries in Europe (and is confirmed by the data gathered for this study). Moreover, the measure of research success seems to be converging: internationally visible publications, which find a wide international readership in high-impact journals, are usually placed more highly on the academic normative scale than success in other research environments such as contributions to research leading to business innovation. Thus, some researchers find the hegemony of such academic values, if given free reign (i.e. in the absence of other strongly regulatory forces sustaining diversity of institutional profiles), to be the prime cause of academic drift (Rhoades, 1990; Meek 1991, Meek 2000; Skolnik, 1986; Huisman 1995, Huisman and Morphew, 1998; van Vught, 2008).

Research on academic drift and its relation to academic norms already goes back several decades to Riesman's study of imitating behaviour of universities and isomorphism (1956): universities push for prestige by emulating the most highly regarded (most often research- intensive) universities. This orientation is influenced by the normative visions of faculty members whose foci are outside their own institutions and who are anxious to create structures and programmes which correspond to their image of the ideal university environment. Of course, this model is not necessarily related to their university's mission and resources. Thus, competition between higher education institutions should not be seen only as competition for resources but also, through the value system of academic staff and leadership, as competition for stature, prestige and legitimacy, which encourage "conformity to prevailing models rather than attempts to distinguish themselves from their competitors" (Rhoades, 1990, p.191). Such an effect is noticeable even when the overall level of resources and the size of a HE system are expanding, creating more diverse demands in the

system and purportedly leaving room for a wider array of different market niches and choices. The consequent academic drift reduces the diversity of institutional types and programmes, even if the latter are incentivised through government programmes, leading to reduced efficiency of the overall HE system[3].

9. However, faculty behaviour and the academic values driving such behaviour are not the only forces determining overall institutional choices. These values may be counteracted or even influenced by institutional policies, as a recent study by Morphew (2000) of programme diversification shows. In his study of faculty (academic staff) attitudes and behaviours governing programme development choices, Morphew concludes that functional pressures associated with institutional resource allocation policies may give increased authority to institutional leadership and institutional resource policies (e.g. promoting faculty to tap into external resources for research and graduate programmes to supplement stagnating institutional budgets) and thus may end up exerting significant influence on faculty behaviour. Moreover, if institutional policies are reinforced by state support and agencies, such influence may become significant enough to regulate the pure regime of academic values that governs their professional training. Such institutional policies may comprise a whole set of different reward methods: internal resource allocation, recruitment and promotion criteria, support service emphases, as well as internal quality assurance criteria.

From the above description of drivers of diversification or convergence, it becomes evident that diversity or homogeneity in higher education is the product of an interplay of forces which cannot be isolated from one another. System-level actors, institutional policies and instruments combine with individuals' values and behaviours to form a complex set of potentially conflicting forces where individual effects may either reinforce or cancel each other out. A simple linear relation between individual factors would be an over-simplification. Neither is there a simple (negative or positive) relationship between the role of government and the relative rate of academic drift or curricular innovation, as Jenniskens' findings of HE systems in the USA and Europe demonstrate (1997). Nor is there a simple relation between market competition and increased diversity, as has been shown by Meek, Codling, Morphew and others in their studies of Australian, New Zealand and English HE developments after the abolition of the binary systems and the introduction of an integrated more market-oriented steering mechanisms. Thus, anyone interested in fostering particular aspects of diversity or in weighing the drivers of diversification or convergence in higher education systems would have to consider the whole set of forces at play at different levels in order to produce the desired effects.

This study explores in empirical detail and within an international comparative perspective, the complex interplay of forces which drive diversification or convergence at system and institutional levels. In particular, it investigates how different forces which are at work at different levels may conflict with or reinforce each other. In order to do justice to the complexity of interrelated forces at play, it seeks to be as inclusive as possible with respect to the range of possible drivers of diversification or convergence, taking previous research literature and its hypotheses or seemingly contradictory findings as a point of departure.
Such drivers include:

- The regulatory framework including accreditation criteria.
- The range of major funding instruments, their emphases and allocation criteria.
- The demands, preferences and needs of different student clienteles.
- Societal and stakeholders' demands and values, including those related to professional sectors or regional developments.
- International developments such as the globalisation of particular sectors of academic research markets.
- External and internal quality assurance criteria and standards related to higher education provision.
- Academic norms and values.
- Institutional policies including internal resource allocation, academic staff selection and reward systems (such as promotion criteria).

To study the important drivers of scientific and disciplinary developments, including the progress of increasing specialisations and the emergence of new fields, would have gone far beyond the possibilities of such a study. Given the large consensus with respect to the overall effect of these developments – namely that they contribute to diversification, by increasing complexity, continuously growing levels of specialisation and a growing number of attempts to bridge between such specialisations – the omission of this area from the scope of the study was felt not to undermine its comprehensiveness. Under the headings of programme diversity, some of the issues raised through scientific developments were taken into account, namely institutional attention to more flexible ways of organising research and scholarship through new cross-departmental organisational structures or interdisciplinary incentives, in both cases contributing to institutional diversity.

[3] For a good overview of the issues and a full discussion of the related research literature on academic drift see Morphew (2000), pp. 57-62.

Chapter 2:

Institutional Diversity in English Higher Education

Sybille Reichert, with Pedro Teixeira

1. Diversity of Institutional Profiles

England prides itself in providing a highly diversified landscape of institutions for a wide range of needs, qualifications and programme orientations. The origins of such institutional diversity can be traced, at least in part, to the different historical waves during which higher education institutions were established, starting with a first array of institutions which emerged from the first medieval centres of scholarship, via a wave of nineteenth century establishments which sought to strengthen civic culture and industrial capacity, to the wave of new establishments founded in the 1960s, fostered by social and economic modernisation ambitions. A final important wave of institutional transformation, which some have argued has fostered convergence rather than diversification, was marked by the end of the binary divide in 1992 when the Higher Education Law granted equal status, title and funding channels to former polytechnics and universities, resulting in a wave of institutional metamorphoses. Today, the English system is characterised by the combination of a high degree of institutional autonomy, arguably the highest in Europe, and an increasing market orientation of the system. English universities have enjoyed a large financial, pedagogic and academic autonomy, granted by a constitutional framework that has made them far more independent from governmental steering than most of their European counterparts. Since 1992, the former polytechnics, which had been subject to more state steering than the universities, have joined this autonomous realm. Given the high level of student and staff mobility, nationally and internationally, and the institutional autonomy to set recruitment criteria for student and staff autonomously, the student and staff markets have opened and broadened further, with institutions competing actively, sometimes even fiercely, for the staff or students who best suit their profiles. Thus autonomy and marketisation are associated by policy makers and higher education analysts with the high degree of diversity in the system, with continuous institutional attempts to define their niche in the market. The current chapter will attempt to shed some light on these assumptions.

At the same time, and in apparent contradiction to the above characterisation, there is an increasing concern about the decreasing diversity of university missions (White Paper 2003), as well as the increasing range of missions that each single university tries to fulfil ("mission stretch", Scott 2007). In this manner, institutional differentiation is an explicit and highly prioritised issue of English higher education policy. The English policy debates on institutional diversification also concern the challenges of further expansion and consolidation of a mass system of higher education more explicitly than in the other four countries included in this study. It is precisely the expansion of the system which tends to be associated with the idea that institutions should develop different kinds of missions for different sets of needs. While institutional missions can overlap and all mission goals may be found in some degree in all institutions, it is expected that some institutions will place higher emphasis on some dimensions than on others.

In particular, there is a widespread perception that one type of institution (not formally but normatively defined), namely the research universities with long traditions of building their capacities of research, scholarship and research infrastructure, has been supported most strongly through public funding instruments, public recognition and media attention (helped also by the media hype around research university rankings). For years, most institutions felt impelled to pursue excellence in these same respects, if they wanted to reduce their funding gaps, or increase public recognition, and even to attract the most qualified students. Already in 1997, the Dearing Report

noted that, while in the UK institutional diversity goes hand in hand with autonomy, there are "forces which we fear may be starting to affect adversely the proper diversity of provision", highlighting the "unintended pressure towards institutional homogeneity".[1] In contrast, institutions that see their prime mission more closely aligned with building regional capacity and responding to professional skills or research needs have received comparatively weak support from the public purse, private foundations or media coverage.

In a system which has done away with the formal distinctions of mission types, the key focus thus always concerns the kinds of incentives which the system would or could create to sustain institutions of different orientation. In response to these concerns, significant governmental attention has been invested in recent years in the establishment of new incentives to steer the system away from these homogenising forces, in explicit recognition of the assumed advantages of mission diversity. Nevertheless, most HE observers and representatives seem to find that these new incentives have remained too weak and even contradictory in part, to counterbalance the benefits associated with being a successful nationally and internationally oriented comprehensive research university, especially since the latter is sustained by academic values, career structures as well as public opinion.

In addition to the clear but weak diversity orientation of public policy, one should mention the availability of new regional support sources which have been introduced in the wake of increased regional development authority and funding. These have included the introduction of regional development agencies some of which have supported HE infrastructures and activities to a considerable extent. In addition, regional development agencies and other regional stakeholders have invested in efforts to coordinate the higher education offer in their regions, to seek cooperation and complementarity between different institutions, thereby strengthening separate regional profiles and helping the forces of institutional diversification.

Having thus set the stage, this chapter will attempt to do justice to the complexity of the conflicting forces of diversification and convergence at work in the English system of higher education.

1.1 The Regulatory Basis

In England, higher education (HE) is provided by three different regulatory types of institutions: universities, higher education colleges and university colleges. In addition there are further education colleges which may also offer higher education degrees, namely the intermediate foundation degrees. All UK universities and some higher education colleges are "recognised bodies", which means they have the legal power to develop their own courses and award their own degrees and determine the conditions according to which they are awarded. In the UK, higher education institutions are recognised bodies if they have been granted degree awarding powers by a Royal Charter, an Act of Parliament or, most often, the Privy Council. The process leading up to this recognition is not dissimilar to institutional accreditation elsewhere in Europe and does not set any clear conditions on institutional missions.

The colleges of higher education can be divided into two groups: general colleges offering a range of courses which may be narrower than in the universities (often with the emphasis on business and management, humanities and education) and specialist colleges, such as arts colleges. Some of these colleges of higher education have been granted powers to award their own degrees and use the title of "university college". Nowadays, the difference between universities and university colleges is largely dependent on size. All pre-2005 universities were given the "university" title by the Privy Council if they had the power to award taught degrees and research degrees. Since 2005, institutions in England and Wales that award only taught degrees ("first" and "second cycle") and meet certain numerical criteria, may also be permitted to use the "university" title. Higher education institutions that award only taught degrees but which do not meet the numerical criteria may apply to use the title 'university college', although not all choose to do so. The Privy Council's criteria for granting the right to institutions to award these degrees also reflect previous and current understanding of key university functions, which have changed fundamentally with the new conditions. While research degrees can only be granted by institutions which have also received the right to award taught degrees – and thus still reflect a certain qualitative hierarchy – the university title is no longer linked to research functions. The fact that the Privy Council can also award the title of university to higher education institutions that only offer taught degrees was the result of the explicit diversity policy announced in the 2003 White Paper which wanted to ensure that diversity of function is not hindered by regulatory or funding conditions. As the title of university is usually associated with superior status, the prospect of being awarded the title could

[1] Report of the National Committee of Inquiry into Higher Education, headed by Sir Robert Dearing, known as the "Dearing Report", Chapter 16, paragraph 16.10 – 16.11, https://bei.leeds.ac.uk/Partners/NCIHE/

be expected to guide institutional behaviour. Hence, if an HEI which only offers teaching is unable to obtain such a status, this would be an implicit disincentive to focus on teaching excellence only and an incentive to invest in research, regardless of the institutional identity, tradition, research capacity or past history. To avoid such mainstreaming, it was thus decided to remove this regulatory incentive.

The third type of institution offering higher education courses are the Further Education Colleges, which are formally outside of the HE sector and not regarded as recognised bodies for the purposes of higher education. The degrees for the courses that they offer thus have to be validated and awarded by the authority of another "duly empowered" HEI. About ten per cent of higher education provision is available in such Further Education Colleges. Since the introduction of the Foundation degrees and their expansion following the 2003 White Paper, the Further Education Colleges have been playing a key role in implementing the widening access policy of the government. It should be noted here that, since the Foundation degrees are part of the HE sector, Further Education Colleges may even obtain the status of Higher Education Institutions if more than 55% of their provision is in higher education.

However, the fact that the binary divide between universities and polytechnics has been abolished should not lead one to believe that the distinctions have been entirely done away with. Within the new system, traces of former regulatory distinctions can still be seen and these are even used in semi-official manner. Thus, according to the Guide of the Committee of University Chairmen (2004)[2], recognised higher education institutions can be divided into two broad groups which relate to recent regulatory history, predating the Further and Higher Education Act of 1992 granting university status to the former polytechnics. Many official and informal descriptions of institutional types thus start with the distinction between pre-1992 universities and post-1992 universities and would often even list institutions in these broad groups.

The end of the binary divide is often pointed out as having been essential to the former Polytechnics, especially in terms of social class and cultural capital. For many institutions it was very important to acquire the symbolic value of being a university. However, the old divide still has some relevance for the mission focus. Indeed, old tensions persist about fair treatment, with a frequent perception that the system privileges some types of institutions, in terms of funding allocations (especially for research).

The 1992 Act converted the previously dual HE sector into a unitary system, abolishing the separate regulatory basis as well as the separate Funding Councils. Hence, since 1992, the diversity of institutional profiles was no longer ensured through regulated distinction of mission, funding and assessment measures, but had to flow solely from institutional choices, reflecting their different missions, orientation, target communities and stakeholders, strategic priorities, strengths and successes, as well as the landscape of financial incentives in which they sought to prosper.

It should be emphasised in this context that institutional autonomy is far-reaching in England, making the array of institutional choices even more open, at least theoretically (other incentives may restrict such choices in practice). All higher education institutions are autonomous with respect to course development, student recruitment and admission as well as staff recruitment. Degrees and other higher education qualifications are legally owned by the awarding institution, not by the state. The state only provides common quality assurance and funding frameworks. Institutional choices have to comply with some common quality standards in different respects, as laid down in different reference documents, such as codes of practice.

But, in spite of such far-reaching autonomy and the supposedly wide range of institutional possibilities, path dependencies do matter: the distinct histories of the institutions still play a significant (though not determining) role in shaping their profiles, not only because of different institutional values, target groups and priorities, but also because they contribute to their capacity to attract funding and support from particular sources rather than others. Moreover, as will be discussed later, the funding channels reinforce the power of such histories, requiring substantial evidence of past performance, as well as of infrastructural and other assets of the higher education or research environment. Building up a new path from scratch may be an institutional choice but it would also be an uphill struggle.

1.2 System Governance and Coordination

In England, no formal bodies exist to foster coordination, cooperation or complementarity between institutions or institutional types. The only

[2] Committee of University Chairmen (2004): Guide for Members of Higher Education Governing Bodies in the UK.

body that could exercise such an overarching function would be the Higher Education Funding Council of England (HEFCE) which has refrained from targeted coordination measures or other incentives to promote institutional complementarity. There is a wide-spread belief that institutional autonomy and increasing market orientation will bring about a more efficient and successful form of coordination through the forces of competition. The existing national bodies which represent the universities and university colleges or higher education colleges do not have a coordinating but rather a representational and lobbying role vis-à-vis the government, funding authorities and Parliament. Coordination as such only exists at a regional level, even then only to a limited extent, e.g. in attempts to strengthen the knowledge-based economy and society of a region (e.g. as is explicitly pursued in Manchester) or to underpin the skills development needed for labour markets, as undertaken by the Skills Councils or Sector Skills Councils which have been established by the government since 2005.

One form of self-organised coordination is worth noting however. While regulation no longer imposes different missions for different types of institutions and, with Universities UK, England has one overarching representative body for the whole sector, the landscape has voluntarily divided itself into mission groups for the purposes of more homogeneous interest representation, of influencing HE policy and of exchanging information good practice. Within these groups, political discussion and exchange of information do lead to informal types of coordination which goes beyond the political macro-level and reaches into questions of institutional development and which may even influence some institutional choices. Moreover, some cooperative projects are said to have emerged from the closer communication which these bodies have fostered. Hence a range of clearly defined institutional types, in terms of distinct histories and missions, has emerged through the self-organisation of compatible institutional profiles and interests rather than regulatory framework.

If one takes these mission groups as representative, the current landscape in English higher education does present distinct types of HEIs, even though they are not laid down in regulatory terms.

The "Russell Group" represents the comprehensive and large research intensive universities that include medical faculties. This group is regarded as the most influential lobbying group and as the most privileged part of the system. It also seems to favour a more segmented system and a more differentiated government approach towards different groups of institutions. The central argument which underpins this approach relates to internationally competitive research which needs a certain critical mass and level of resources in order to compete successfully. Given the limited resources, it is argued that if these were spread too thinly among institutions in the country, the overall visibility, position and attractiveness of the English research system would suffer. As international frontier research and research training need a certain level of support these institutions argue that they offer the performance and capacity to justify such support, meaning that a higher level of resources should generally be granted to them, provided they supply evidence of such performance levels. There are detailed position papers on different aspects of research universities and their needs but no proposals as to what exactly the role and incentives for other types of institutions should be.

A second, clearly identifiable mission group is composed mainly of the new universities, called the "Million + Group". These institutions traditionally place a stronger emphasis on teaching, though they do not seek to be regarded as teaching-only institutions, especially bearing in mind a system context that they perceive as more favourable to research missions. Sometimes this group is split into two, by separating out those large new universities, which are regarded as having greater ambitions (and capacities), to compete with old universities, at least in specific areas. They, therefore, argue for equal opportunity, not only for different types of missions, such as widening participation and teaching excellence that is able to address the needs of different qualification groups, but also equal opportunity for research groups that can claim excellence but have to develop as institutional niches rather than as part of a generally research-driven university with the corresponding volume of activity. The critical mass argument is applied to these niches too (e.g. in terms of priority funding they might need within institutional allocation) but accompanied by the argument that excellence can emerge anywhere and should thus not be discriminated against through highly unequal base funding.

A third group includes those institutions that also have a strong research activity, but that do not have the same degree of research intensity or scope as the Russell Group and do not include medical faculties. Their interests, which overlap in part with the Russell Group, are represented by the "1994 Group". In addition to wanting to enhance the visibility of their research and conditions needed, these institutions have also positioned themselves as paying particularly high attention to sustaining excellent teaching competencies. Some of these institutions are sometimes

referred to as "the squeezed middle", since they stand for a balance between teaching and research missions, placing them in competition with the first two groups. Many of these institutions have tended to become more specialised, since they have concentrated on those areas in which they have (or are well placed to attain) greater national and international reputation. This approach has been particularly enhanced by increased competition for resources, which stimulated concentration on competitive strengths in teaching and research.

Finally, there is the group of small and specialised colleges of higher education which cater for well-defined niche target groups. They are not likely to compete with most of the other institutions, since they are focused in clearly identifiable market niches and would only compete with each other within these. These institutions tend to have a strong emphasis on teaching and learning.

In addition, there is the "University Alliance" (formerly the Alliance of Non-Aligned Universities) and "Guild HE" (formerly the Standing Committee of Principals), which is, formally, the "rectors' conference" for the non-university HEIs.

Interestingly, the two organisations which may be regarded as the "rectors' conferences", namely Universities UK and Guild HE, which do not differentiate by mission (but only very generally by institutional status), may have lost some of their influence and authority while the mission groups, which are able to speak for more homogeneous groups of institutions, have gained in profile, policy influence and representative capacity in recent years.

As the key coordinating force, however, one should point to the growing importance of the market and competition among English higher education institutions. This competition has been particularly pronounced in attracting qualified students, highly qualified research staff (especially at advanced and professorial level), and funding. It should be emphasised that the effect of market forces on institutional diversity is an issue of contention, namely since they are regarded as a recent and, for some aspects, a not very strong phenomenon as yet. Several observers, such as the Dearing committee members and some HE researchers[3], consider that market forces and competition have reinforced homogenising trends, even leading to a significant degree of institutional isomorphism. Market forces have also played a role in shaping institutional missions and priorities, e.g., fostering a greater attention to applied and externally visible activities (see also 1.5). This is particularly visible in research, but also in other institutional dimensions. These market forces are likely to become even more significant in the near future and to be one of the major challenges for the coordination of the English higher education system in the coming years.

Interestingly, the only voice calling for enhanced coordination and a systematic quest of complementarity, inter-institutional synergies and closer inter-institutional cooperation comes from the Council for Industry and Higher Education (CIHE). In the name of efficiency and the necessity to address diverse needs, it calls for more incentives to help institutions make use of complementary profiles and expertise.[4] The government, in contrast, sees collaboration mainly as a natural consequence of greater complementarity of institutions which in turn is supposed to be a result of enhanced diversity of missions:

"We also see a strong link between the development of stronger missions and growing collaboration in the sector. One of the results of universities acting as if they all had the same mission has been that institutions across the sector view each other as competitors; more diversity will make collaboration easier as institutions with complementary missions associate."[5]

1.3 National Policy Priorities

The 2003 White Paper "The Future of Higher Education"[6] which still informs today's HE landscape and political priorities, may be regarded in many ways as an explicit diversity policy for higher education. It acknowledges the homogenising effects of previous funding policy, posits diversity of institutional missions and profiles as an explicit aim, and proposes to develop funding instruments to encourage such diverse orientations. While the government recently initiated a broader debate on a wide range of HE issues, including institutional diversity, these contributions have not led to any revisions of this policy yet.[7] The White Paper's central proclamation of an institutional diversity policy thus still holds:

[3] See Meek (2000) and Douglass (2004)
[4] CIHE (2006), Diversity and Cooperation
[5] Department for Education and Skills: The Future of Higher Education. Presented to Parliament by the Secretary of State for Education and Skills by Command of Her Majesty, January 2003, p.20.
[6] Op.cit.
[7] See http://www.dius.gov.uk/higher_education/shape_and_structure/he_debate for these contributions to the policy debate and commentaries.

"The sector has embraced lifelong learning, research, knowledge transfer, social inclusion and regional economic development. There is a broad consensus within higher education that all of these elements are both welcome and necessary. However, it is unreasonable to expect all higher education institutions to sustain all of these activities simultaneously at global, and not just national, levels of excellence. No higher education system in the world is organised in this way. Rather, scarce resources are applied in such a way as to produce a focus on comparative advantage: individual institutions focus on what they do best, while the sector as a whole achieves this much wider range of objectives.

There is already a great deal of diversity within the sector. But it needs to be acknowledged and celebrated, with institutions both openly identifying and playing to their strengths.

The Government accepts that it has been partly responsible for the failure to have an honest recognition of universities' different roles. For example, institutions have in large measure been driven towards greater involvement in research by the incentives in the funding mechanisms, and by the criteria for being awarded the status of a university (which helps them recruit students). Government will continue to be the principal funder of higher education, but we need to move to a funding regime which enables each institution to choose its mission and the funding streams necessary to support it, and to make sure that our system recognises and celebrates different missions properly."[8]

One regulatory consequence of this explicit wish to foster diversity of missions and functions is that, since 2004, the provision of taught degrees is enough to obtain the title of university. In parallel, funding instruments and reward structures were also adapted to reward teaching and innovation more than before: Centres of Excellence in Teaching were awarded to about 70 of the best university teaching departments; a Teaching Quality Academy (later called the Higher Education Academy) was created in 2004 to set and oversee teaching standards and promote continuing professional development, accredit training and agree national professional standards for all new teachers; more transparent information on teaching quality was provided to help student choice; and quality incentives for teaching were introduced in the pay system. Additional funds are also provided for students from disadvantaged backgrounds to assist institutions in addressing their special learning, pastoral and financial needs. Furthermore, the innovation activities and business interfaces receive additional means to reward this orientation in institutional activities. However, the scope of the funding received through HEFCE on the basis of RAE ratings is still too large in comparison to reset the stage for true mission diversity. The rewards which institutions obtain through excellent research performance are considerably stronger than those obtained for other successes.

HE representatives thus agree, as the interviews conducted for this study showed that, while much more attention has been paid in recent years to address other dimensions of HE mission beyond the research dimension, there are weaknesses in the degree of consistency between explicit policy aims and funding regimes. Moreover, the policy aims themselves are sometimes in conflict with one another. To sustain world class research by concentrating resources for research more strongly on those institutions which perform best and show sufficient critical mass is an explicit government policy. In theory, the other aim of rewarding institutions for teaching and widening participation is intended to complement the research agenda. In reality, HE representatives agree, the latter is still largely overshadowed by the former.

Another key government priority which relates to diversity of institutional profiles (as well as of student profiles) has been its focus on increasing the HE participation rate, with a target of 50% rate of enrolment. This has become more complex due to the declining demographic trends which have been making it more difficult for institutions to meet the targets set by government and leading to significant institutional competition for students. As part and parcel of the objective of expansion, government policy has concentrated on widening participation to hitherto under-represented groups and on addressing the enduring inequality in access and participation across socio-economic and ethnic backgrounds.

A key instrument for pursuing the goal of widened participation has been the introduction of two-year Foundation Degrees which are intended to be widely accessible and which should facilitate access to technical jobs on the labour market or to be used as stepping stones into advanced levels of higher education. These Foundations Degrees are expected to be offered, for the most part, by Further Education Colleges, i.e. lesser status institutions which are not recognised HEIs, and whose courses have to be validated by HEIs. Foundation Degrees may also be offered by HEIs themselves, but this idea appeals only to those few institutions which

[8] Op.cit., P. 20.

have been catering traditionally to lesser qualified students or students from disadvantaged backgrounds. Some post-1992 universities have expressed concern that offering Foundation Degrees would result in a potential loss of good reputation associated with such offer. Thus, the idea of including new marginalised groups to higher education has been relegated in some way to the margins of the system itself, undermining to a certain extent the whole idea of counteracting social exclusion.

Moreover, the widening participation agenda, while accompanied by new incentives and support programmes such as the *AimHigher* programme, is being simultaneously undermined by existing public funding regimes: The indicators used to fix institutional grants are determined (i.e. reduced) in part by the drop-out rate of a given institution, which means that there is a powerful disincentive to refrain from accepting those students who are most likely to drop-out. Ironically, the latter are often precisely the students from disadvantaged or less supportive educational backgrounds which the government had wanted to help access higher education.

Another policy priority concerns the external efficiency of the higher education system and the way it responds effectively to social and economic needs. The most frequently highlighted aspect in this context has been the employers' needs and employability of graduates which has led to new incentives and programmes that involve employers in the design and funding of HE programmes. If successful, this new focus may strengthen the position of the more regionally and professionally oriented universities (mostly post-1992), but it is too early to assess the extent of this policy and its implementation.

Efficiency is also associated with the relevance of HE and its contribution to business innovation, which is seen to contribute directly to economic competitiveness. Government policies have been advocating a closer interaction between universities and business, especially through more applied and business-oriented research activities. Considerable attention has been given in the last decade to making targeted funds available for these purposes, both through institutional grants, awarded on the basis of competitive bids, and through corresponding criteria introduced by the Research Councils. However, since the HE institutional funds will no longer contain ear-marked funding for innovation, it remains unclear how strong the effects of functional differentiation will remain. Clearly, earlier incentives to enhance innovation activity of HEIs, such as the HE Innovation Fund did have noticeable effects on institutional orientation, as the survey data of this study confirms: English HEIs place much higher value on business innovation as a vital part of their missions than their peer institutions in the other four countries (46 % English HEIs find this function vital, and 43 % important, compared with only 31 % and 37 % average).

Another factor which supports business orientation derives from the overall funding gap which is reported widely, with the effect of making HEIs seek more funds from other private and public sources to sponsor research or individual programmes. According to many interviewees at HEIs, this has had an effect on research goals as well as the overall sense of mission of HEIs.

In contrast, continuing education or lifelong learning does not seem to have been high on the agenda of national policies in recent years.

Taken as a whole, the national agenda of supporting diversification of institutional missions and priorities is not regarded as entirely consistent, given the continuing strong emphasis on internationally competitive research. On the one hand, HE representatives observe that policy-makers have begun to take the declaration of different institutional missions to hold equal esteem more seriously by introducing a few new funding instruments. On the other, they find that funding policies have not really followed suit to sustain such "equal esteem", but that funding has been clearly more generous to the research mission than to teaching or other parts of HE missions.

There is wide-spread concern among some institutional representatives that the emphasis on research within current funding structures and institutional missions is often at odds with the policy objectives of enhancing access and equality in higher education.

Moreover, the emphasis on research in the overall funding landscape and institutional priority setting (see 1.6) has also been accompanied by important debates about the type and range of research which should be conducted at HEIs. While attempts to bring research closer to business' interests have been gaining support and momentum, many interviewees consider that the emphasis on applied research with business orientation has been more rhetorical than real, since funding sources remain comparatively small. Also, the policy expectations that business will help to fund applied research are regarded with some scepticism by most institutions, as they see business more reserved than government had hoped for.

Many HE representatives also see a strong correlation between the various sources of funding, the so-called Mathew effect, with more money flowing to the more affluent institutions, even in such areas as applied research for business innovation, which may be seen as a core competence of post-1992 universities.

1.4 Funding Structures

In recent years there has been a significant debate in England about funding channels and instruments for higher education. This has been largely propelled by the introduction of some major changes in the funding mechanisms, by the raised tuition fee caps, and by the extent of resource concentration across the system. At the same time, given the widespread funding shortage and infrastructural investment gaps which had grown substantially from Thatcher to Dearing and the Blair administration, most HEIs have been facing pressures to diversify their funding sources. This diversification is perceived to be easier for some institutions than for others, since there seems to be a considerable correlation between various sources of funding, at least between research funding and other sources and thus, the way major sources of funding play a major role, directly and indirectly, in differentiating institutions' financial situation and thus their capacity to respond to different opportunities. Some institutions are proposing the idea of bilateral negotiations with government, though this is widely regarded as a zero-sum game within the sector. The sector's organisations have been trying to prevent such a new distribution instrument, preferring general transparent rules and criteria.

The issue of the effects of raising tuition fees has been one of the most prominent issues in higher education funding discussions in recent years, notably since 2006 when the cap was increased to £ 3,000. There were concerns of the effect of this new policy on equality, although the limited evidence available so far suggests no major impact on access. The tuition cap was raised to £ 3,290 in July 2009. The most prestigious institutions have been pressing for more autonomy on this issue, i.e. for moving towards a higher fees-higher aid paradigm. This regime is already being applied to overseas non-EU students who pay full fees, making this target group highly attractive for institutions.

Presently, English HEIs receive their funds in at least six different ways:

1. The main source of funding for higher education institutions is the block grant made available annually by the Higher Education Funding Council for England (HEFCE), which is the key agency for HE government funding and was formed by the Further and Higher Education Act, 1992, superseding the Polytechnic and College Funding Council and the Universities Funding Council.[9] The HEFCE grant may not impose too many conditions on individual institutions, neither by reference to particular courses or programmes of research (including the content of such courses or programmes and how they are taught, supervised or assessed), nor by reference to criteria for selecting and appointing academic staff or admitting students. However, it does top-slice some funding for specific activities or projects and imposes some conditions on increased tuition levels, such as establishing bursaries for students from low-income families. To a large extent, the grant can be allocated freely by the institution. It falls into three main categories:

   1.1 Funding for learning and teaching, including widening participation, based on an annual funding agreement with each institution, which sets out the student numbers that institutions are required to deliver in return for funds for teaching. Diversity of institutional profiles is respected only in so far as a series of funding premiums is applied to recognise that different institutions have different costs. Some are student-related, such as the premium for part-time students. Others relate to the institution, such as the premium for universities and colleges with historic buildings, and premiums for small and specialist institutions providing high-cost courses in, for example, music, dance, and art and design. An institution's total standard resource for teaching is calculated by weighting the full-time equivalent (FTE) student numbers in each price group by any applicable special factors, multiplying the weighted FTEs by the standard price for the group, and summing the totals for the four groups. Additional money is allocated for the purposes of widening participation (see 3.4).

   1.2 Funding for research: The great majority of HEFCE funding for research is allocated as a quality related (QR) grant. Concretely, this means that HEFCE operates a policy of allocating research funding selectively on the

[9] The role of the Funding Council is to distribute public funds made available through government via the Department for Innovation, Universities and Skills (DIUS) in England and to advise on the funding needs of higher education to the Secretary of State for Innovation, Universities and Skills.

basis of research quality, as assessed periodically in a Research Assessment Exercise (RAE), run by the four UK HE funding bodies. This review is largely based on a peer review by expert panels and supporting data provided by the institutions. The last RAE took place in 2008, with funding consequences still unclear at January 2009. Assessment is based largely on the quality of cited published research outputs (which can be printed works, products or even artistic performances) but also takes into account subsidiary indicators, including (since the 2008 RAE) some innovation achievements. In 2001 these had only included the numbers of postgraduate research students, funded research studentships, external research income and statements of research plans.

In the 2001 RAE, submissions were graded on an ascending scale of seven points, from 1 to 5* with point 3 divided into 3a and 3b. The rating of 5* denoted a submission in which the majority of the work was judged to reach international standards of excellence. Only departments rated 4 or above receive QR funding. The QR funding method also takes into account research volume, measured primarily as the number of staff submitted for assessment but also using additional proxy volume measures including numbers of research students and research income from charities.

In 2008, the rating scale was replaced by more flexible graded profiles identifying the proportions of work in a submission judged to reach stated standards at four starred levels. In this way the internal diversity of research quality within institutions and submission units will be reflected more clearly. The results raised the question whether all excellent research groups should be treated equally or whether additional support should go to those institutions in which more of such excellent research groups and a wider environment of excellent research training and infrastructure could be found, with the argument that only these institutions could compete internationally and should be supported to do so successfully. Hence a key question of the values of convergence versus diversity was raised in this context: the option of concentrating resources on institutions with greater critical mass of research excellence was associated with the argument of greater efficiency and competitiveness. On the other hand, the option of supporting a wider range of institutions to nurture research excellence was associated with equal opportunities. The argument was made that research excellence can and does emerge in very different institutional contexts and that excellent performance should be rewarded no matter where it occurs.

It should be emphasised that the above-described mechanism of the RAE and its threshold logic of funding, rewarding only those research units which reach beyond a certain threshold of quality and quantity of research, results in a high degree of financial and reputational differentiation of institutions. The RAE results are widely publicised and commented on and result in further follow-up rewards for the successful. The unsuccessful will have even fewer means to build up or expand their research capacity. Within the logic of limited resources, this funding mechanism creates a strong vertical differentiation force which rewards those who are already performing well.

To counterbalance this overall concentration on excellence to some degree, the government has introduced an instrument for upcoming research institutions: HEFCE's funding for research also includes support for selected subject areas where research activity has developed comparatively recently, through a "research capability fund".

1.3 Special funding, including earmarked capital, which one could even call diversity funds given their purposes, covers the following areas:
- rewarding excellence in teaching and raising the quality of learning and teaching
- widening access and increasing participation through the AimHigher programme
- supporting HEIs in developing their capability to respond to the needs of business and the community where this will lead to economic benefits
- reimbursement of inherited liabilities
- rewarding and developing staff (this may be rolled into core funding in future)
- supporting specialist museums, galleries, collections and libraries which are available to all researchers within the sector

2. As a second source of funding, beyond the institutional grant, HEIs may receive Capital Funding. The latter may derive either from the Science Research Investment Fund (SRIF), funded jointly by HEFCE and the Office of Science and Technology (OST), which supports investment in research facilities; or from project capital allocations from

HEFCE for learning and teaching, IT and disability, which are conditionally allocated on the basis of a formula linked to total teaching resources.

3. Thirdly, and for some institutions most importantly, a third source of income consists of grants awarded by the Research Councils for specific projects, as well as from contracts with industrial and commercial firms and government departments, or grants from charities and the EU. The overall money distributed for research purposes through this channel is as high as the research money that flows to institutions through the research part of the HEFCE grant. Institutions thus have a strong interest in faring well in these bids if they want to build or sustain a strong research base.

4. The fourth and currently most intensely debated source of income is Tuition Fees: From 1998-99 till 2007, an annual flat rate fee of £ 1,000 was introduced for full-time home and EU undergraduate students (£ 1,150 in 2004-05). However, to avoid reduced diversity of socio-economic backgrounds, this fee was means-tested, and around 50 per cent of students were wholly or partially exempt: their fee is paid in full or in part by local education authorities (LEAs). All eligible students entering higher education can get help with tuition fees through Student Loans. Student Loans have to be paid back but students do not have to start making repayments until they have left the course and are earning over £ 15,000.Once their earnings reach this repayment threshold, they pay back nine per cent of whatever they earn over £ 15,000. Those students due to start paying back their loans from April 2012, will have the option of taking a repayment break of up to five years.

   The maximum tuition fee is £ 3,290. Less is possible but, given the financial climate, a majority of institutions charges the full amount. Non-EU students are charged higher fees because, since 1980, the government has required that their fees cover the full economic cost of their tuition. Here, institutions are free to decide what level of fee they charge overseas students. Most institutions, regardless of institutional mission or type, have built up substantial overseas student clienteles, by taking advantage of this financial incentive. This has been especially visible at the Master level, most often the one-year Master programmes, which seem to be very attractive to these student groups.

5. The fifth growing source of income derives from knowledge transfer, either directly from services provided by the institution, or from innovation support grants by the HEFCE Higher Education Reach-Out to Business and the Community Programme (HEROBC) or the Higher Education Innovation Fund (HEIF) which is designed to help HEIs develop an infrastructure for working with business and the wider community. The HEIF is regarded as providing a greater distribution of funds over all institutions when compared to the concentrating effects of the RAE-based Research grant provided by HEFCE. Finally, there is the HE Active Community Fund (designed to encourage closer working with local communities). However, these latter funds have now become integrated into the non-earmarked block grant so that this incentive to diversify functionally is partly lost.

   It should be noted that the Research Councils also promote "inter-sector" cooperation by providing a strand of money for collaborative research which is conducted in partnership with industry as well as by providing the possibility of spending Research Council grants on a research year in industry. Moreover, since 1994, Research Councils have shifted their policies to ask for more justification of the relevance of the funded research to the wider community, aiming to increase public understanding of the uses of investment in science and scholarship.

6. Income from endowments, donations, sponsorships, special fees for short courses etc. The importance of these other income streams varies from institution to institution: income from invested endowments, for example, tends to be more significant in the older universities, and donations tend to be focused on universities with medical schools, while continuing education activities are more developed, on average, in the post-1992 group and are usually not a significant source of income.

1.5 Institutional Strategies and Development

Institutional development priorities and strategic plans differ more strongly between different mission groups of institutions, as already pointed out above (1.1 and 1.2), than among these groups, even though institutional choices may naturally vary considerably within these mission groups.

With respect to research development, performance in the RAE seems to be the highest priority of institutional leadership, regardless of institutional type. Many institutions link their internal resource allocation, rewards and even sanctions, to RAE's performance. Hence, the RAE does not just lead to

vertical differentiation between institutions but also to some extent within institutions. In addition to performance-based internal allocation being more widespread in England than in any other European country, as confirmed by the survey data in this study, some research-intensive institutions will even go so far as to close departments if they fare badly in the RAE and do not show critical mass and concrete signs of quality improvement in their research performance.

Such questions of portfolio development are particularly pronounced in the universities of the so-called "squeezed middle", which have had to look for more marked profiles in order to compete nationally and internationally. These institutions compete with the Russell Group institutions in research but also place student experience and teaching excellence particularly highly on their institutional priorities. Hence they are strongly concerned with their subject profile to make sure their investments are well placed. Some institutions' decisions to close down individual departments, such as chemistry, have been met with great concern by the relevant national associations which point to the central position the subjects hold in basic university education and in allowing for interdisciplinary research. But the decisions reflect the urgency with which many institutions look for survival in harsh competition for research funds and for the best-qualified students.

A closer look at the subject portfolio of the 1994 group of universities will thus reveal a markedly more restricted profile than at the larger Russell Group universities: They are most widely represented in the social sciences and humanities, even above the average of other university groups. While usually having a wide range of natural sciences, mathematics and IT, only very few institutions have activities in medicine (sometimes in collaboration with other institutions), or engineering specialisations.

The larger comprehensive research universities of the Russell Group are usually firmly represented across the whole gamut of subject areas, and perhaps less urged to consider more extreme portfolio decisions. However, they do also invest great strategic attention into optimal research performance and capacity, by supporting high-performing departments, through high-level hiring, supporting major bids for research infrastructure, or enhancing research training environments. Building critical mass is a concern here too, as is the identification of new scientific areas and the investments needed to support these.

The increased government and public attention to widening participation and equal access has brought some less favourable publicity to the well-reputed institutions of the Russell Group or the 1994 Group. Such reputational issues, as well as the perception of missing out on talent in a decreasing national pool of students, has moved some of the most established Russell Group institutions to pay more attention to attracting students from under-privileged backgrounds. However, attracting highly qualified students from these backgrounds tends to be a great deal easier for those institutions with a higher reputation.

While innovation activities receive high attention at all research-intensive institutions, continuing education and lifelong learning do not seem to rank high on their agenda. This is also strongly confirmed by the survey data, which shows a negative correlation between placing research as a vital part of the mission and the importance attributed to continuing education. In contrast, regarding research as a vital part of the institution's mission often goes hand-in-hand with attributing high importance to its contribution to business innovation.

It should be noted that an increased interest in contributing to business innovation seems to be a common denominator among both the research-driven and teaching-driven institutions, the only difference being that they may target different kinds of business and emphasise different kinds of collaborations. While larger research-driven universities may be more focused on research cooperation with larger companies, post-1992 universities may place greater emphasis on applied research projects, consultancy, tailor-made continuing education offer and collaborative course design, and may work more often with small and medium-sized companies. The survey's findings show that emphasis on business innovation is not only to be found more often among the research-driven institutions. Moreover, those institutions which attribute vital importance to teaching and continuing education and which reward innovative approaches to teaching in their promotion criteria, reflecting commitment to this dimension of their mission, also find business innovation more often a vital part of their mission.

Hence, in England, there is a significantly greater emphasis on business innovation than in most other countries. As questionnaire data and interviews in England reveal, this is not only reflected in institutions' sense of their missions but also in the higher values attributed to this function among academics: while they value research the most (higher than teaching), engagement and success in innovation is rated far more highly than by their peers abroad. Similarly, innovation performance is one of the most important hiring criteria for 23 % institutions, only 10 % fewer than for teaching.

Widening participation and enhancing access to higher education is a high priority especially among the post-1992 universities. However, it should be added that institutions which have paid significant attention to issues of access and equity, often, out of a sense of their own mission and tradition of inclusiveness and building social capital, also regard this priority as demanding and tricky.

Firstly, they feel that there is some contradiction in the policy and funding framework and that the focus on widening participation is not sufficiently rewarded. The funding incentives remain small or even negative if one looks at the actual costs of addressing the needs of students from under-privileged backgrounds.

Secondly, and perhaps even more damagingly, although there is some recognition of widening participation achievements through assessment mechanisms (including public reports with rankings of different aspects), there are important reputational risks to be labelled as a "widening participation" institution. Thus, even those institutions that place widening participation as an important institutional priority and can be applauded for their multiple achievements in this area with an impressive range of successful teaching approaches, counselling and support services, tend not to include such successes in their marketing communication so as not to lose attractiveness for the best-qualified among the socially disadvantaged students.

High attention to teaching excellence and optimal student experience is also a key priority at many 1994 group institutions. This is also reflected in the survey data which shows that 1994 group institutions reward innovative approaches in their promotion criteria and find teaching a vital (rather than an important) part of their mission more often than the Russell Group institutions. Nevertheless, when compared with the post-1992 institutions, the focus of the 1994 group is less on paying attention to the diverse needs and being inclusive of students from disadvantaged backgrounds (in this respect they even have more trouble than some of the Russell Group universities), than on providing a highly selective but also particularly attentive and supportive environment for traditional qualified students, with high staff / student ratios and excellent learning and research infrastructure in the fields they represent.

All across the HE landscape, acute market awareness was noted in the interviews conducted for this study, both within the HEIs' leadership and among representatives from sector or funding organisations. There seems to be an overall consensus that market awareness has increased considerably in recent years and is shaping institutional choices. An institution will see first where its primary markets are, where it would attract resources most successfully, where it would attract its students or its new staff, and what it has to do to optimise its market successes. For instance, an institution which only receives 7 % of its budget through the Research grant of the HEFCE would "go bankrupt if it concentrated only on its basic research" but would make sure to develop its excellence in being responsive to the concerns of regional stakeholders, students and employers. Hence, to build a learning, research and service environment which strives for excellence in its responsiveness to external stakeholder needs is not only part of an institution's tradition but also becomes an instrument to obtain greater support and recognition from its relevant markets, including sponsors from the professional world.

Even though government incentives are nowhere near as supportive of such alternative HE missions as they are of the internationally oriented research universities, there are still enough financial incentives and third party sources to make it at least possible for institutions to pursue institutional excellence in this respect. Diversified funding is a key term in this context, as it allows institutions to gain some flexibility. Nevertheless, the overall limits of available funding, including private sources, often lead institutions to chase opportunities that would otherwise not be part of the core of their institutional priorities. Mission diversity does not just need multiple incentives to thrive, but also presupposes a sufficient overall level of funding to prevent institutions from running around wildly in all directions, forgetting about their core missions, to maximise their changes and make ends meet.

1.6 Quality Assurance

Quality standards and quality assurance in institutions are underpinned by several different instruments, most importantly, by the universal use of external examiners and by the activities of the QAA including its codes of good practice and quality benchmarks. In many areas there are professional and statutory bodies which may exert a far-reaching influence on quality standards and even on curricula. This ensures that institutions meet national expectations such as subject benchmark statements and codes of practice. For this purpose, QAA conducts peer review-based audits and reviews of higher education institutions and their internal QA arrangements, with the possibility of subject-based reviews as the need arises. Accuracy and adequacy of quality-related information published by the higher

education institutions is also reviewed. QAA reviews also cover higher education programmes taught in further education institutions.

These quality assurance instruments and procedures do not seem to be hindering or promoting institutional diversity but are supposed to be neutral since they take the institution's mission as a point of departure. However, as QA and institutional representatives state, there is a tendency for institutions to overperform in the quality audits and to adapt to perceived standards and expectations. HEIs tend to play safe and do not want to stand out, even though the QAA repeatedly attempts to dispel these beliefs and tries to encourage open dialogue on the unique challenges and approaches of each institution. According to QAA representatives, the institutional behaviour and its willingness to take risks seem to be positively associated with the degree of institutional self-confidence. Whereas more established institutions feel less constrained by quality mechanisms and regulations, more recent ones with less traditional orientation are reported to be more inclined to follow unwritten perceived expectations.

All in all, quality issues have gained visibility with the emergence of a mass system of English higher education and its increased diversity of needs and of institutional and programme orientations. Widening participation has been associated with more diverse populations, motivations, competencies, and qualifications, including a concern about lowered quality standards, which in turn has fuelled the recurrent debate between elitism vs. mass approach in English higher education. Quality assessment becomes even more of a challenge in a non-homogeneous sector. On the one hand, there is a greater urgency to define minimum standards that promote credibility of an expanded and expanding system. On the other hand, there is a consensus that quality mechanisms should not become a hindrance to diversity of institutional missions and programmes. The issue becomes even more contentious when dealing with less traditional subjects and programmes.

1.7 Stakeholder and Academic Values

Academic values still place research very much at the core of the ethos of being a University, as the survey data clearly confirms. In fact, the difference between the importance academics attach to research compared with the other HE functions is even higher in England than in the other four countries. Following the traditional notion of the university, substantial research activity is seen as being not only beneficial but as a necessary condition for quality university education, regardless of the changed regulatory use of the title. Thus, a strong research focus is linked to significant reputational and financial advantages for institutions and career advantages for academic staff, so that very few, if any, institutions want to be seen as teaching-only institutions but prefer to be regarded as having a particular teaching emphasis (on teaching excellence, on innovative approaches to teaching and learning or on catering to diverse populations of students). The place of research within institutional priorities has risen even higher, firstly in response to the RAE rounds and their strong impact on financial allocation and reputation, and secondly, in response to the increasing visibility and effect which league tables are exerting on institutional behaviour in recent years (Hazelkorn 2008).

2. Diversity of Staff Profile

2.1 Regulatory Framework

Even though the English system has been formally unified since 1992, the old binary divide still seems to be reflected to some extent in different staff profiles, in non-regulated ways, as will be described below. However, the overall dominance of research competences especially in hiring criteria and in academic value systems is clearly the most striking feature of overall HE staff profile in England (see 2.4). This research dominance in staff assessment is to some extent related to the absence of regulatory distinctions between different types of institution, although a more heterogeneous approach to staff profile would have been possible if other incentives had been sufficiently strong. While national regulations leave HEIs complete freedom to define the competence or task profile, and to some extent also academic staff salaries, the survey data reveals that the English institutions have the least differentiated approach to staff when compared to the institutions in the other four countries (see 2.4).

National regulations only prescribe a certain national pay scale which determines salaries for all but the highest staff groups. As regards salary frameworks, there have been recent changes in the academic pay system. A national scale was agreed, mostly due to equal pay issues. However, this applies mainly to non-professorial levels. At the highest levels of the academic ladder there is large flexibility. Professorial salaries differ substantially between institutions since the latter are autonomous to set these at their own discretion and have an interest in attracting the best researchers to improve their own research capacity, which would

result in high financial rewards for the institution. This means that institutions have started "poaching" successful professors from each other, offering better research infrastructure and salaries. Since staff mobility is high, reaching out also to other countries, especially the US, a real market for the most successful internationally visible researchers has developed, which institutions have to take into consideration if they want to compete on the international research front. Hence many institutions are much more pushed to consider in which areas they would like to invest, so as to stand a chance of offering attractive conditions for the best qualified staff. Market awareness has clearly become most acute in this most competitive dimension of the HE sector.

2.2 National Policy Priorities

There does not seem to be any national policy which targets diversity of academic staff as such, but rather a clear commitment to keep the domain within the autonomy of each institution. However, as part of the diversity policy intended in the White Paper (2003), there has been a marked policy to make teaching excellence and performance more visible and publically recognised and to support quality enhancement in this domain. This includes teaching awards and support for teaching competence development through the national Higher Education Academy. Perhaps most influentially, teaching achievements are made publically visible through the National Student Survey, which is an attempt to raise the importance of teaching for institutional visibility by responding to the public taste for rankings and league tables. However, some institutions seem to have found ways to influence the students whose evaluations are included in the survey so that its reliability is contested. But the idea of making teaching achievements the focus of national and public attention seems to have resulted in increased institutional attention to these matters.

2.3 Funding Structures

As in the other four countries, functional differentiation of staff is the only dimension of staff diversity which is clearly affected by funding structures. In England, the reward system privileges research performance over all other dimensions of staff activity. Rewards for good research record tend to be significant, both at an institutional level (through the RAE quality-based allocation) and at individual level (through the increase of prestige and one's price on the research staff market). This research emphasis is clearly reflected in recruitment and promotion criteria (see 2.4 below). Even though recent political efforts have given greater visibility to teaching, this is not reflected in national funding incentives to increase staff salaries on the basis of teaching performance. As yet, the idea of creating quality incentives for teaching in the pay system as a longer term instrument of implementation[10] remains unrealised.

At institutional level, teaching and innovation are often rewarded in promotion but only rarely lead to increased salaries, as the survey data shows. Highly regarded university researchers are also more highly prized to the extent that poaching is a growing practice between institutions, which leads to an overall increase of research/star salaries. Furthermore, there are many reports of tensions within institutions between research-rated staff and the others.

2.4 Institutional Policies and Development

With respect to staff profiles, the old binary divide can still be traced in hiring and promotion criteria to some degree. Old universities have a more traditional approach that values research clearly above other aspects. New universities are more likely to recruit more mature staff with professional experience, with business links which may be relevant for their teaching and research at university, and with interest in applied research of social and economic relevance. The degree of research engagement expected from academic staff varies significantly across the gamut of different types of academic positions. Some research record is expected of all senior reader and professorial positions, also at post-1992 universities.

It should be added, however, that the pressures towards reputational and financial rewards through research activity have led some new universities to start privileging research records even more than their missions may lead one to expect. It may thus be less surprising that the survey data reveals a relatively high degree of functional mainstreaming in staff hiring criteria. Research performance is weighted most strongly by 65 % of responding English institutions (slightly above the 60 % average across the five countries), whereas teaching performance is ranked as the most important hiring criterion by only 32 % of English institutions (vs. 42 % average across the five countries). Only around one fifth of all institutions attribute the lowest rank to research performance in their hiring criteria (both in England and the

[10] Cf. The Future of Higher Education, p.97.

other countries included in this study). Moreover, professorial positions seems to be less often functionally differentiated in England as compared to the other countries: Whereas on average half of the responding institutions across the five countries have different types of professorships in term of hiring criteria, this is only the case for 27 % of English institutions. Likewise the task definition of professorships differs within institutions at 67 % of institutions across the study but only at 52 % of English institutions. Only with respect to salary or rewards do English institutions show an equally differentiated picture as the other HEIs, with 61 % institutions providing different salaries and rewards to different professorships.

Hence, institutional profiles do not differ as much with respect to their staff profiles as the variety of different mission emphases would suggest. Hiring criteria are remarkably research dominated, even at the more strongly teaching-driven institutions. In the interviews, it was pointed out that the high value of research competences in hiring, which is deeply embedded in institutional attitudes at many post-1992 institutions as well, is related to their value as a foundation for the whole set of required academic staff competences. It is argued that applied research, research-based consultancy and business innovation, which are also writ large at these institutions, also presuppose research, though perhaps of a different nature. Nevertheless, the fact that high-impact publications which are not per se related to these forms of research would still play such a large role in promotion at so many institutions (including many of the more professionally and regionally oriented ones) can only be understood in light of the overwhelming importance of the RAE funds as the only significant pot of funds available, so that even for institutions with poor odds it would influence institutional rewards and hiring criteria.

In comparison to research, all other aspects are ranked far more weakly in hiring criteria and with a much wider variety of emphases between institutions. Thus innovation performance is distributed quite evenly across the different ranking possibilities: most highly by 23 % of English institutions (4 % more than average), in second order by another 23 %, in third place by another 25 % and 23 % in fourth, the rest in fifth.

It should be noted that the interviews conducted in the framework of this study revealed a slightly more differentiated picture with respect to hiring, in which the institutional differences are reflected more noticeably in different staff portfolios. Institutions with weaker research reputations have difficulties in attracting young research stars, not only for reputational reasons which may diminish the market value of the researcher in future but also because of the expectations of a higher share of time allocated to teaching activities (and thus less time for building a research profile) often associated with more teaching-oriented institutions and their more demanding diversity of needs and student qualifications. Nevertheless, more strongly teaching-oriented institutions still report trying to focus on some subject areas with the most competitive research performance, as part of a research niche strategy, to attract academic staff with competitive research records and potential, so as to increase their research performance and visibility, as well as to attract research funding in these well-positioned areas.

Performance-based promotion criteria exist at 93 % of the English institutions (above the 84 % average) and again reflect a highly research-dominated landscape, although less so than for hiring. In this case the English research weighting is no longer above the average of the five countries. Publications in high impact journals and publications in general are regarded as decisive by around half of all institutions (English or other). Teaching experience is only regarded as decisive by a third of the institutions (English or other), but found important by two thirds.

One should take note that the promotion criteria are more differentiated than the hiring criteria in so far as they attribute a significantly higher weighting to evidence of innovative teaching approaches (found to be decisive by 50 % English institutions, 13 % above the trans-national average, where this aspect is more often found important but not decisive). The high interest in innovative teaching approaches is especially highly represented among the 1994 group institutions and the post-1992 universities.

Other aspects of staff diversity, linked to ethnic and religious identity, are more often targeted at English institutions than at their peer institutions abroad, though rarely prioritised in hiring and promotion criteria. Ethnic diversity of staff is prioritised by 28 % English institutions (vs. only 13 % on the transnational average) and religious diversity is found to be desirable more often than in the other countries (35 % vs. 19 % average). Unfortunately, the survey gives no data on the how these priorities are implemented, apart from the fact that both aspects are usually supported by strong anti-discrimination policies. Some details were provided during the site visits conducted in this study. At one institution, major efforts were made to analyse all areas of human resource development for signs of insufficient attention to diversity, resulting in action plans with concrete measures addressing diversity of staff in these respects.

Diversity of national backgrounds is a priority for 19 % of English institutions (slightly above the average of 15 %). Attracting international staff has become more important in recent years for some institutions, depending also on the subject areas and their size and international market orientation. However, internationalisation presents some challenges, especially with respect to language problems which may affect the teaching performance and institutional management capacity of that staff, raising questions of equal treatment (less teaching and institutional management load being seen as desirable for most English staff members as well).

The only aspect of diversity that is prioritised less often in England than on average is gender diversity which forms a priority for only 32 % of English institutions (vs. 40 % on average). Likewise fewer English institutions provide special services to support diverse needs with respect to gender diversity (34 % vs. 46 % average). In the hiring process, the gender criterion, together with age is found to weigh least strongly, in comparison to the various performance aspects and international experience. This may be due to the fact that gender issues are not a great problem, compared to most other European countries, as statistical data show, although there are still some relevant differences in certain subject areas. While this is also the case for other institutions, the English institutions weigh these aspects significantly more weakly than the average respondent institutions in this study (weighted most weakly by 53 % of English institutions vs. 40 % average). There are strong policies against discrimination, however. Although there is not much evidence of explicit discrimination, there are still some remaining issues of pay gaps and promotion patterns.

The diversity of staff in age profile is reported to be an issue in certain institutions, mostly due to the fact that staff turnover is low in many institutions and their academic structure is ageing. The issues of age structure may become a more visible issue in some fields. This is particularly the case of those fields in which low student demand has prevented institutions from opening new staff vacancies or renewing their staff as older staff members retire.

2.5 Quality Assurance

The greater institutional autonomy on personnel matters, including more liberal lay off policies, has led to a significant emphasis on individual performance assessment, which tends to be reflected in recruitment and promotion criteria as well as pay and work conditions. With respect to staff diversity, it should be emphasised that quality assurance has been the main instrument with which some functional diversity has been promoted, namely the attention to teaching performance, innovation and achievements as well as to the quality of student counselling, tutoring and mentoring. The quality audits, the ample internal quality development measures, and the recent national student surveys have all contributed to raising the status and visibility of teaching performance of academic staff.

Other aspects of staff diversity only play a role in internal quality assurance procedures and much more rarely so. At some institutions, human resource development is increasingly interested in proactive diversity management, akin to the high degree of attention paid to these aspects in the US. This is more likely to be the case at institutions which are located in ethnically diverse regions and cater explicitly toward ethnically diverse clienteles, as one example included in the site visits of this study showed. The measures introduced at this post-1992 institution to address diversity as a challenge and opportunity for innovation and responsiveness reflect so much investment of thought, effort and imagination that they could serve as a model of remarkable practice for others.

2.6 Stakeholder and Academic Values

In all the five countries included in this study, one finds academic value systems in which engagement or success in research is most strongly valued by the academic peers. However, these values are even more strongly weighted in England than in the other countries: 82 % weigh success in basic research most strongly, 83 % applied research – 22 % above the average of the five countries – while teaching performance is only reported to be weighted strongly at 57 % of English institutions. In the other countries, teaching performance is weighted nearly as strongly as research. At the other end of the scale, academics at English institutions attribute slightly higher value to business innovation and service to society (strongly valued by academic peers at 28 % and 38 % of English institutions respectively, compared with averages across the five countries of 17 % and 27 %).

The academic value system is strongly sustained by career structures which are determined by research performance, at least for the majority of academic staff and the senior positions. Even at some of the more professionally oriented institutions, where the professional experience of staff is regarded as central, a substantial number of academic staff positions are expected to be filled with persons with a solid

research background, though often with more applied focus. The fact that institutions are fully autonomous with respect to staff recruitment and promotion does not seem to be used as a counterbalance to these homogenising forces of career structures and value systems. Instead, given the open market of academic staff and the high degree of staff mobility and inter-institutional poaching, institutions have to take account of these forces in order not to lose their highest performing staff to other institutions. To prevent this from happening, institutional choices tend to buy into the research emphasis, at least to some degree, thus reinforcing rather than balancing such mainstreaming.

3. Diversity of Student Profile

3.1 Regulatory Framework

There are no specific definitions of student profile laid down in national law, e.g. describing different qualification profiles or other aspects of student diversity. However, the regulatory framework does provide for the possibility of flexible access to higher education, including recognition of prior learning, and validation of non-formal learning, facilitating access to higher education, or from vocational education to higher education. Likewise, the regulatory framework for Foundation Degrees and their recognition as intermediate Higher Education Degrees (by way of validation through higher education institutions) has contributed to diversifying the student profile in terms of qualifications, educational and socio-economic backgrounds.

3.2 National Policy Priorities

These regulatory conditions are part of a broader national policy to widen participation. The issue of participation and access is very prominent in the higher education policy debate. Diversity of student profile is a policy aim in so far as students from educationally disadvantaged backgrounds have become the key focus group in order to raise the participation rate from 43% to 50% of the age group. This is deemed necessary in order to respond to the needs of the knowledge economy. In order to fulfil the economy's demand, the government explicitly seeks to diversify not just the student body but also the HE offer: foundation degrees are intended to be one of the main ways of increasing student numbers, following the argument set in the White Paper:

> "Demand for graduates is very strong, and research shows that 80 % of the 1,7 million new jobs which are expected to be created by the end of the decade will be in occupations which normally recruit those with higher education qualifications. So it is in the country's interest to expand higher education. At the moment we calculate that the participation rate for English students in higher education is around 43 % of 18–30 year olds. (…)
>
> If we want to close the productivity gap we must close the skills gap. (…) There is good evidence to suggest that the skills gap is most acute at a level that is represented by higher education qualifications below degree level, particularly two-year work-focused provision. The National Skills Task Force reported that jobs in the "associate professional" and higher technician level will experience the greatest growth in the coming years, increasing by 790,000 up to 2010. (…) Shorter, more work-focused courses are also better suited to a culture of continuous professional development."[11]

National policy also seeks to address equity concerns in the overall system, since the composition of the student body is still non-representative of the age cohort. Indeed, institutional performance varies greatly and the controversy about equity is more visible in some institutions than in others, given the varying degrees of elitism across the system. Accordingly, HEFCE has set specific targets for each institution.

Overall, the government pressure for widening participation and HE expansion has been facing problems, due to unfavourable demographic patterns, but also to insufficient financial backing of the ambitious targets. The combination of demographic and financial pressures to attract students who would be likely to succeed, and thus not count as financially damaging drop-outs, has created strong competition for the best-qualified students.

As part of its widening participation agenda, government policy addresses a whole range of aspects of student diversity. In the White Paper a whole chapter is entitled "Fair Access" which is reflected in HEFCE's strategic objectives:

"Widening access and improving participation in higher education are a crucial part of our mission and form one of our strategic aims….Widening

[11] The Future of Higher Education, page 16.

participation addresses the large discrepancies in the take-up of higher education opportunities between different social groups. Under-representation is closely connected with broader issues of equity and social inclusion, so we are concerned with ensuring equality of opportunity for disabled students, mature students, women and men, and all ethnic groups."[12] (2008)

Thus widening participation goes hand-in-hand with increasing student diversity, in terms of students' academic backgrounds, as well as disability, age, maturity, experience, commitment, motivation, study mode, class, sex, race, and religion.

3.3 Funding Structures

Additional allocations are made for widening participation, namely for outreach, counselling and support services, and for supporting disabled students. The allocations take account of students from wards with low participation in higher education; qualifications on entry; age; the number of students in receipt of Disabled Students' Allowance; and the number of part-time students. For 2004-05, HEFCE allocated £ 273 million for this. Funds are being ear-marked in the institutional grants to fund the additional recruitment and support burden incurred by approaching students from non-traditional HE environments. Apart from additional student counselling and pastoral care, government investments also comprise the AimHigher programme (see above).
Nevertheless, many institutional representatives emphasised that the national priorities with respect to widening participation are not consistently reflected in the financial framework. In particular, they point to the financial disincentives associated with equity policies and the enrolment of students from less traditional social and economic backgrounds. Not only are they regarded as more costly, since they tend to require more tutoring, they also have higher drop-out rates that penalise HEIs in terms of funding. Thus, many actors consider that the government should provide greater financial incentives in order to ensure that institutions really adopt the priority.

As in most countries, diversity of student profile is also accounted for with respect to subject area, given their varying costs. All academic subjects are allocated to one of four price groups, and a standard price for full-time students is calculated for each group.

The international composition of the student body is clearly the most strongly incentivised aspect of diversity in the student profile. Since international (non-EU) students have to pay the totality of their tuition fees, institutions have a strong interest in attracting these students, and they do so successfully, all across the different mission groups.

3.4 Institutional Policies and Development

In general, the survey data clearly shows that diversity of the student body is much more highly prioritised by English institutions than in the other four countries. This finding is not only reflected in the declarations of priorities by the institutional leadership and administration but also supported by the availability of policies, data and special services, all of which can be found significantly more often at English institutions. This higher degree of attention applies to diversity of ethnic background, nationality, age distribution, and -- most strongly divergent from the average across the five countries -- diversity of socio-economic backgrounds where 20 % more institutions than average (40 % of English students) provide a special service supporting students with diverse needs in this respect.

In accordance with the national policy priorities, the most salient divergence from the European average can be found with respect to student diversity priorities concerning their socio-economic backgrounds (i.e. income and educational degree of parents). This is a priority for nearly half of the English institutions (47 %), while the average shows only less than a third of institutions (31 %) setting this as a priority. Also, only a fifth of English institutions are indifferent to this aspect, while the average institutional indifference score of this aspect amounts to a third of all institutions (33 %). Indeed, for the English institutions, this aspect of diversity is the most highly prioritised of all those included in the questionnaire. The data collected on socio-economic backgrounds is also reported to be used for strategic purposes and institutional decisions in 76 % of all English institutions (20 % above the average).

Second in rank (in terms of number of institutions having prioritised this aspect) comes diversity with respect to the level of entry qualifications which is prioritised by 44 % of all institutions (average being 46 %). More than three quarters of all English institutions have a policy in this regard and four fifths use the data they collect for institutional decisions and strategy development.

Ethnic diversity of the student body is a priority for 43 % of the responding English institutions (high

[12] HEFCE (2008) "Widening Participation" [www.hefce.ac.uk/widen]

above the average of only 26 %). Also, while only 14 % English HEIs are indifferent to ethnic diversity of their student body, this score is 31% for the average across the five countries.

Similarly, English HEIs find diversity in terms of nationality more often a priority (32 % more than 10 % than the average). Many institutions have developed active policies to attract international students also because they believe it brings additional prestige and reputation to have a more internationally diverse student population and because it may be also attractive for national students to be exposed to more diverse learning environments. However, the international composition of the student body may also pose some diversity challenges, for instance, since some national groups have a reported tendency to cluster and thus potentially undermine the diversity of student cohorts.

Similarly, religious diversity is a priority for English institutions more often than for the average HEI (17 % vs. 9 %).

Diversity with respect to age distribution is prioritised by 24 % English institutions (10 % above the average) and diversity of competence profiles is also more often addressed at English institutions in terms of having a policy (73 %) and a special service (60 %) to look after diverse needs, 18 % or 28 % above the trans-national average.

Only with respect to different modes of learning, part-time and full-time learning or physical presence and distance learning, the English priority setting resembles the average across the other countries. Such diversity is deemed desirable by half of all institutions (English and others) but only a priority for about a quarter (for having both full time/ part time) or a fifth (for combining presence and distance learners). Similarly for gender diversity, desirability scores are high but priority setting comparatively low (26 % English vs. 29 % average).

The old binary divide still has some relevance as regards the attention to diversity and the composition of the student body. New universities tend to have a stronger focus on access and equity and greater student diversity in terms of competence profiles and socio-economic, ethnic and religious backgrounds. They also have a greater share of mature and part-time students.

Many institutions mention the challenges associated with diversifying their student profile. First of all, it was emphasised in several interviews at highly diverse institutions that diversity is not a value in itself but becomes an added value only through particular pro-active approaches to it. If student diversity is not pro-actively attended to it could even cause more friction than opportunities for additional learning and innovation, both for students and teachers. Students from less traditional backgrounds are therefore regarded as posing additional challenges and requiring a greater effort from institutions. Some point out the difficulties in combining different types of students with different needs, but also language issues, cultural factors, and the need to engage with families. Moreover, those students are likely to have poorer academic backgrounds and the quality of state schools is often regarded by many institutions as a problem. There are specific difficulties in the case of students with special needs.

Moreover, some aspects of diversity can also be reputationally damaging. Thus, institutions fear that attracting students from less-traditional socio-economic backgrounds with a wider range of qualifications will deter many well-qualified students from applying since they look for clear reputational assets for their own careers. Institutions also perceive some contradictions between policy objectives, namely between policies that enhance value-added to students, and others that address performance in rankings and prestige-seeking strategies. One of the problems in this respect refers to the impact of diversity on employability, since the effectiveness of institutions in helping their graduates in the transition to the labour market seems more difficult with diversity of ethnic background, and this is expected to have a negative impact on an institution's reputation.

Another specific group that post-1992 universities address with more attention is that of mature students, especially due to the declining demographic trends and the tight competition for traditional students. Again, this is reported to pose a challenge, since many institutions consider that more mature students tend to have different motivations, interests, learning modes, and responsibilities, challenging the institutions to adapt their teaching programmes and methods, besides other adjustments in course organisation and scheduling. This may help to explain why thus far there seems to be limited engagement from many institutions, despite the debate about skills obsolescence and lifelong learning needs. Again, the binary divide has left traces: among the post-1992 institutions, more institutions declare continuing education and lifelong learning as being vital to their mission, while the research-driven Russell Group and 1994 group institutions are less inclined to these activities and to attracting these students. Their

focus remains on attracting as many highly qualified traditional students as possible and on maximising research success and grants.

3.5 Quality Assurance

Following national priorities, institutional reporting has had to pay much more attention to its measures and achievements concerning widening participation and access. Quality assurance has also been attentive to student learning environments and student evaluations of teaching at HEIs, which includes attention to diverse student learning and counselling needs. This is strongly reflected in institutional development and internal quality assurance processes.

3.6 Academic Values

While academic values are highly dominated by research concerns it should also be emphasised that there is a significant degree of awareness expressed of a public responsibility toward providing equal opportunity and access for students from diverse backgrounds. In spite of insufficient incentives, the academic value system, especially but not only at the post-1992 institutions, strongly supports helping all qualified students, regardless of their backgrounds, to succeed in higher education. Many individuals strongly supported measures that would support this aim, even if it cost the institution and themselves more investment than was met by government funding.

4. Diversity of Disciplines and Programmes

4.1 Regulatory Framework

The lack of regulatory intervention and complete institutional autonomy which English institutions have has clearly strengthened competition between institutions in terms of disciplinary and programme development, with significant implications for the diversity of disciplines and programmes. Competition has been pointed out as a powerful force that has encouraged HEIs to search for some market niches in terms of programmes and research strengths.

The competition unleashed has also enhanced consumer-oriented focus in recent years, with institutions trying to become more aware of the programme demands and interests of prospective students. This has been especially visible in large metropolitan areas where geographical proximity has led many institutions to compete closely for the same pool of candidates.

Another regulatory condition which pertains to programme diversity concerns the changed status of Further Education Colleges, which may now offer higher education programmes in the form of foundation degrees which have to be validated by HE institutions. If Further Education Colleges provide a majority of their programmes in higher education they may apply for higher education status, which could lead to an additional inflow of programme diversity into the higher education system.

4.2 System Governance and Coordination

This competitive context has created some challenges at the system level. On the one hand, the competition for students and the demographic patterns have led to the closure of some programmes or departments in several institutions and have promoted further specialisation and narrowing of disciplinary focus on some HEIs. There has been significant discussion about potential risks that these developments may cause, especially in a long-term perspective, a debate which has been particularly strong in certain fields of science and technology where attracting students is a perennial problem. Student demand and national or regional competence and skills needs do not necessarily coincide.

On the other hand, there is significant discussion in the system about the balance between market competition, institutional autonomy, quality concerns and academic values. Although market competition tends to be articulated with greater institutional autonomy, in order to allow institutions to respond to market stimulus, there are also concerns that the intensification of competition may reduce the capacity of institutions to develop a sustainable strategy, namely due to the short-term pressures. Moreover, some fear that the need for institutions to respond to market pressures may create dangerous pressures over the quality of the programmes and the robustness of academic values.

4.3 National Policy Priorities

Clearly, the most important national policy with respect to programme diversity has been the recent introduction of Foundation Degrees. This was an explicit government initiative (in fact, it was the first degree ever designed by government) that aimed at

creating flexibility and supporting new qualification profiles within the HE sector. Foundation degrees have been largely inspired by some other international experiences of short-cycle HE programmes. However, from the beginning these programmes have encountered scepticism from institutions, echoing old debates about vocationalism in English higher education. One should add that vocational education is associated with inferior social status in English society. Many critics also caution that the success of these programmes depends greatly on employer engagement which cannot be taken for granted since their involvement in higher education teaching has traditionally been limited.

The only other aspect of programme diversity which has received national policy reflection, without having led to concrete measures, concerns the sufficient promotion of science and technology programmes which have not been met with sufficient student demand in spite of rising labour markets demand.

4.4 Funding Structures

Foundation degrees, which have added to programme diversity in England, have been financed through additional government funds.
In the study's survey 44 % of English responding institutions declare that programme development is strongly influenced by the Funding and Research Councils, with another 44 % finding they exert some influence. This diverges considerably (+23 % above transnational average) from all the other countries in the study. The exact nature of this influence and the extent to which it may foster convergence or diversity, could not be traced in this context. The only aspect which was explicitly repeatedly mentioned in interview pertained to the increasing pressure by Funding Councils to reward cooperation among institutions. Other forms of influence on programme development would deserve a more detailed focus study.

4.5 Institutional Policies and Development

The enhanced competitive forces and increasingly adverse demographic context have led many institutions to attempt to diversify their programme portfolio. The differences range from variations in the structure and syllabus of the programmes to the modes of delivery. Some institutions have introduced new areas of study, especially in professionally oriented areas. Several institutions have also decided to place a greater emphasis on exploring specific markets such as evening and part-time programmes.

One of the strategies of differentiation has been through innovation in teaching and learning methods. There is a greater emphasis on professional orientation in some institutions. A recurrent strategy has been to give more attention to problem-based teaching and to use a diversity of methodologies and pluralism of approaches. Several of these innovations have been supported by the development of new technologies and their application to teaching. One important development has certainly been the so-called e- and b-learning platforms.

In response to scientific and professional development and calls for interdisciplinary approaches, another important aspect has been the development of combined degrees, though their relevance varies significantly across subjects. More vocational areas seem to be clearly less willing to participate and broader fields more likely to engage. There are also institutional specificities since HEIs with dispersed campuses face more difficulties in developing this type of programme.

The institutional reactions to the government-initiated foundation degrees have been mixed thus far. Experiences vary significantly, though scepticism seems to still dominate. There are fears that these degrees may become a sort of screening mechanism, an option for students with poorer academic performance and/or poorer socio-economic background, keeping them in this separate lower status HE segment rather than offering opportunity for upward social and educational mobility. The institutions also find the financial incentives associated with these programmes limited. As already mentioned, they also fear some reputational damage if they become strongly involved with this type of degree, as their non-university status may cast a shadow on the institutional university status. Some institutions have also pointed out that these programmes have specific requirements and needs in terms of teaching staff and methods. Finally, institutions still seem to be wary of the idea of engaging business partners (with their short-term horizon) in programme design which should provide long-term relevance.

4.6 Quality Assurance

Quality assurance concerns have raised several important issues with respect to programme diversity, firstly with respect to the comparability of degrees, and secondly, with respect to assessment standards and grade inflation in certain institutions and in the system as a whole. There has been considerable debate recently about degrees and classifications, though this has not yet led to a clear definition of common standards, especially

for more recent (and often less reputable) subjects. An important development in this area has been the HEAR – Higher Education Achievement Record – a recent pilot study involving 20 universities. In general, the call for common standards and thus for some quality-driven convergence is becoming noticeably louder.

The most important role in the overall QA landscape, also with respect to programme development, is played by the Quality Assurance Agency (QAA) which defines minimum standards and subject benchmarks or reference points (which remain broad and generic), thus containing programme diversity to a certain degree. At the same time, those developing new subjects and programmes tend to be quite willing to embrace QAA's role, since it adds legitimacy and credibility to those new programmes and fields. However, some actors have expressed fears that this will tend to encourage a national curriculum.

There are different perceptions about the impact of QAA across the system, with some QAA representatives observing that the more prestigious institutions seem to be less likely to feel constrained by the QAA guidelines. Overall, however, 59% of English institutions find that quality assurance (whether by QAA's role or other agencies) is a strong influence on programme development, considerably more (+16%) than on the average of the five countries.

An important force of programme convergence may also be exerted by the Professional Accreditation bodies whose role varies across subjects, but can be significant in certain subjects. This has raised concerns, not only for administrators, due to the multiple expectations placed on programme contents and the time-consuming nature of the reporting demands, but also for academics who find their academic freedom sometimes constrained. Of course, the great variety of practices, more complicated in some areas than in others, makes it hard to generalise on the nature of the role which the professional bodies play. The survey reveals, however, that the influence on programme development by professional bodies is perceived as being a great deal stronger in England than in the other countries: 48 % of English institutions find they are a strong influence on programme development, 21 % more than in the transnational average.

5. Conclusions

The English approach to institutional diversity is unique in Europe in two respects. Firstly, there is no other country in Europe (excluding the rest of the UK) which addresses the issue of institutional diversity or differentiation with such a high degree of regulatory abstinence, relying solely on institutional autonomy, inter-institutional competition and incentives to support individual HE dimensions. There is a widespread belief among all HE actors that autonomy and competition combined will allow continuous increases in institutional diversity. In practice however, the English case and data examined in this study show that, while such autonomy in itself may help institutions to make choices which would differentiate their profile from their competitors, it is not in itself sufficient to sustain or promote institutional differentiation. The role of incentives and values are decisive in fostering or undermining differentiation. Moreover, the English case also illustrates that in certain contexts, competition may even hinder diversification by leading to significant isomorphism.

Secondly, England has the HE system with the most explicit conflict between forces of mono-dimensional vertical differentiation, on the one hand, and those of horizontal differentiation, on the other. Over more than a decade and a half, research performance has been built up to provide the single most powerful measuring rod of vertical differentiation, creating increasing financial and reputational differentials between institutions along the dimension of their internationally oriented research performance. Various past incentives, particularly funding policies and regimes but also individual performance assessment and internal institutional quality assurance criteria have fostered mainstreaming among HEIs, particularly on their mission and priorities (research). Differentiation may have been sought through programmes and research niches, but not through mission mixes and emphases. Only recently have policy makers and HE representatives become very aware of the dangers of such a mono-dimensional approach and have made noticeable efforts to introduce incentives which would promote diversity of missions and institutional profiles. They seem to have succeeded in creating perceptible, albeit weak, counter-currents which act as incentives and implicit value recognitions of alternative notions of excellence. In interviews and mission statements, institutions seem to reflect remarkable awareness of their markets, their possibilities and position. The self-organisation of the sector into different mission groups also reflects a certain degree of consolidation with respect to different sets of institutional values. However, the survey seems to reflect that these forces are still too recent and the rewards put in place too weak to counterbalance the research-dominated homogenising, which remain dominated by a comparatively narrow set of research performance criteria and rewards. The funding instruments in particular are still seen to be driving predominantly towards competition along a single measuring rod

and thus to homogenisation. Since many institutions believe they are being compared according to the same criteria, namely those privileging research intensity and excellence, many institutions even develop practices of cross-subsidisation of research activities, in order to enhance their position, reputation and prestige in this area. International research performance as the definitive criterion of institutional position even seems to inform student choices: the most qualified students tend to want to go where reputational assets are greatest so as to optimise their own career advancement – and institutional reputations are still defined most strongly by research performance. Thus, if one looks at mission spread, one would have to conclude that the explicit "diversity policy" of the government has had only limited success. Convergence forces on institutional profiles are still greater than diversification forces. Research positioning and research performance of their staff are still the dominant concerns of most institutions.

Nevertheless, the rewards attached to other focuses of institutional attention have borne fruit and allowed institutional initiatives which pursue excellence in other dimensions of HE engagement to gain momentum. In two respects, these successes of diversification policies can be traced clearly in the findings of this study. Firstly, institutional attention to diversity of student profiles is much more developed in terms of measures, services, and support, than in the other four countries included here. In this respect, one may even trace some diversification of institutional profiles, with some institutions having developed a track record of excellence in engaging teachers and administrators in a common endeavour to optimise access and attention to diverse student needs and qualifications. While some of these efforts may be the fruit of social idealism and institutional traditions, they would not have advanced as far without the government support and new instruments which have been put in place in recent years. And yet, the more recently highlighted function of equitable access and widening participation and its implicit diversification of the student profiles, which the government has been promoting in recent years, is still caught in a web of remaining disincentives which make it difficult for institutions to put this aim as highly on their agendas as their institutional values systems would otherwise allow, at least in many institutions.

Secondly, the study has shown that English HEIs attribute higher value and greater attention to HE contributions to business innovation than their peers in other countries, reflecting marked traces of earlier incentives on academic value systems and institutional choices. For many English institutions, regardless of which mission group they may belong to, business innovation is clearly significantly higher on the agenda than it is in the other four countries (with the exception perhaps of the Swiss Fachhochschulen where its high value is linked to the recently expanded applied research).

All in all, the forces which are promoting multiple senses of excellence and advocating a system which would sustain more horizontal forms of institutional differentiation have gained some momentum, be it through funding channels or public accountability and visibility. Whether they are strong enough to counterbalance the strong traditions of vertical differentiation and associated elitism will depend on the financial and symbolic future investments in the instruments at hand. As yet they are strong enough to justify new initiatives along these alternative dimensions within institutions but too weak to help sustain alternative institutional mission mixes. Hence, they may indeed serve to increase institutional diversity but not necessarily external diversity (differentiation between institutions). In terms of external diversity, the only effect of institutional differentiation which has been widely observed has been vertical and mono-dimensional: the different positions of institutions in the overall research performance scales (RAE and others). The government's attempts to make use of this logic of vertical differentiation by adapting it to other dimensions of performance have not yet managed to dissolve this mono-dimensionality.

Thus, in spite of recent efforts to strengthen parity of esteem among different institutional orientations and highlighting different dimensions of excellence, the forces of horizontal diversification are still submerged by those of vertical differentiation.

One effect of such vertical differentiation deserves further observation and reflection in the years to come, since it may shed more light on the nature and limits of the market orientation of the English HE system: namely the growing segmentation of the institutional landscape which may make the English system more akin to the formally differentiated system in the future. Although the binary divide between the university and the polytechnic sectors was ended in 1992, increasing the fluidity of the system even more dramatically than had been noted in the 70s (and resulting in the academic drift of some of the best-placed younger institutions), this fluidity has been noted to decline in recent years. While the universities which were established in the 60s such as Warwick, Lancaster, or Essex were able to move up to the top of the league tables in past decades, within the above-mentioned logic of vertical differentiation and a desire

to be on its loftier sides, HE representatives observe less fluidity in the current system. Indeed, the growing segmentation of institutional profiles is signalled by the formation of the institutional mission groups with their largely separate policy interests.

With respect to the most decisive dimension of institutional performance, internationally oriented university research, market segmentation is supported through path dependencies related to critical mass, infrastructure and reputation as well as an array of different funding instruments such as research grant awarding criteria which demand past research successes and critical mass in the existing research environment before allocating resources.

In England there is a more wide-spread public belief than in the other four countries that money is better spent if it is concentrated in fewer places, even though questions of equal chances and fair treatment for all researchers have re-emerged in recent funding debates following the RAE results. In a new version of the idea of mission diversity, the government, the key HE actors and the public seem to believe that separate market segments help to respond to the diversity of societal and economic needs, and that separate funding tools should be created for these different market segments. Hence, one may see a further vertical differentiation, supporting the separateness of mission groups. In the end, such market segmentation may make the English HE landscape resemble the formally differentiated HE systems.[13] The differences between formally laid down institutional types (such as those defined in binary systems) and informal ones which are only sustained through financial instruments and lobbying may not be as great as some HE institutional differentiation debates may make us believe.

From the findings in this study one can thus conclude that high levels of institutional autonomy and increasing marketisation or inter-institutional competition for students, staff and resources do not necessarily increase diversity. They do so only if financial incentives and reputational recognition create sufficiently diverse reward structures for diverse dimensions of HE engagement. If however, the financial and recognition incentives reward one dimension strongly over all others, as is still the case in England, institutional autonomy and competition contribute more often to homogenising effects. Differentiation may still occur in terms of programme diversity and even student diversity, but not in terms of institutional mission profiles. To prevent mission spread within institutions and foster mission differentiation, more far-reaching reward structures that embrace institutional funding, career structures and public recognition of performance would have to be put in place.

[13] In this sense, the author would agree with Scott's statement that systems may simultaneously share aspects of different phases of development, in this case the English system may be said to contain elements of binary, post-binary and market systems, to use Scott's system typology (Scott, 2007).

Chapter 3:

Institutional Diversity in French Higher Education

Sybille Reichert, with Jacqueline Smith

The French case study is perhaps the most revealing example of the multiple and even conflicting values which may be attached to institutional diversity in higher education. It illustrates most clearly that diversification and convergence policies and trends can both coexist and conflict within one higher education landscape.

The French HE system is characterised by a particularly high degree of institutional diversity with respect to institutional types and programmes. Historically, most new demands on HE have been addressed by creating new types of institutions, units or programmes, with different authorities, governance, funding, target groups, student and staff selection processes, all of which coexist in today's system. Given the pressures to achieve increased international visibility and research competitiveness, as well as to enhance the quality of HE, this diversity of institutional forms and structures has increasingly appeared to pose a problem. The French HE landscape is experienced by many users and observers as being too segmented and insufficiently flexible to respond to the demands of the currently developing knowledge society and of international competitiveness. As a result, policy actors and institutional leaders have focussed more on strategies of convergence and permeability between different segments of the HE system than on the values and methods of diversifying institutional profiles. In fact, institutional diversification itself is not an explicit object of public policy. Instead, diversification is expected simply to result from the recently increased autonomy of universities, introduced in principle through a new law (LRU) which grants universities more freedom to recruit and reward their staff, define their functions, manage their budgets and develop their programmes. (The *grandes écoles*, the often well-reputed selective professional schools, had already enjoyed greater autonomy.) While diversification of institutional and staff profiles may be positively valued by many HE leaders, the value of creating critical mass in research seems more pressing to most. As a result, more interlinked forms of institutional development are being sought, and incentives are being created to induce complementary institutions or research units to combine their activities and infrastructures, so as to obtain greater international impact. Thus, a prominent strand of current HE reforms consists in the attempts to develop further or create new cooperative structures and consortia, in order to overcome the perceived disadvantages of segmented institutional diversity and to enhance mobility, transparency and visibility.

Before looking more closely at individual values of diversity or convergence, one should point to another overarching feature of the French system which seems to have had a large impact on its approaches to diversity: its ambivalent attitudes toward elitism and egalitarianism in the context of massification. While there is an enduring ideal of equal opportunities and egalitarian access to HE through competitive examinations (the so-called *concours*), the latter are not as meritocratic as is often publicly posited. Instead, they tend to favour those with social capital. In French higher education, the celebrated ideal of free access and provision for all coexists with a cherished culture of selectivity that seems to be held in equally high public esteem and is not as neutral to socio-economic origins as true meritocracy would imply.[1] These two sectors, the selective, privileged one and the freely accessible, un-privileged one, coexist without much interlinkage and may be said to sustain and justify each other as responses to different social demands. One set of institutions or institutional sub-units looks after selective elite functions, while another segment

[1] For a recent discussion on the social injustices of access and hidden and involuntary forms of discrimination in French higher education, see S. E. Ouaja, "How to meet the Challenge of Diversity in the French System of Education", in: W. Allen, M. Bonous-Hammarth, R. Teranishi (eds.) Higher Education in a Global Society: Achieving Diversity, Equity and Excellence, Elsevier, 2006, 33-50.

looks after equity and widening participation. As may be expected, there is a social hierarchy that makes these segments seem vertically rather than just horizontally differentiated. However, to complicate the picture, there is also selectivity in some parts of the universities and the demands of international research competitiveness have threatened the ordering principles of vertical differentiation (elite professional education versus widely accessible academic education) and have introduced new ones which focus more on research performance and thus cut across the sectors and existing differentiating lines. The French system is thus in transition, in multiple and far-reaching ways and trying to describe it in detail is like shooting at a moving target.

1. Diversity of Institutional Profiles

1.1 The Regulatory Basis

The French HE system includes a wide array of different types of institutions governed by different authorities and regulatory frameworks. The deepest dividing lines run between the universities – which are governed by the law of 1968 and more recent laws, particularly the 1984 Savary Law – and the *grandes écoles* which are governed by a different set of laws and statutes. The latter enjoy considerably greater institutional autonomy and strategic development capacity and, most decisively, select their own students, unlike the universities. Even with the recent increase of university autonomy, the *grandes écoles* still benefit from a greater *marge de manoeuvre*. Many of the highly reputed *grandes écoles* were established in the 19th century to provide the country with the engineers it needed to develop its expanding industry. Engineers were viewed as "doctors of industry" and still enjoy a high social standing, which is also supported by the highly selective nature of many *grandes écoles*. Most of these schools are under the authority of the Ministry of Higher Education and Research, but several fall under other ministries – e.g. agriculture, culture, defence, industry or even the Prime Minister. Training spans five years: two years of "preparatory classes" followed by a highly selective exam giving access to three years specialised education. An additional ingredient of system diversity is the fact that many of the preparatory classes are offered in the upper secondary schools (*lycées*) (although some are integrated in the engineering schools) so that they fall under the authority of the Ministry of Education (which oversees primary and secondary education), and are characterised by different quality assurance processes, standards, staff profiles and rewards.

As an institutional type, the French universities have been subject to some unusual historical conditions which affect the values they attach to different aspects of diversity. Following the French Revolution, the National Convention decided in 1793 that the university, which was in very poor condition at the time, should be abolished as an institution. This meant that during almost two centuries, between 1793 and 1968, there was no university (in the real sense of the term) in France. Instead, the former universities were separated into independent, autonomous institutions, which were either faculties based on disciplinary clusters, or *grandes écoles* that catered for high-level professional training. Only in 1968 did the *Loi Edgar Faure* reinstitute the university, and stress two fundamental principles: namely, that universities should offer open admission to all students who complete secondary education, and that higher education should be free of charge. Thus, all students who earn their *baccalauréat* are entitled to enrol in a university and the current very low annual tuition fee of 169 Euro for Bachelors and 226 for Masters is a small administrative fee that is fixed by the ministry for all universities.

In a context of institutional diversity, it should be pointed out that the tradition of universities as institutions that emerged from separate disciplinary clusters subsists to this day. In an age where the values of trans- and interdisciplinary interfaces and cooperation are supported in all knowledge societies, these institutional separations are increasingly seen as obstacles to innovation. Hence, there are many ongoing efforts to seek cooperative arrangements (even one merger) to create new opportunities and smoother arrangements for interdisciplinary research and learning.

While the diverging degrees of institutional autonomy and selectivity may be said to be the salient features distinguishing the *grandes écoles* from the universities, these dividing lines are no longer as clear-cut as may appear at first sight. Not only has university autonomy been increased through the recent HE laws but, over time, universities have seen the introduction of more selective or elite units into their traditionally egalitarian midst. These units may comprise, for example, the institutes of technology (IUT) or the *écoles d'ingénieurs* which may exist within a university as semi-autonomous units, and like the *grandes écoles*, select their students (although in the IUT case, the need for selection has been triggered by their popularity).

At the more advanced level, Doctoral schools or research schools which are run in alliance with the CNRS *(Centre National de la Recherche Scientifique)* or other national

research institutes[2] (which have their own regulations, selection, hiring and reward criteria) introduce other methods of selectivity or vertical differentiation into the institutional landscape. Increasingly, the existence of research units that combine researchers from the national research institutes and the universities (called "mixed labs") is used as an indicator of (research) success, setting apart one university from another and signalling its success in a given area.

Hence it is no longer possible simply to juxtapose two separately regulated sectors, one of which would be selective and elitist while the other would be freely accessible for all and egalitarian. Instead, the regulatory framework has allowed for a wide array of intertwined institutional arrangements. However, the linkages between the selective and the non-selective sectors remain limited to a small number of individuals moving between the sectors. The elite institutions or the selective units within universities are set apart from the freely accessible ones, in order to sustain their selective and high performance orientation.

Thus a relatively complex and highly segmented system has emerged which now leads policy makers and funding schemes to focus on new arrangements to promote cooperation between these separately regulated units in order to achieve synergies, efficient use of resources and increased visibility. The PRES (Pôle de Recherche et d'Enseignement Supérieur) scheme is a prominent example of such new funding incentives to stimulate inter-institutional cooperation and pooling of resources. It was created in 2006, to foster cooperation between universities and *grandes écoles* (and national research laboratories through the "mixed labs") within a region or a large city, in order to improve efficiency through synergies and reach research critical mass to achieve global visibility.[3]

It should be pointed out that the research function of the universities has only been strongly emphasised in recent years. Historically, the CNRS was regarded as the main institutional framework for public research. It was established in 1939 to meet the rising demands for research when research capacities in the faculties were too limited and segmented. The CNRS, and other research institutes, aimed to "coordinate laboratories in order to draw a higher output from scientific research."[4] However, since more than 80% of the CNRS institutes are now "mixed labs" in which CNRS and university researchers work together, CNRS regulations, rewards and quality criteria, exert a substantial influence on university development.

To complete the account of diverse institutional types in French HE, one should mention the other types of institutions or programmes which exist within higher education as separately regulated institutions or units. As an early attempt to foster professional orientation also within the university sector, the already mentioned IUTs *(Instituts universitaires de technologie)* were created in 1966[5] to offer a level of professional qualification between the BTS *(Brevet de Technicien Supérieur)* which was established in 1959 to meet the need for qualified technicians[6], and the higher academic degrees in technical subjects (especially engineering). They functioned as sub-units within the universities, in part to address the high drop-out rate in the first years of university and to address the need to increase the number of technicians and engineers at intermediate level (i.e., more specialised than an engineer, and with a broader education than a technician). The IUTs' aims were explicitly linked to the government's wish to respond to new needs by diversifying institutional orientations, for example modifying the selection procedures, introducing new objectives and pedagogies and pro-actively opening the university to the world around it. In a two-year programme after the *baccalauréat* a student would acquire a diploma enabling immediate entry into the labour market. While business leaders are still very happy with this form of training[7] , a clear mission drift emerged over the years as the IUT became a safe and successful path for many students towards further HE studies. Higher demand than expected has now led to a selection process.

[2] CNRS is used as a short cut to refer to all other national research institutes: INSERM, INRA, etc.
[3] "La constitution de pôles de recherche et d'enseignement supérieur (PRES) est un des nouveaux instruments de coopération proposés par la loi de programme pour la recherche du 18 avril 2006. » http://www.education.gouv.fr/cid5690/mise-en-place-des-poles-de-recherche-et-d-enseignement-superieur-pres.html.
[4] J.-P. Finance comments: « La petite taille de tous ces établissements émiettés sur le territoire a fait que, lorsqu'il s'est agi d'aborder des problèmes de recherche lourde, la politique et la masse critique n'étaient pas présentes. De fait, on a créé des organismes de recherche (le CNRS, puis l'INSERM, puis l'INRA, etc.), autant de palliatifs à l'absence d'une université capable de répondre à cet enjeu. Cet état de fait constitue une spécificité française » (Jean-Pierre Finance, http://histoire-cnrs.revues.org/document485.html.)
[5] The instituts universitaires de technologie were created in 1966 (the law was revised by the décret du 12 novembre 1984) as part of the plan Fouchet to provide « un enseignement supérieur destiné à préparer aux fonctions d'encadrement technique et professionnel dans certains secteurs de la production, de la recherche appliquée et des services » (now regulated by the article 33 of the Loi Savary). There are now 116 IUT across France.
[6] With massification, the increased diversity of social and economic demands on HE produced a new need for shorter tertiary education that would allow quick entry into the labour market with appropriate qualifications beyond secondary education. The BTS (Brevet de technicien supérieur) was introduced as a new type of professional training which is offered in STS (Sections de technicien supérieur) at the lycées as a two year higher education programme.
[7] IFOP (Institut français d'opinion publique) published a survey of business employers in January 2003 showing that IUTs offer the best training for professional life, cf. http://www.ifop.com/europe/docs/iut.pdf.

A later attempt to expand the professional education conducted at universities consisted in the creation of the IUP *(Instituts universitaires professionnalisés)* in the 1990s to offer a higher level of professional qualifications, and to provide another alternative to the *grandes écoles*. (Having foreshadowed the preoccupation with employability of the Bologna Process, the IUP degree was replaced by the professional Master, as part of the implementation of the Bologna reforms.)

The above list does not include the many discipline-based institutions, often with a specific status, in some cases associated with other HEIs, which would deserve a whole study, as for example the institutes offering paramedical training in universities (e.g. midwifery) or in private institutions (e.g. nursing).

Finally, one should not forget teacher training, which used to be offered in separate institutions, *(écoles normales)*. The primary teacher part of these were transformed into *Instituts universitaires de formation des maîtres* (IUFM), mostly affiliated to universities, which are now in the process of being integrated into the universities.

To sum up the array of regulatory authorities, these include the Ministry of Higher Education and Research which oversees the universities (representing approximately 1.5 million students); the Ministry of National Education (primary and secondary education) which oversees the special HE-level training within secondary schools, i.e. the BTS and preparation to entry in *grandes écoles* (equivalent to 1st and 2nd year of HE), representing about 300 000 students; and other ministries (agriculture, culture, defence, and industry) or Chambers of Commerce which oversee the public or private business schools (representing roughly 500,000 students).

The diversity of separate regulatory institutional types in the French system is clearly the result of differing initiatives to respond to evolving needs which existing structures were felt to be unequipped to address. Rather than adapting existing institutions to meet those needs, new types of institutions or units were created to meet new demands. As a result, the current French higher education system is characterised by an unparalleled degree of regulatory diversity of institutional types. Interestingly, unlike other systems with explicitly elite institutions or units, in France the elite institutions are associated with professional training and education rather than with purely academic higher education. This is not to say, however, that universities are not involved in professional education. Indeed, since the mid-sixties, as we have seen, they have been developing professional curricula.

1.2 System Governance and Coordination

As described above, the French HE landscape comprises a wide set of separately regulated institutions with different histories, missions and clienteles, with traditionally few links between them (except for the "mixed labs"). Even the national representative and lobbying organisations function rather separately, only occasionally combining their efforts. These include a number of purely representative associations, such as the CPU *(Conférence des présidents d'université)*, the CDEFI (*Conférence des directeurs des écoles françaises de formation d'ingénieurs*), or the CGE (*Conférence des grandes écoles*), which serve as buffers and intermediaries between the state and the institutions. There have been no coordinating commissions, policies or measures to promote cooperation between institutions across the boundaries of institutional types.

This fragmentation has increasingly been seen as an obstacle to French competitiveness, especially concerning international research visibility. In recent years, international rankings have served as somewhat of an electric shock, receiving high attention in the media and among politicians alike. While they were copiously criticised (in France as elsewhere) for their methodology and cultural biases, they also stimulated critical analysis and debate. Although the full range of implications in terms of required structural changes is not yet appreciated, the need for more coherence and increased visibility is now widely recognised and is partly at the origin of the latest reforms, in particular concerning the PRES which were set up to lessen the fragmentation of education and research.[8]

The mission of a PRES includes the pursuit of excellence at international level and local involvement to meet the needs of the business community and society at large in terms of qualified labour force and innovation. Although all institutions consider both dimensions part of their mission, within a PRES some components will concentrate more on achieving research excellence to be

[8] « [La constitution des PRES] correspond à un besoin ressenti par toute la communauté concernée de mettre fin à l'émiettement territorial de la carte universitaire et de recherche. » www.education.gouv.fr/cid5690/mise-en-place-des-poles-de-recherche-et-d-enseignement-superieur-pres.html. The 2006 Law about research - Loi de programme n° 2006-450 du 18 avril 2006 pour la recherche. This law prescribes the establishment of the PRES-Pôles de recherche et d'enseignement supérieur and opens the possibilities for cooperation among HEIs and with non academic regional, national or European partners. http://www.droit.org/jo/20060419/MENX0500251L.html. The earlier pôles universitaires européens which created synergies around common infrastructures and international cooperation programmes were already a significant earlier step in this direction of inter-institutional clustering.

recognized internationally, while others will give higher priority to meeting local needs. Thus the PRES are neither developing in the same way nor at the same pace. While some institutions (such as *Paris 12* and the *Université de Bretagne-Sud*) see the PRES as an opportunity for increased weight and lobbying, greater visibility in areas of excellence and a way to avoid duplication (sometimes through complementary portfolio development), other HEI leaders feel that apart from lodging common Doctoral schools under a PRES umbrella, the momentum is soon lost. Some differentiation between PRES may thus be taking place. It will take a few years of institutional development to ascertain whether the most ambitious PRES projects will increase diversity of institutional profiles through increased attention to complementarity of profiles, or whether closer cooperation will lead to institutional convergence.

It has become clear already, however, that the French approach to institutional diversity is neither to celebrate it as a positive value nor to dismantle it as a negative state of affairs, but rather to complement it with measures which would reduce fragmentation and enhance interdisciplinarity, flexibility and permeability between the separate institutional types and entities.

1.3 National Policy Priorities

The two most important national policies which affect institutional diversity are implemented through the recent laws on the PRES (2006, see above) and on autonomy and accountability (the so-called *Loi Pécresse* or "LRU", *Loi relative aux libertés et responsabilités des universités*, of 2007). The LRU aims to give universities greater autonomy regarding finances and staffing, and (optionally) the ownership of immovable assets, thus implying some devolution of ministerial authority to the institutions. This is a major step in a traditionally highly centralised system. The central authorities promised to adopt a softer steering role rather than an interventionist one, but it is too early to tell whether a long history of state control will prove difficult to forget.[9] Nevertheless, as expressed in the Ministry document taking stock of the current situation: "the two laws [2006 on research and 2007 on universities] are based on the same principles: rather than imposing major structural reforms, the aim is to provide conditions, means and tools in order to foster the development of new dynamics that will be more effective and more competitive and will gradually replace the previous ones."[10] The main objective of this new policy is to improve the French position in international competition and "to strengthen its participation in the building of the European area of knowledge". This aim is explicitly stated in the Ministry's presentation of the LRU: "It is unacceptable that our country is not able to place its universities among the first ones in the international rankings of the best institutions."[11]

National policy has also introduced a vertically differentiating instrument of institutional development through its selective support schemes for campus development. The programme Plan campus aims at improving the infrastructures for particularly competitive institutions, again supporting cooperative arrangements in given regions, by investing in the renovation of ten campuses selected in May and July 2008 on a competitive basis. (Each *Plan campus* may cover part of a PRES rather than all PRES members.)

As mentioned above, the increased institutional autonomy also foresaw the possibility to decide locally rather than nationally on academic recruitments, an innovation that led to heated debates, demonstrations and even occupation of some universities in 2009 (fuelled also by the rushed drafting of the relevant decree). If realised, this enlarged autonomy could potentially lead to institutional diversification, provided funding is available to support such freedom. The differentiation potential may be supported in future by more diversified staff career patterns (see section 2) and a wider array of support measures for young researchers. As recruitment in this area is likely to be competitive, vertical differentiation between different institutions predicated on research strength and potential will probably be the result.

Other priorities relate less to institutional diversity than to the particular conditions at universities. These include reducing the high drop-out rate and enabling successful completion of the first cycle, by improving students' living conditions, and developing a supportive learning environment. The Ministry's national programme "*Plan licence*" seeks to address these issues by providing some support and some incentives to encourage increased attention from institutions.

[9] Some close observers of the system changes find early indications that the government is using its power to control to an even greater extent the universities that have adopted the status of "institutional autonomy" in the first round.

[10] « Les deux lois reposent sur les mêmes principes : plutôt que d'imposer de larges réformes de structure, il s'agit de réunir les conditions, les moyens et les outils pour promouvoir l'essor de nouvelles dynamiques plus performantes, plus compétitives, qui ont vocation à se substituer progressivement aux précédentes. L'objectif de cette nouvelle politique est de mieux positionner la France dans la compétition internationale, de renforcer son rôle dans la construction de l'espace européen de la connaissance. » www.nouvelleuniversite.gouv.fr/-pourquoi-la-reforme-de-l-universite-.html.

[11] « Les universités françaises doivent devenir visibles à l'échelle internationale. Il n'est pas acceptable que notre pays ne soit pas en mesure de donner à ses universités les premières places dans les classements internationaux des meilleurs établissements. » www.nouvelleuniversite.gouv.fr/-pourquoi-la-reforme-de-l-universite-.html.

1.4 Funding Structures

In addition to a considerable increase of funding for higher education and research in 2006 (the government pledged an additional 1 billion Euro p.a. for the next five years) after years of under-funding, the 2007 law has increased financial autonomy and opened the doors to diversification of funding sources which until now has been limited. It should be pointed out in this context that funding of education has always been considered the responsibility of the state, while private contributions from business or other sources were even avoided, with the exception of private income from research contracts. Hence private funding has remained minimal (0,2 % of GDP – the OECD average is 0,4 %). Furthermore, another deeply entrenched principle of university education, besides open admission, has been and remains that education is tuition-fee free (although registration fees set by the state amount to a minimal level of tuition fee). While higher tuition fees remain taboo, universities now have the possibility to create foundations and accept sponsorships for chairs, as well as to transfer money between budget lines and budget years.

In addition to these increased institutional development opportunities, research funding sources have also been diversified, with the introduction of competitive project grants through the ANR (Agence nationale de la recherche). Research funding for universities used to be mainly channelled either through institutional grants that were distributed internally, without or with only very limited competitive bidding or performance criteria, or through the national research institutes. The recently founded ANR has increased the proportion of university research funds that can be obtained through competitive bidding. These new funding opportunities for individuals or research groups diversify the circle of research grant holders to include young researchers more often than was possible in the past. They also increase the potential for internal institutional diversity among university researchers through vertical differentiation of high quality research.

In addition to widening the spectrum of possible external funding sources, the internal funding mechanism has changed with the new law's introduction of financial autonomy, which universities may obtain upon successful application and inspection.

Until now, university funding came from the state in the form of block grants for the general budget, and as a line-item budget for the portion associated with the quadrennial contract between the university and the government listing institutional priorities and commitments. An institution developed a four-year plan and entered into a contract with the state to implement the planned activities. Salaries were paid directly by the state, and building maintenance was also the direct responsibility of the state or the region. Research funding was covered, as was funding for operating expenses. In addition, unused funds could neither be transferred to another category, nor to the following year. The lack of budgeting flexibility and the input-based funding mechanism were widely seen to curtail institutional efficiency and effectiveness.

The 2007 LRU dissolves these constraints and allows all universities to obtain financial autonomy within five years, after a transitional period to ensure appropriate managerial preparation. Eighteen universities took this step in January 2009. "Autonomy" (financial and budgetary autonomy) is granted after a review to evaluate whether the institution is ready to take responsibility for its finances and has the appropriate budget management know-how and staff. In the four-year contract, additional funding will continue to be granted, based on whatever new action is proposed. General funding will be distributed (as previously) in three major grants: salaries, operational expenses, and infrastructure management. Research funding remains separate. The quadrennial grant, however, will no longer be line-itemised for the new actions, thus allowing for more flexible budgeting. In addition, institutions will now have the right to establish foundations and to use the funds thus generated; financial incentives are created at the same time to encourage the business sector to contribute to these foundations. While salary scales remain controlled by the state, limiting the possibilities of internal staff differentiation, the institution would become responsible for the payment of salaries.[12] Moreover, a small part of the salary grant will be used at the discretion of the institution, to meet specific needs through its own personnel contracts which may also include the highest academic staff level.

These measures mean that institutions must now develop funding strategies, implement accounting and financial services, assess the full cost of services, and become more pro-active in finding additional funding sources, competing with other institutions for public and private funds. In addition they will have to establish human resource management services. While these steps imply a major structural and cultural change in a highly centralised country, it should be emphasised that the new financial autonomy is granted within strict guidelines. Nevertheless, it should

[12] At the time of writing, this proposed change had not yet been implemented and, given the resistance to implementation, it seemed somewhat unlikely that it would be implemented in the foreseeable future.

allow institutions to develop more easily towards the profile they choose, and thus enable an institution-led diversification which had not been theoretically possible before.

1.5 Institutional Strategies and Development

From 2007 until early 2009, institutional strategies and developments have focussed strongly on the new opportunities offered by the PRES (2006 law) and by the increased autonomy introduced in 2007. Another important area of institutional priority-setting focuses on responsiveness to regional needs and cooperation with regional stakeholders. All of these strategic development areas affect institutional diversity directly or indirectly, as explained below.

The opportunities offered by the PRES in terms of resources and of contacts potentially leading to cooperation constitute a central element of institutional strategies at many French institutions. The most important strategic benefits of being part of a PRES are associated with critical mass for research and resources, and increased (especially international) visibility. The PRES have not been in existence long enough yet for their impact to be evaluated, but expectations are quite high on the part of all the persons interviewed. Several interviewees have emphasised that the PRES will be the best way to build on synergies and gain visibility, especially for smaller institutions. The PRES projects may also bring about some portfolio profiling decisions, since they often involve the establishment or expansion of common Doctoral schools, which bring together the complementary expertise of several institutions by lodging them under the PRES administrative structure. Thus, institutional diversity is indirectly promoted through cooperation within a given PRES since coordinated portfolio development leads cooperating institutions to target the development of niches associated with their own unique research strengths, rather than to duplicate efforts of partner institutions. At the same time, governance and management structures may tend to converge in order to make the new units manageable, although it is too early to estimate the extent and exact nature of this effect.

It should be noted that a PRES may also serve to prepare a merger of institutions, as for example in Nancy. The 2009 merger of the three universities in Strasbourg was planned before the PRES scheme became available but applies a similar logic of increased visibility, enhanced synergies and improved interdisciplinary cooperation. Similarly, some large institutions are aiming to restructure internally, reducing the number of faculties (or institutes), again with the aim of enhancing efficiency and increasing interdisciplinary and managerial flexibility by reducing rigid boundaries. The extent to which the specificity and differentiation of the units concerned will be reduced cannot be judged as yet, but it should be emphasised that the institutions are using the opportunity provided by the PRES to encourage increased internal diversity, and to identify and make use of new interfaces and common interests. Here flexibility, permeability, "de-specialisation" and increased visibility are the aims that stand in the foreground, rather than differentiation and differentiated profiling.

The institutional strategies of some institutions also address the relationship between mass and elite education. These may involve the introduction of selective degree programmes (such as *bi-licences*), or of selective units such as the *écoles d'ingénieurs* or IUTs, to enhance their reputation and to increase the professional relevance of the education they offer, emphasising employability in the context of the Bologna reforms (together with other older or newly developed programmes such as the *licences professionnelles*). A certain professional drift (often referred to as "vocational drift" in HE research literature) may thus be said to occur here. The increased desire of universities to include selective units within their structures, as well as their increased autonomy and strengthened strategic capacity may lead one to say that the university sector is emulating the *grandes écoles* sector more than in the past.

At the same time, one can point to a certain "academic drift" among the *grandes écoles*. Realising the importance of research for their graduates' success in globalised knowledge economies, and the importance of Doctoral education for international recognition, some *grandes écoles* have increased the part which research and research training play in their curricula as well as in the competences and orientation of their academic staff. Although some *grandes écoles* have always been engaged in applied research, there is now an increased emphasis on internationally oriented basic and applied peer-reviewed research.

Hence, in the last decade one can observe a certain convergence between the two French higher education sectors, the university and the grande école sectors, in spite of their obvious remaining differences in missions, modes of governance, teaching approaches, and student populations.

Another important aspect of institutional policy concerns regional partnerships and cooperation, not just within a PRES, but most importantly with the regional authorities and employers. In some regions, the relations between

the university and the regional authorities may be very close, reflecting the close patronage of the regions which led to the establishment of branch campuses within a region or, in one case, even a whole new university. Responsiveness to regional needs can be reflected in a wide array of policies, programmes and support services, from information, orientation, counselling and support services for students to ensure inclusiveness, to the design of study or research programmes which bear particular relevance for regionally important sectors. Wherever these regional needs form an important part of institutional strategies, they contribute to profiling and differentiation of institutions.

In this context one should point to the survey data (although it should be treated with caution, given the low return rate for French institutions) which shows an above average proportion of institutions that identify their regional and local communities as targets for their teaching. In research, the regional orientation is also considerably above the cross-national average (one third of responding institutions attribute highest priority to this community), while global communities are considerably less often prioritised by French respondents as targets for research activities than by the average peer institution abroad. However, as for the majority of institutions in the other four countries, the national orientation is still most often given the highest priority, both for research and teaching.

With respect to missions and functional emphases, the French survey data, albeit of a limited sample with limited representativeness, reflect noteworthy divergences from the cross-national averages: interestingly, the responding French institutions (which cover all types of institution) more often attribute a high value to the aim of preparing a social elite than their peers abroad, and only rarely find this goal unimportant (compared with the other countries' average of 25 %). The French institutions also ascribe even greater importance to the research training function: no institution finds research training for academia or for industry unimportant; nearly two thirds find research training for academia vital; and nearly half identify research training for industry as a vital function for their institutions. With respect to their other activities, such as research, continuing education and contributions to societal challenges, the French results resemble that of the other countries.

The site visits conducted in the context of this study revealed considerable efforts to enhance the teaching and support environment for students, to address the negative effects of the massified, non-selective study tracks but also to enhance individualised attention for diverse groups of students within the limits of the resources available. One university devised a whole range of services and counselling support, including individualised follow-up and support for varied needs, to improve guidance and success rates, especially for students "at risk" (often meaning those from less privileged backgrounds). The explicit aim of widening participation and inclusiveness formed a key part of the mission, value system and regional mandate of this institution in which it was willing to invest its own internal resources, seek outside support and make priority choices (including attention to relevant competences in staff hiring). Such initiatives are partly supported (but not triggered) by the above-mentioned *Plan licence* of the Ministry.

The increasing importance of research was strongly highlighted by all institutions, regardless of type, with different measures and strategic priorities accompanying this development. Institutional leaders were acutely aware of the importance of research capacity for international competitiveness and visibility. The *grandes écoles* are increasing their research capacity and research performance through changed hiring criteria, high-profile research Master programmes, and, as highlighted by one nationally and globally oriented engineering school, through targeted development of research competences among its students. Both *grandes écoles* and universities also hope to increase research competitiveness through PRES projects and research infrastructure developments, as for example in the context of the national Campus programme for particularly competitive (groups of) institutions. In addition to such nationally supported development programmes, significant institutional efforts and in some cases regional resources are invested in campus development aimed at improved research capacity, as well as in obtaining major grants from EU programmes.

1.6 Quality Assurance

Quality assurance of higher education was divided until 2007, with different agencies evaluating education, research or institutional management. AERES (*Agence d'évaluation de la recherche et de l'enseignement supérieur*) was established in 2007 and replaced the CNE (*Comité national d'évaluation*) which had been responsible for institutional evaluation and for a limited number of programme evaluations. Thus, for the first time, there is one evaluation structure for the whole system.

In addition to AERES which oversees the whole HE system, the CTI (*Commission des titres d'ingénieur*), provides accreditation for the engineering degrees, although AERES continues to evaluate the engineering schools. The CNRS research evaluation also affects the

university sector in that the attribution of a CNRS grant to a "mixed lab" is seen as a positive differentiating label and CNRS standards determine the "mixed labs".

But by far the most important influence will be exerted by the new AERES evaluations which started in 2008, in separate rounds for education, research and institutional evaluation respectively. Unlike the CNE institutional evaluations, the AERES evaluation reports are sent not only to the institutions but also to the Ministry and the national research institutes both of which may choose to take into account the evaluation results when granting the institutions the right to provide particular programmes, finalising the institutional contracts and granting budgets. This means that their impact will be substantial, more akin to that of the RAE in England than the more formative evaluations of many other European quality audits.

With respect to their effect on diversity of institutional profiles, AERES evaluations claim to take account of institutional aims and profile but they also introduce one common rating system with a common set of standards that distinguishes the more successful from the less successful, thus implying vertical differentiation among institutions. This vertical differentiation through ratings may well become one of the most widely noticed outputs of these evaluations, particularly in the research field. It is unclear as yet to what extent the results of the institutional and programme evaluations would be able to counterbalance these research "grades". This vertical differentiation approach has been justified by the overall perception that performance orientation and rewards had not been strong enough in the French university sector, an observation that is indeed confirmed by our survey data which reveals that while performance-based promotion criteria exist at a vast majority of institutions in the other four countries (84 %), they are used in only two thirds of responding French institutions.

2. Diversity of Staff Profile

2.1 Regulatory Framework

The categorisation, reward structure and salary schemes of academic staff are largely regulated at national level in France. University professors are tenured civil servants assigned to a post in a public institution of higher education and research. To reach the level of "professor" an academic must acquire the *habilitation à diriger des recherches* which is granted on the basis of nationally defined criteria. Similarly, the salary scale and promotion until 2007 was nationally set: "as for any civil servant the main remuneration of a university professor increases regularly as the professor goes up from one step to the next within each level [of the salary scale] : for each step an index determines the basic salary".[13] Essentially these salary differentials are based on seniority. Similarly the BIATOSS staff (*personnel de bibliothèques, ingénieurs, administratifs, techniques, ouvriers, de service et de santé*) are employed according to nationally established categories of employment and salary scales, although it has been possible to hire academic and administrative staff locally on contracts.

In other words, staff career patterns and individual staff advancement have been essentially determined at national level, with very limited capacity available to individual institutions to take into account diverse career paths, staffing needs, or the particular aspects of a position or performance. While promotion does seem to lie within the bounds of institutional responsibility, institutions were largely expected to conform to the seniority principle.

The LRU will now allow more flexibility in staffing and recruitment. Most importantly, (a small) part of the salary grant will be reserved for contract employment which allows for different conditions with respect to tasks and payment. These variable contracts mean that institutional funds can be applied to more competitive positions, in addition to the new funding system which allows other sources of income and more flexible funding mechanisms. As may be expected, some associations of academics have expressed fear that this possibility given to institutions will threaten employment security; but other HE representatives have applauded the increased negotiating power given to universities, which will now be in a position more easily to recruit academics from abroad, being able to offer more competitive conditions for some of their posts. Institutions will thus be able to attract international academics and expand their international dimension. The *grandes écoles*, which have always enjoyed more autonomy than universities, are already active in this direction.

With the new LRU, university presidents have also received increased power to set different recruitment and promotion emphases and criteria. Until now,

[13] « Les professeurs d'université sont des fonctionnaires titulaires nommés sur un emploi dans un établissement public d'enseignement supérieur et de recherche. (…) Comme pour tout fonctionnaire, la rémunération principale d'un professeur des universités augmente périodiquement au fur et à mesure qu'il gravit les échelons à l'intérieur de son grade : à chaque échelon correspond en effet un indice qui détermine le montant de la rémunération principale » www.education.gouv.fr/cid1059/professeur-des-universites.html

recruitment procedures were nationally determined. Academic staff were appointed to a post after a vacancy had been advertised in the government national paper (*journal officiel*), and reviewed by a commission de spécialistes which stresses research as the main recruiting criterion. Only in the more autonomous *grands établissements* do institutions have greater recruitment autonomy, or to a lesser degree in the *écoles d'ingénieurs* and the IUTs of the universities. With the new LRU, academic staff will be recruited by a comité de sélection set up by the institution. The LRU will also allow more flexibility with respect to bonuses, release from teaching hours for junior academics to concentrate on research, increased means for research units, release time for mentoring and student support. Hence, the internal diversity of academic staff conditions is likely to increase significantly, both with respect to their expected emphases on individual functions (research, research training, teaching and academic management) and with respect to their payment and employment conditions.

However, in spite of this increased autonomy regarding hiring and promotion procedures, career structures still remain largely determined at national level, with relatively little leeway for institutionally set differentials. But national deliberations as well as drafts of interpretive directives (*textes d'application*) regarding career structures suggest that, in the future, career tracks and reward structures will become more diversified at national level, with different rewards for different functional emphases in academic careers. However, leaving this differentiation entirely up to each institution does not seem to be part of the current plan.

It is practically impossible to address other issues of diversity, such as ethnic, religious, social or gender characteristics since French law does not allow such references.

2.2 National Policy Priorities

Beyond the above-mentioned aim to increase functional differentiation through more flexible career patterns, there are no national priorities attached to different aspects of staff diversity, such as ethnic, cultural or religious or even gender diversity, given the explicit non-discrimination clause in the Constitution and its restrictive effects on policies and data collection on the part of institutions. One may add that the gender balance of academic staff is not as bad as in most other European countries.

2.3 Funding Structures

Since salary scales are nationally determined, institutions may only provide differential treatment for different staff positions in the framework of institutional staff contracts, for which funds are still quite restricted. In the case of continuing education and continuing professional development, significant additional financial benefits may be awarded to the teachers involved, but only outside their own institutions, where such engagement would count as part of their normal tasks.

The survey confirms the above-mentioned limitations with respect to functional and funding differentials among academic staff. The greatest divergence of the French institutions from the HEIs of the other countries is shown with respect to salary or rewards, where 61 % of the institutions in the other four countries report that they provide different salaries and rewards to different professorships, while only a fifth of French institutions do so. While professorships with more research tasks are also paid more at 16 % of the institutions in the other countries, this possibility does not exist within the French institutions. Professorships with more teaching and less research, or more innovation activities, are also a formal possibility at only a small number of responding French institutions (compared with 45 % or 33 % respectively across the other countries). It is only in regard to continuing education or CPD engagement that there are more French institutions that reward with increased pay.

2.4 Institutional Policies and Development

If one looks more closely at the internal differentiation among professorships, the survey results confirm the site visit interview findings, namely that, so far, French institutions have a relatively low degree of formal differentiation among professors compared to the other countries in the study. Whereas on average, half of the responding institutions have different types of professorship with respect to hiring criteria, this is only the case for a quarter of French institutions. Likewise the task definition of professorships differs within institutions at two thirds of institutions across the study, but only at a minority of French institutions. Across the other countries, the highest proportion of institutions (46 % on average) provides formal internal differentiation of professorships with respect to higher levels of research engagement, while only a quarter of responding French institutions say they do so. Only with respect to continuing education are there more French institutions which provide the formal possibility of differentiating professorships (i.e. those with more continuing education tasks and fewer other forms of engagement).

However, as the site visits showed, considerable differences exist between and within different parts of institutions. While all institutions confirmed the overwhelming force of nationally set staff career patterns and regulations, with research performance as the determining criterion, some institutions have begun to pay attention to additional criteria in hiring and promotion, e.g. to ensure sufficient engagement in regional partnerships, student support or teaching innovation. At some institutions, targeted policies and priorities have been formulated in this regard, although institutional leaders confirm the tension that exists between their own institutional priorities and national incentive structures.

Of course, the combinations of expectations with regard to research, teaching and service functions vary more widely between different units (e.g. the faculty of medicine compared with the IUT or a humanities faculty) than between institutions, in France as elsewhere.

It should be added that, informally, professorships are highly differentiated in terms of functions across all of the five countries, with more than two thirds of all institutions reporting such informal differentiation. This score is even higher for French institutions where the formal differentiation is more rarely possible.

All in all, universities will be more responsible for the selection, and in future probably at least partly responsible for the career management, of their staff. One of the main issues at institutional level appears to be how to recognise and reward different areas of achievement, such as excellence in teaching, student support or involvement in continuing education. It is foreseeable that increased autonomy, once realised, will stimulate the emergence of different approaches to meet this challenge.

2.6 Quality Assurance

Requirements to qualify for different categories or levels of teaching position are codified at national level and are very rigorous, with research as the determining factor for the higher echelons. AERES will evaluate teaching programmes and research units, but not individual professors. Evaluation of staff is a sensitive issue; in particular, evaluation by students is not part of the quality culture of all universities yet. It appears that the *grandes écoles* can use this approach more easily, perhaps because they have long practised selectivity, graduate tracking and feed-back; and, given their highly-qualified student body and their prospective leadership functions, have shown great respect for the opinions and satisfaction of their students (and later alumni).

2.7 Academic Values

The different dimensions of higher education activities – teaching, research, research training, innovation, continuing education and service to society – are also subject to different value judgements by colleagues in the institution. Overall, all institutions across the five countries on average reflect a value system where performance in research and teaching fares highest. Then, by a wide margin, the value ranking begins to diverge considerably across the five countries. France, like most others, attributes the third rank to research training. But unlike the others, the next in rank are business innovation and institutional leadership, while service to society is less often seen as a core value of academic performance.

The strongest identification of academic staff is reportedly felt toward the department and the scientific community in the field (in France as in the other four countries), while academics are reported to identify a great deal less strongly with their institutions. In France such identification is even weaker than in the other four countries (only one quarter of French institutions note strong identification of the academics with the institution, compared with 44 % in the other countries), clearly reflecting the limited influence that institutional soft norms may be able to exert on their staff in the future, given the fact that staff regulations are nationally determined, and there is both internal fragmentation of the institutions and fragmentation of the system as a whole. The weak identification with the institution may well be attributed to the limited autonomy enjoyed by French universities up to now, which has generally resulted in a relatively weak sense of institutional identity.

3. Diversity of Student Profile

3.1 Regulatory Framework

The French Constitution and the HALDE *(Haute autorité pour la lutte contre la discrimination et pour l'égalité*, i.e. the agency that fights discrimination and promotes equality) forbid all references to race, religion and ethnic background on the part of any public institution. Such a policy is not seen as a denial of diversity but as a barrier to discrimination and recognition of the dangers of misusing such concepts and data. Data on these aspects therefore cannot be collected at French higher education institutions, and such diversity cannot be measured. During the site visit interviews, these characteristics were reported not

to pose a major problem at French HEIs. However, other more targeted studies of discrimination suggest that problems of under-representation do indeed exist and are difficult to combat in the context of voluntary non-collection of data (Ouaja 2006). By implication, affirmative action is also impossible and unconstitutional.

Two fundamental principles governing higher education in France, which do affect diversity indirectly, are the aforementioned conditions of open access and free provision of higher education that aim to ensure equity, i.e. access of students from diverse socio-economic backgrounds. Any student who has completed secondary education and obtained a *baccalauréat*, the graduating diploma, is entitled to enrol at a university.

Among the aspects of diversity which are highly and explicitly valued at French universities, perhaps as part of the same concern with social justice, one finds considerable attention to flexible outreach to students with a variety of different learning histories and qualifications, including informal learning histories which are evaluated and validated to allow for alternative access routes. The VAE (*Validation des acquis de l'expérience*, i.e. recognition of non-formal education) now allows an individual to receive a secondary school completion equivalent, or higher education credits based on experience. These learners are usually older and have had some professional experience; they therefore present a different student profile. Accordingly, the survey conducted in the context of this study showed the French responding institutions giving an above average priority to diversity of qualifications and alternative modes of learning. Well over half of French institutions accord priority to diversity of qualifications among their students (as opposed to 46 % on average across the other countries) and to diversity of student profile with respect to part-time versus full-time study or distance versus presence learning modes (well above the other countries' averages of 22 % and 24 % respectively). Also the diversity of competences is addressed through specific support offices much more often: two thirds of the responding institutions have service units to address such diversity, while on average only one third of their peer institutions abroad provide such services.

In contrast to the free and flexible access to (most of) the university sector, entrance to a grande école is via a very selective track in secondary and post secondary education (CPGE – classes préparatoires aux *grandes écoles*), and a very competitive examination, sat by some 30,000 students each year. Acceptance rates vary among *grandes écoles* but may be well below 10 % of those who pass the exam and apply, following the ranking of exam results. The overall intake number is regulated by the state. In the universities, entrance generally only requires the *Baccalauréat*, with the exception of the selective tracks where admission is based on the quality of the individual applications. Medicine is the only field with a numerus clausus and a competitive examination at the end of the first year, with selection rates being also often as strict as 10 % of student applicants.

In spite of the recurring theme of "equality" in the French culture, it appears that the co-existence of open and selective access study tracks within the universities is not perceived as contradictory. In fact, in some universities a majority of students is reported to be enrolled in selective tracks. It seems that the number and performance of the selective tracks have become a welcome method of positioning and marketing through vertical differentiation for universities, since selective tracks are reported to offer better employment prospects and to attract more qualified students.

The fact that the students at the selective *grandes écoles* often come from more educationally and socio-economically privileged backgrounds (since parental educational support clearly increases chances of success) has given rise to a wealth of discussion and debate on the chances for applicants from less educationally privileged backgrounds to gain access. Even though positive discrimination is forbidden by law, some detours are used to give students additional chances to access these institutions so as to counteract the social bias. These approaches are not uncontroversial, however, since the purely meritocratic principle associated with real equity, is seen to be at stake. One should note in this context, that the purely meritocratic admission policy of the *grandes écoles* was originally designed to offset the social elitism that existed at the time in the traditional HEIs. At first the *grandes écoles* succeeded in fostering a social mix among their student populations. They worked as an effective "*ascenseur social*" or lift on the social ladder, providing high-level professional qualifications to prepare for high-level professional occupation. As the *grandes écoles* became prestigious, the most sought-after sure path to success, they attracted the most talented students. Hence, over the years the scholastic selectivity led to a concomitant unintended social elitism, as the students came mostly from well educated middle and upper middle class background. In the 1950s, 20 % of students enrolled in *grandes écoles* came from less privileged backgrounds; in 2008 only 5 % did so. Hence, the *grandes écoles* are now sometimes regarded as a process for the reproduction of a certain type of elite.

Thus, with time, the open versus selective dichotomy has led to differentiation along the lines of talent as well as social background: on average the more talented and socially privileged students will choose the selective tracks. These trends have led institutions, both universities and *grandes écoles*, to implement measures to reach a better balance (see below), without using affirmative action or positive discrimination since it is not allowed.

3.2 National Policy Priorities

One consequence of the open versus selective admission dichotomy of the two sectors is that a significant number of students will enter the open track by default, often insufficiently advised about HE studies and not necessarily qualified or motivated for the studies they are undertaking. In addition, universities want to be sure that student qualifications match their course profiles. As a result the first year examinations often act as an ex-post filter and the drop-out rate in the first year is very high: in some fields up to 50 % of the students do not complete their first cycle education and leave the system without a degree (or transfer to other institutions; conclusive data on the fate of drop-outs is not available). One national priority is thus to improve the success rate, particularly in the first years of HE. Thus the government launched the Plan licence at the end of 2007 to promote innovation in training for first general education degree (Bachelor level), to develop "active" guidance and individualised mentoring, and to widen access to professional tracks (STS, IUT, licences professionnelles, i.e. professionally oriented Bachelor degrees). The aim is to reduce first year drop-out rate by half within five years, to bring 50% of an age cohort to the licence level, and to ensure that the licence qualifies a student either for further education or for entry into the job market.[14]

There are no other aspects of student profile which have been addressed directly in national policies. Indirectly, however, one may say that diversity of age and mode of learning (part-time versus full-time) has been greatly promoted through very progressive national regulations and fiscal policies with respect to continuing education, and flexible access which opens the higher education market to additional sets of learners and a wider range of competences.

3.3 Funding Structures

Since the funding formula for higher education is still input-based, with student numbers as the main indicator (multiplied by a subject area cost factor), diversity of student profile is not directly supported – apart from the absence of tuition fees which some believe favours inclusiveness of students from financially underprivileged backgrounds. In addition, need-based, state-funded financial support is available for students from lower socio-economic backgrounds in all institutions, again with the aim of supporting equity.

However, the hierarchy between selective education and free access education has social and funding ramifications as well, since fewer students from under-privileged backgrounds will end up in these selective tracks where unit costs are considerably higher. The selective tracks offer better student-staff ratios and higher quality of service, which means that the cost per student varies not only from one field to another as can be expected, but also from one type of institution to another, with the selective tracks receiving the highest funding per student. The CPU estimates that 5 % of the students (enrolled in the selective tracks) consume 40 % of state resources. The cost per student ranges from 7,000 Euro in the general university education to 13,000 Euro in the *grandes écoles*. The higher level of funding thus adds to the selectivity and vertical differentiation within the higher education system by raising the level of education and the future employment prospects of students enrolled in the *grandes écoles*. Nevertheless, the state is considering taking the drop-out rate of the universities into account in a new funding formula.

The level of funding for continuing education varies from one institution to another, and from one region to another, depending on the degree of private sector involvement in education, as well as on regional support. Indeed the region may play a substantial role in supporting and promoting continuing education infrastructure, as well as courses where they help knowledge and skills development and the inclusion of new student clienteles within the region. Hence in this respect, regions again add to the diversification of institutional offers and targeted student profiles. It should be added that continuing education is also nationally supported through tax breaks for employers and continuing education time allowances for workers, which produce substantially increased continuing education demand and offer, and thereby increase diversification of programmes and student clienteles.

3.4 Institutional Policies and Development

At many institutions, student-oriented policies focus on improving success rates, often with an explicit

[14] http://www.amue.fr/presentation/articles/article/reussir-en-licence-le-plan-daction-du-ministere/

diversity focus in encouraging students from lower socio-economic backgrounds to access and succeed at all levels of higher education. For some, the diversity of student body is measured by the percentage of students who receive financial support. There is no explicit reference to "equity" nor to "social diversity" (these expressions being rarely used in France) but to equal opportunities (*égalité des chances*) or to the *ascenseur social* or lift up the social ladder.

Many students enter the open admission track in university by default: from failure to gain admission, fear of failure in more selective tracks, interest in subjects that are not taught in selective tracks or lack of proper guidance towards other tracks. As mentioned above, mismatches of programmes and student profiles, lack of adequate qualifications or study habits and partly inadequate didactics to address the number and diversity of student profiles are seen to be responsible for the high first year failure-rate in universities, which is a matter of concern for government and institutions alike. While the government initiated the *Plan licence* or "*réussir en licence*" programme, institutions are devising a number of measures to improve the success rate, in particular through mentoring, tutorials, and increased contacts with secondary schools. Some HEIs are very proactive and creative in this respect, as the following examples illustrate:

- At many institutions, HE students provide remedial help to high school students and raise their aspirations at the same time. To support this approach, HE students receive credits for their participation in this programme. This is part of a nationwide action "*100.000 étudiants pour 100.000 élèves*" (100,000 students for 100,000 pupils).
- HEIs, universities and *grandes écoles*, organise information sessions in secondary schools to raise awareness of the full range of opportunities for different interests and qualification profiles.
- Some institutions have special support programmes for students who are less well prepared for HE studies.
- One institution within this study provides an integrated approach to monitor and support students' progress during their whole education: a university-secondary schools interface with initiatives as above; guidance, remedial help and support once a student has entered the university; a *projet personnel professionnel* (personal professional plan) to prepare entry into the labour market; and a university-labour market interface to inform the work environment and help graduates enter the labour market. This university has found this approach very fruitful in improving success rates while meeting the different needs of a diverse student body.
- In some *grandes écoles*, there is a commitment to ensure that "all students who enter must succeed". These institutions have put in place active support programmes for the students.

In recent years, some *grandes écoles* have been very proactive in becoming more accessible to under-represented social classes, for example in trying to identify promising high school students, offering these students tutorial support and preparing them for entry in the highly competitive *grandes écoles* system This has the effect of increasing social diversity, albeit only slightly given the size of each cohort.

Gender is an issue for student populations in some subject areas, as is subject choice in general. Through the actions aimed at secondary schools, HEIs try to attract more students, particularly women, towards scientific fields, especially engineering. While gender balance is not an issue in other fields, in some *grandes écoles* only 18 % are female students.

Regarding diversity of geographical origins and age distribution, one can observe a relative homogeneity in the first cycles in universities: the majority are local students, recently out of secondary education. Diversity increases noticeably at the second and third cycles levels: at those stages students choose an institution for its field of expertise rather than proximity; these are also the levels where the proportion of international students increases.

The *grandes écoles* present a different picture: from the first year on there is a great diversity in terms of geographical origin, as a result of the nation-wide competitive entrance examination; but homogeneity regarding the age distribution.

Increasing international diversity and mobility is another focus of student diversity policies at some institutions. Most institutions actively aim to increase international participation through well established exchange programmes, such as ERASMUS, as well as accepting independent degree students from abroad. Nationwide, international students represent about 12 %, but this percentage varies from about 6 % to about 18 % depending on the institution and its location. Again, the picture is different in the *grandes écoles* many of which actively recruit abroad. Some *grandes écoles* have an explicit internationalisation policy already for the undergraduate population. In one *grande école*, for example, 100 of the yearly 450 intake are international students.

Diversity of age distribution is not often an explicit policy of HEI, nor are distance learners being targeted

proactively; but both are addressed in the life-long learning offer which institutions have expanded considerably in recent years. Indeed, many universities in France have an active policy to increase lifelong learning activities, thereby increasing such student diversity as well as diversity of didactic approaches. Some universities actively encourage persons with a few years of professional experience to resume their HE studies and increase their skills. These students represent a high percentage in professional Masters. Regional public and private employers' interest and sponsorship are important factors in this context.

Generally one can note that, with the demographic downturn, HEIs are beginning more actively to attract non-traditional students: international students, more mature students, 2nd chance students. There, too, the PRES are seen to help with increased visibility and a wider range of education opportunities than a single HEI can offer.

Although the institutions that were visited provide special support for students with disabilities, these students were not mentioned as contributing to diversity; however, the CGE has acknowledged this dimension and has recently set up a commission on diversity with working groups focused on "gender equality", "disabilities", and "social openness".[15]

In summary, diversity of student profiles in France is highlighted by institutions with respect to the following different dimensions: diversity of qualifications (with the accompanying variation in selectivity among study tracks and institutions), diversity of social backgrounds (more or less pronounced depending on the HEI's context), diversity of national backgrounds (with deliberate policies of varying intensity to increase international participation at many institutions) and diversity of study mode and age distribution through the extended lifelong learning offer.

4. Diversity of Disciplines and Programmes

4.1 Regulatory Framework

The establishment of new degree programmes is not within the full autonomy of higher education institutions in France but remains largely regulated by the state: national diplomas are granted by the state for accredited programmes. One should add that it is possible for HEIs to award their own diplomas, but since state diplomas are more highly valued, in most cases universities submit to the AERES evaluations. If positive, the Ministry will grant accreditation for an initial four years and will renew it after another evaluation by AERES. This long process is meant to ensure that the programme meets the required standards. It also means that new programmes cannot easily be launched and accredited, and that they will be subjected to some common standards. It is too early to estimate whether this procedure will have strong homogenising effects on programme diversity.

As in most other European countries, programme structures have been profoundly changed with the implementation of the Bologna structure (called LMD in France), which is now almost completed in universities. Difficulties remain in implementing the Bologna structure in the area of medical studies, and for the *grandes écoles*. As a result, the new Bologna-triggered programme developments have not yet led to increased structural convergence within the country. The Master level, however, seems to develop into a platform of structural convergence where *grandes écoles* and universities alike develop programmes to profile their research strengths, sometimes even jointly in the context of a PRES.

As mentioned above, the development of new needs has often led to the establishment of new types of programmes and structural frameworks within which these would be delivered, with the necessary legal basis created by the government. One example is the successful, professional training programmes in which higher education is combined with apprenticeship on the basis of a partnership between an institution and an employer. The student alternates every so many weeks or months between employment related to studies and formal education in a university professional track. The BTS, IUT, and IUP and licences professionnelles, have all been regulatory measures to diversify HE programmes to meet new needs.

4.2 National Policy Priorities

In recent years, national policy priorities have focussed on two aspects of programme development: employability and improving the graduation rate. The professional *licences* and professional Masters (replacing the old *DESS*) have been developed with these aspects in mind, induced in part by the Bologna process. The intention is better to qualify students from the open admission tracks for entry into the labour market. According to initial reports this form of education is successful.

[15] l'Ouverture sociale www.cge.asso.fr/cadre_societe.html

Another policy concern may be said to affect programme development indirectly, namely, the drive to increase the research capacity of the country. Research competences and orientation play an increasing role in revised and newly developed programmes at many HEI, universities and *grandes écoles* alike, especially at the Master level.

4.3 Funding Structures

Funding structures are based on student numbers and do not directly relate to programme development; but they can provide incentives to increase the attractiveness of programmes. Of course, more rarely, programmes may also involve research partners from the private sector who may contribute funding to projects, in turn affecting the research environment and project opportunities for students. Direct external funding also exists for all professional tracks in the form of a tax paid by the business sector (*taxe d'apprentissage*) to institutions. Furthermore, as already mentioned, direct programme funding from industry or other employers is current practice in continuing education, a field in which some French HEIs are very active.

4.4 Institutional Policies and Development

HEIs have engaged in a number of different approaches to diversify syllabi and teaching methods. Programme development is undergoing a reciprocal drift between universities and *grandes écoles* which is leading to some convergence of programme profile. On the one hand, since the 1960s universities have been developing their offer of professional tracks in order to meet a wide variety of needs, such as ensuring smoother transitions to the labour market or developing research-based higher levels of professional qualification. Often they also aim to increase their attractiveness to more talented students (especially in the selective professional tracks). To some extent, one may say that professional training has become a priority for universities. The success of their professional tracks shows that these programmes do indeed meet a need: even at institutions that are known for excellence in research, up to three quarters of the students may be enrolled in a professional track. On the other hand, the *grandes écoles*, which are by nature professional schools, now place special emphasis on research as inseparable from high quality education; some are expanding their Doctoral education as an international criterion of institutional excellence. In this context, it is important to note that any *école doctorale* must be accredited by the Ministry, following AERES evaluations of its research capacity and quality as well as of its organisation. Generally, if a *grande école* is engaged in Doctoral education it is through a partnership with a university. In this respect, convergence rather than diversification can be observed.

Some institutions are also trying to distinguish their programmes through innovative or diversified pedagogical approaches, new and expanded forms of student support, or resource-intensive measures such as providing smaller classes for first-year students to minimise drop-out and strengthen guidance and counselling support.

Diversification of disciplinary organisation has become a theme for institutional policies in so far as targeted attempts to increase interdisciplinarity lead to diverse tracks and orientations within programmes. The historical separation of broad disciplinary fields into separate institutions makes the pursuit of interdisciplinarity a particular challenge. Interdisciplinarity is approached both by developing common courses between different fields, and by facilitating transfers from one type of studies to another via "bridges". One institution mentioned giving credits for courses taken in another HEI, for example. All universities visited described how difficult it is to build bridges between degree programmes in different disciplines, for example to ease the transfer of students from medical studies to studies in the health sector, or from a general *licence* programme to a professional one. The main aim here is to meet the different needs of emerging specialisations as well as promote more flexible learning paths. But often a workable approach to bridging between different types of studies has not yet been found.

Programme diversification is also occurring through the increased interest in joint degrees in partnership with other institutions in France or abroad, which are becoming increasingly common at French HEIs. Programmes with joint supervision of studies in partnership with business are being developed by some institutions, in an attempt to develop niches of excellence together with regional stakeholders.

4.5 Quality Assurance

AERES evaluates higher education programmes. A new funding formula is being considered, in which quality assurance will become a factor. As education indicators are notoriously more difficult to take into account than research indicators, it is unclear how quality performance will be taken into account in determining funding levels and how this will affect the funding of individual programmes (if at all). At institutional level

it has been decided at least that failure rates will be taken into account, but not whether such numbers will also be considered in internal allocation on the basis of performance in individual programmes. How other types of educational performance will be considered also remains unclear.

More and more institutions are putting in place internal evaluation procedures for their programmes, although at many institutions the evaluation of teaching, and especially of teachers, is not fully part of the university culture yet. In this respect, the *grandes écoles* seem to be ahead, given the importance they attribute to attracting the best qualified students whose demands are taken very seriously and who benefit from more favourable student-staff ratios. At universities, the evaluation of teaching is reported to be easier to implement, and to embed in institutional culture, in younger institutions not yet weighed down by tradition and with a somewhat unconventional institutional mission. At institutions where such evaluations play a well developed role, the feed-back into programme development is noticeable and teaching methodologies are often more "student-centred" and more attentive to competence development. An interesting example was found at a *grande école* where the whole curriculum had been restructured in terms of sets of competences and where assessments as well as evaluations had been adapted accordingly. Some programme diversification is thus occurring through focuses which were often introduced through quality assurance of teaching and learning environments.

4.6 Stakeholder and Academic Values

After a wide range of interviews with a whole set of different types of institutions and representative organisations, it became very clear that the professional dimension of education is and remains the most highly valued dimension of HE programmes, often even contributing to their prestige. The academic pursuit of knowledge and research seem to be less often seen as valuable in themselves, but rather valued for their contribution to other functions.

Another highly placed value, which is not highlighted as often in other countries, concerns the cultural value of universities and the cultural competences of students, often subsumed under the concept of *citoyenneté* or citizenship.

The diversity and the interplay of disciplines is emphasised as a value by institutional leaders and academics, as well as, more recently, by policy makers, especially since the historical separation of disciplines in separate institutions makes the pursuit of interdisciplinarity even more of a challenge. Such diversity is a central concern in programme development and institutional development and plays a key role in the institutional mergers and PRES initiatives and in many other integration efforts, for policy makers, stakeholders and institutional leaders alike.

5. Conclusions

For historical reasons, the French higher education system is characterised by a high degree of diversity between institutional types as well as within each sector. The need to expand higher education and provide egalitarian access while at the same time furthering the development and reproduction of a meritocratic elite, has led to the development of a wide array of institutional forms in France. Three sets of distinctions mark the main differentiations:

1. universities versus *grandes écoles*
2. non selective access versus selective access
3. universities versus research organisations

In these couples, status differences are an important functional ingredient since they allow, as Trow would have described it, the combination of inclusion/ massification and elite functions of the system. Vertical differentiation has traditionally been oriented toward selective professional education. But the dividing lines no longer run as smoothly along the lines of institutional separations as they have done in the past. Not only have universities introduced elite functions; research performance and international visibility have also emerged as new principles of vertical differentiation, which apply in equal measure to the *grandes écoles* and to the universities, cutting across the old territories of functional and vertical differentiation. The nature of status differentiation is thus currently being transformed.

To many users, outsiders and insiders of the system, the diversity of the French HE system is perceived as being associated with segmentation, lack of transparency and insufficient flexibility, both from the point of view of mobility within or into the system as from that of the interplay of disciplines and programmes. Hence, attempts to interlace and associate members of the different institutional types with those of other types of institutions or units are increasing in range and intensity, starting decades ago with the association of CNRS and other national research institutes with university research groups, and culminating in the PRES scheme in which groups from all types of institution

can pool their expertise. Indeed, in recent years, national authorities and institutions alike have placed central emphasis on the need for greater visibility, critical mass and synergies, in order to enhance research capacity and play a significant role on the international stage. Therefore, rather than diversifying further, the system aims at new forms of inter- and intra-institutional synergies and collaboration and even, as regards quality standards and functional orientation, at some convergence. The two recent laws on research (2006) and on education (2007) set out the framework in which this is to happen. The *Pôles de recherche et d'enseignement supérieur* – PRES (created by the 2006 law) set the conditions for HEIs to pull their separate resources together in order to strengthen their research capacity, and to go as far as mergers if appropriate. The 2007 law provides the autonomy and the means to do so.

At the same time, although it offers a wealth of different approaches to higher education, the system remains fairly centralised, especially as regards employment regulations, even if one takes into account the recently increased institutional autonomy of the universities. Nevertheless, institutions are clearly freer to develop their own strategies and to set their own agendas than ever before. While some convergence of structures may occur through increased research orientation and closely knit collaborative forms, a new form of institution-led diversification is likely to take place at the same time. The overall result is more difficult to predict than for any other of the countries included in this study.

Chapter 4:

Institutional Diversity in Norwegian Higher Education

Sybille Reichert, with Lars Ekholm

Introduction

In order to understand the present higher education situation in Norway, it is important to consider the origins of the institutions and the way the system has grown. For a long time, Norway had two comprehensive, traditional universities, in Oslo and Bergen. A science and technology-focused university was created in Trondheim through a series of mergers. In the 1960s, a university was established in Tromsö, the northernmost university in Europe. In parallel, in the post-war period, a great number of specialised "district university colleges" (teacher education, nursing, engineering, etc) were established, often building on 19th-century educational institutions, supported by their local communities. This part of the Norwegian higher education system was quite fragmented. In the 1990s, the 98 colleges were merged into 26 university colleges, because they were perceived to be too small to meet quality standards. These university colleges have very different orientations or backgrounds: some are more professionally oriented; some have also added research activities to their activities.

Although Norwegian higher education is governed by one comprehensive law, the system is clearly binary in its division of labour between research-based universities, which are free to set up whatever programmes they choose, and more education-oriented university colleges with limited (though often increasing) research activity, which have to undergo accreditation if they want to move up in the Bologna ladder to offer Master courses (and even PhD programmes).

However, the binary divide has become more blurred over the last decade, as the border line was crossed by two larger university colleges (student numbers: 7,000 and 5,500). These received university status, endorsed by the government, but with the important difference that they still are funded on a university college model. A few university colleges are still in the pipeline for upgrading. One specialised university institution was also given university status. It appears that the current Norwegian higher education system provides incentives for institutions to become universities, resulting in an academic drift at system level. The government seems ambiguous about this; on the one hand, it accepts this drift, allowing status "upgrading" under certain conditions, but on the other hand, it does not provide equal terms with universities in terms of adapted funding.

Thus, it seems that Norway is currently debating the basic contours of the binary system and its capacity to respond to a new set of needs. The present system is diverse in the sense that it houses a variety of institutions with different tasks, different mixes of functional emphases – some more research-driven, some more teaching-driven – with different degrees of basic and applied research, innovation and continuing education activities, catering to different regional or national, more rarely global target groups. But despite the deeply rooted egalitarian attitudes there is still a hierarchy in the value system which places universities and their degrees significantly higher in social recognition than those from university colleges, and this has been reinforced recently by the increased value placed on international research competitiveness. Hence institutions are seeking to move upwards in the hierarchy, a trend which is currently leading to greater institutional convergence at the cost of diversity at system level. This convergence is quite openly conducted, however, with publicly laid down and supervised rules which fix the conditions and criteria as well as the process for being upgraded.

1 Diversity of Institutional Profiles

1.1 The Regulatory Basis

The Norwegian higher education system is regulated by one comprehensive law (Act No. 15 of 1 April 2005 relating to universities and university colleges) which covers all three main categories of higher education institutions, namely the seven universities, eight specialised university institutions (five public and three private) and 25 university colleges, as well as private higher education. This Act was passed in 2005, merging the formerly separate acts for public and private HE (the "Act Relating to universities and university colleges" and the "Private Higher Education Institutions Act").[1] The comprehensive act seeks to ensure greater equality between public and private higher education institutions, focusing more on the quality in higher education than ownership. The accreditation of both public and private institutions is handled by a national agency, NOKUT (The Norwegian Agency for Quality Assurance in Education).

The seven universities include four comprehensive research-based institutions, as well as one recently upgraded, formerly specialised university institution and two recently upgraded university colleges. Since 2005 any college offering five Master programmes and four Doctoral programmes and showing a sustainable production of PhD candidates can apply to NOKUT for an accreditation as a university. The Norwegian Specialised University for Agriculture, Stavanger University College and Agder University College have all been converted to universities through accreditation from NOKUT. The specialised university institutions cover business administration, veterinary science, architecture, sport and physical education and music. The university colleges are responsible for regional education, primarily at Bachelor level, within the fields of nursing, teaching, business management, engineering and information technology, though most colleges also offer a number of other fields as well. University colleges can offer also Master and PhD programmes if they have passed an accreditation from NOKUT for the particular programme. The university colleges differ widely in size. The biggest (Oslo University College) has 11,000 students, the smallest (a private institution) only a tenth of this number. In addition to these institutions there are two university colleges of art which are usually categorised with the 25 university colleges.

In terms of student numbers (2006, public institutions), the sector is distributed quite evenly between universities and university colleges:

Universities	80,500
Specialised university institutions	5,000
University colleges	83,000
University colleges of art	1,000
Total	**169,500**[2]

Norway has also 26 private higher education institutions, none of which has the university title. One of them is fairly big (14,000 students), one has about 2,000 students and all the others have less than 1,000 students; the smallest has 40. In the ensuing text the focus is on the public institutions, which represent more than 90 % of the higher education sector.

Overall, the tasks for all institutions are the same:

- to provide higher education at a high international level
- to conduct research and academic and artistic development work at a high international level
- to disseminate knowledge

A more detailed comparison of the tasks that the government has asked the various types of institution to fulfil shows only one clear regulatory distinction. With respect to education, universities and university colleges are both expected to provide "higher education of high international quality on the basis of research, academic and artistic development work and empirical knowledge". (For specialised university institutions, there is the addition: "within their academic fields." Otherwise the specialised university institutions have the same rights as universities within their fields.) With respect to the research function, however, universities and university colleges are clearly distinguished. Universities are given a "national responsibility" for basic research and for PhD training within the fields in which they award PhDs, as are the specialised university institutions. In contrast, research at university colleges should also be of high quality but should be oriented toward professional practice and development work within their academic fields (unless they have PhD awarding rights), which are associated with their regional responsibilities.

The government decides to which group an institution shall belong, following a recommendation and assessment made by the quality assurance agency NOKUT, as well as granting the right to award

[1] http://www.regjeringen.no/upload/kilde/kd/reg/2006/0031/ddd/pdfv/273037-loven_higher_education_act_norway_010405.pdf
[2] The data on the HE sector is taken from the Til¬standsrapport for UH-sektoren 2008 (Kunskapsdepartementet).

degrees, professional qualifications and titles: "The government decides which degree programmes and professional training courses an institution may offer, the length of time in which it should be possible to complete the course of study, and which title each degree or professional training qualification confers the right to." (Such degree titles comprise Bachelor, Master and PhD. Institutions have the right to provide subtitles.)

In practical terms different "rights" follow from the category to which an institution belongs, once this institution is accredited (see below 1.3).

1.2 National Policy Priorities

Current higher education policy in Norway is preoccupied with the question of institutional diversity and the future landscape of Norwegian Higher Education. In particular, questions of fragmentation, the future definition of the binary divide and the role of different types of institutions have been high on the agenda. One central question has been the role of the many small university colleges. As indicated there are considerable differences among this institutional category. Figures for 2006 show that seven public university colleges have less than 2,000 students, another seven have between 2,000 and 3,000 students, four lie in the bracket 3,000-4,000 students, only six above (the biggest, by far, numbers 11,000 students). Another question raised is that of the current and future definition of a university and its mission(s). How diverse should these missions be and what conditions should define the university title? The current stipulation which demands that a university should have at least five Master programmes and four PhD programmes to deserve the title, is seen to be insufficient, too formal or possibly too constraining by some. One aspect associated with university status which is seen to be problematic is the number of institutions having PhD awarding rights. There are now 18 such institutions (seven universities, eight specialised universities and three university colleges), raising questions of sufficient critical mass and the quality of research training environments.

With these questions in mind, the Ministry mandated a commission in 2006 to conduct an in-depth investigation into the Norwegian higher education system and to make recommendations for its future structure for the coming 10–15 years. The "Stjernö Commission" reported back in early 2008 (Stjernö-utvalget, "Sett under ett")[3] provoking a widespread debate in the country – which has not yet been resolved, as the government has put the document aside without a formal decision. Even though the commission's work may thus be regarded as of merely transitory importance, it serves the purpose of this study well because it raises the whole range of system level issues which affect institutional diversity. While the solutions it proposes may be too radical and not always attuned to the complexity and values held highly in the Norwegian higher education landscape, its proposals and the public reactions to it illustrate the transitions facing the Norwegian higher education system in relation to a wide range of issues, including institutional diversity. In spite of its short-lived shelf life, we will thus take the commission's report as a point of departure for our analysis of the Norwegian approach to institutional diversity.

Indeed, the problems the commission set out to solve all relate to the above description of the Norwegian system. The report points out that the present system works quite well in so far as it provides all regions with higher education opportunities and good labour force. According to the commission, however, the price for this is that many institutions can neither recruit good students, nor meet quality standards. In comparison to neighbouring countries, there are few or no attempts to concentrate resources to secure the quality level needed in the knowledge society and to succeed in international competition. The commission was concerned about present plans by university colleges to become universities, which included projects to establish another 20 – 25 Doctoral programmes in order to satisfy the university definition criteria mentioned above. If these plans had come to fruition, the division of labour between universities and university colleges could not have been maintained. The commission accepts that these distinctions may belong to the past, but fears that a highly fragmented yet homogeneous institutional landscape may be the result.

The solution suggested by the Stjernö Commission, is to make institutions cooperate in one way or another. It drafts four different alternatives.

1. Multi-campus model: the country would be divided into eight regions and all institutions in one region form one university. Student numbers in an institution would be in the range from 8,500 to 32,500.
2. A binary model with in total five universities and six university colleges in the country.
3. Networking institutions, with a university at the centre of each network.
4. Mergers among institutions of different profiles.

[3] Stjernö report (NOU 2008:3).

The commission proposes that the institutions themselves start the cooperation process, under the leadership of the Ministry, which should then draft a bill to Parliament proposing a new structure for Norwegian higher education. If this turns out to be impossible, the commission suggests changing the definition of university, allowing any institution providing Doctoral programmes the right to the university title, without further limitations or details. This, it says, is in line with European higher education policies. A student body of at least 5,000 has been mentioned as an appropriate threshold.

The Stjernö report has been circulated for comments among all those concerned, provoking charged discussions and widespread criticism, not so much of the diagnosis but of the therapies proposed. In response, the Minister of Education has published a short statement reassuring the sector that the most radical mergers proposed by the Stjernö Commission will not be enforced. However, some voluntary mergers do seem to be on the horizon, especially among the smallest institutions. A merger between a university and a university college was reported to be under way (Tromsö). At other university colleges, possible future mergers or denser forms of cooperation with a university or a few other university colleges are being discussed in key strategy groups. In many interviews it was emphasised that if a merger should turn out to be the best possible option, it would be "easier" for various reasons to cooperate with the university in the region, which would be complementary, than with the institutions belonging to the same institutional category in the same region, which are traditional competitors.

In response to these policy proposals, the academic community has been most coherently and vocally represented by the Norwegian Association of Higher Education Institutions, with its 45 member institutions, which represents the whole range of institutions (i.e. of all three categories, having been formed on the basis of a merger of the two representative organisations for universities and university colleges in 2000.) Its attitudes towards the Stjernö proposals are in line with its key concerns of academic freedom and institutional autonomy. The Association agrees with the commission's diagnosis of a system with a blurring division of labour among different types of institutions. But, while wanting things to improve, the Association prefers the present system and voluntary mergers and cooperation, arguing that it safeguards the diversity of the Norwegian higher education landscape. Even more forcefully, the Association openly rejects the proposals by the Stjernö Commission to increase the role of the state in governing, or at least re-shaping, the system. The Association questions the value of the small body which the commission proposed should help the Ministry in the merging process and in defining profiles, diversification and concentration. According to the Association, this arrangement could easily interfere with academic freedom in new, merged institutions. On the contrary, "the institutions must have possibilities on their own to consider various forms for cooperation and possible mergers, on the basis of their autonomous assessments of what will strengthen the capacity for each of them to develop their respective profiles and strengths."[4] The Association also criticises the lack of analysis of the proposed large-scale mergers and is concerned about their effects on the diversity of teaching and research traditions in such institutions. Basically the Association shares the view that the overall system must be further developed, but it should be done on the basis of voluntary cooperation among institutions, long-term funding from the state including economic incentives to stimulate cooperation, and division of labour.

Even though the Stjernö Commission report has been put aside, its proposals reflect the overall issues and areas of attention to which national policies are likely to turn to in years to come. Thus the Stjernö concern with critical mass and larger more internationally visible institutions, for example, has been a national concern for a while and is likely to lead to further incentives to increase cooperation and consortium arrangements, even mergers. While the most radical proposal from the Stjernö Commission – dividing the country into a number of university regions and reducing the number of public institutions from about 40 to eight – will not be implemented and no conclusive policy decisions have been made on these matters, cooperation arrangements and mergers will probably be promoted as one instrument to increase international competitiveness. For institutional diversity, the creation of bigger units or conglomerates would shift diversity more toward internal institutional structures rather than emphasise increased external diversity of institutional profiles. The interviews confirmed a far-reaching consensus that there must be more cooperation if institutional performance and visibility are to be strengthened.

In this context, it should be pointed out that the emphasis on mergers and cooperative structures is shared, and perhaps partly influenced, by policy debates and institutional choices in the other Scandinavian countries. Thus, the necessity to sharpen profiles and

[4] Written comment by the Association on the Stjernö report, 2008-05-29, p.3, translation of Lars Ekholm.

increase institutional critical mass and visibility is also high on the policy agenda in Denmark, where far-reaching mergers have been carried out. Three large-scale universities have been formed, through mergers enacted from above and handled autonomously by the universities. In Finland two mergers are under way at this moment (two universities in Mid-Finland and one major merger in Helsinki). Mergers and cooperation are also high on the agenda in Sweden. One merger has occurred in Stockholm, another has recently been accepted by the government and other forms of cooperation are under discussion.

In the background of many of these discussions and in the foreground of many institutional agendas, there is the recurrent emphasis on the importance of research for national competitiveness, which is becoming an increasingly central point on the national agenda. While its national expenditure is still comparatively modest, given the hitherto generous income from its natural resources (Norway sets aside only 1,5 % of its GNP for R&D, less than its neighbouring countries: Denmark 2,4 %, Sweden 3,9 %, Finland 3,5 %), Norway has spent considerable attention in recent years to improving research competitiveness, establishing ambitious programmes for centres of excellence and taking other measures to strengthen research at universities as well as some university colleges.

1.3 Quality Assurance

The present Norwegian higher education system was established through the Quality Reform in 2002, which (on the basis of a process started by the Mjøs Commission in 1998) implemented the Bologna ideas, structures and guidelines, but also added a number of intra-Norwegian reforms concerning governance, funding, quality assurance, etc. An important cornerstone of this new architecture was the establishment of an independent agency for accreditation and quality assurance, the Norwegian Agency for Quality Assurance in Education, NOKUT, which started its activities in 2003. NOKUT is funded by the government, which also decides on the agency's tasks. But apart from the definition of its mandate, it is an independent agency, headed by a board that is fully responsible for its own operations and decisions and cannot be overruled by the Ministry.

Among NOKUT's tasks, three are of special interest for our study:

1. Evaluation and recognition of quality assurance systems at the institutional level. During a six-year cycle NOKUT evaluates all universities, specialised university institutions and university colleges. If an institution's quality assurance system is not approved, it loses its accreditation.
2. Approval and accreditation of study programmes and institutions. A three-level hierarchy operates in this field, which is interesting from a diversity point of view:
   - The universities can decide freely on what study programmes they want to offer, at all levels, and do not have to apply for a NOKUT accreditation.
   - Specialised university institutions and accredited university colleges can decide on their own on study programmes up to the Bachelor level. If they are accredited with a PhD-awarding right in a specific field they can decide also on study programmes in that field at Master level. For all other fields they have to have new Master programmes accredited before starting.
   - Non-accredited universities colleges must have an accreditation from NOKUT regarding all study programmes.
3. Accreditation of institutions seeking to be up-graded from one level to another (i.e. from university college to a specialised university institution or a university, or from specialised university institution to university).

In general, one can say that NOKUT has the authority to supervise this comprehensive but basically binary higher education system, and to safeguard the hierarchical distinctions which are built into it. It has the power to give a green light to a university college or a specialised university institution to obtain university status. It commands the mechanism that has opened the door for academic drift at system level.

The basic criteria for the various types of institutions are laid down by the government. But the standards are set by those actually doing the assessment. For this reason the composition of the panels is important, and NOKUT tries to safeguard their competence by stipulating various profiles (such as at least one person with university management experience on an institutional accreditation team). The standards of study programmes are set by those in the field. While the system is too young to allow assessment of its impact, one may suspect that, from a diversity point of view, these comprehensive accreditation exercises could contribute to harmonising standards, with every institution wanting to follow the "norm".

The following two tables give some information on the NOKUT accreditation decisions, which reveals a rather critical practice on the part of the agency, namely a 19-46 % non-approval or dismissal rate for programme

accreditation and a 41 % critical assessment or non-acceptance rate for quality audits.

Accreditation success rates 2003 – 2007 in % of total number:

	Approved (%)	Not approved (%)	Withdrawn/ dismissed (%)	Total number of submissions
Bachelor	54	9	37	35
Master	81	6	13	119
PhD	64	27	9	11

Quality assurance system audits for 2003 – 2007 in % (total number 46):

	Universities	Specialised Universities	University Colleges	Inst. without Accredi-tation	Total
Acceptable/ Positive assess-ments	**67**	**60**	**46**	**82**	**59**
Acceptable/ Critical assess-ments	**33**	**20**	**38**	**18**	**30**
Not-acceptable	**0**	**20**	**17**	**0**	**11**

Naturally, the agency, situated as it is between the government and the institutions, with a relatively critical track record, has been under sharp observation since its inception. Questions have been raised concerning such topics as the degree of independence from the Ministry, the relation between NOKUT's board of external members and the proposals and decisions from within the agency, the big apparatus – in terms of evaluation panels – that seems to be associated with so many ambitious QA agencies in Europe, etc. As a result, a recent European evaluation of the Agency[5] was received with great interest by the sector. The evaluation finds that NOKUT fully complies with the guidelines for European external quality assurance agencies and has indeed been effective in assuring quality. In the survey carried out for the evaluation, many institutions report that they have improved quality in preparing for the accreditations and that NOKUT has helped to put quality issues on the institutional agenda. However, the evaluation is more critical regarding the limits to NOKUT´s autonomy and its effect on institutional diversity. It points to the fact that the present regulation invites non-university institutions to try to reach university status and comments: "The current regulations invite non-university institutions to try to reach university status, risking to put diversity and other important functions of the higher education system under pressure. Current incentives may be geared too much towards being a research-intensive higher education institution, undervaluing the role of teaching and the qualities of professional studies."[6]

1.4 Funding Structures

Norway´s funding regime is based on the system enacted with the Quality Reform of 2002. It introduces output-based indicators which replace the previous partly input-based funding system. This new regime comprises institutional basic grants based on input data and output-based funding for teaching/learning and research

The basic funding represents about 60 % of institutional budgets on average (for university colleges it represents some 70 % and for universities some 50-55 %). The output-based funding for teaching and learning makes up about 25 % of institutional budgets. It is calculated on the basis of "study points", i.e. student credits. Extra points are given for student mobility, on the basis of in-coming and out-going student numbers.

Funding for research is split into two parts: strategic allocations, which essentially cover posts for PhD candidates and scientific equipment; and output-based allocations, with four sub-components: a) Doctoral candidates; b) EU grants; c) national research council grants; d) publications. On average this component covers 15 % of institutional budgets (20-25 % at universities and 5 % at university colleges). Unlike the output-based teaching grant, the output based research allocation is re-distributed so that institutions are always either winners or losers in each annual re-distribution round.

As has been underlined above the higher education law stipulates that education, research and artistic developments are tasks for all institutions. But in practice there is a division of labour between the more research-based universities and the more teaching-based university colleges, which is reflected in the distribution of research allocations. Average figures for 2006 show that (public) university colleges derive only up to 3 % of their budgets from the output-based research grant, whereas the corresponding figure for universities is 23 %.

[5] Liv Langfeldt, Lee Harvey, Jeroen Huisman, Don Westerheijden & Bjørn Stensaker
Evaluation of NOKUT/Reports 1 and 2 (2008). Evaluation of NOKUT – The Norwegian Agency for Quality Assurance in Education. Report 2: NOKUT's national role
http://www.regjeringen.no/upload/KD/Vedlegg/UH/Rapporter_og_planer/NOKUTEvaluation2.pdf
[6] Op.cit. p.42

The overall distribution of public institutional funding among the various categories of Norwegian institutions is as follows (2007 data):

	NOK (1,000)	Euro (1,000) (as of 24/4/2009)	%
Universities	12,088,331	1,373,134	57
Specialised university institutions	967,946	109,958	5
University colleges	7,948,131	902,967	38
Total	21,004,408	2,386,257	100

In addition, the institutions have external funding from the Norwegian research council, EU projects and project funds from private institutions, and private contributions amounting in all to 20-30 % (universities some 30% and university colleges from 10-20 %).

The allocations are provided as lump sums which the institutional boards may distribute according to their own priorities. But the institutions apply the same calculation models as the Ministry (in varying degrees) when they allocate the money to the different departments or faculties of their organisations. The system is transparent since an annual report describes in detail all funding streams. (*Tilstandsrapporten*/Annual Survey).

While the Quality Reform has been evaluated, decisions on changes are only expected in the budget proposal for 2010, which will be presented in October 2009. The Ministry believes that the time has come to review the whole funding regime, and is supported in this by the Norwegian Association of Higher Education Institutions (the Rectors´ Conference). The Ministry has commissioned a report from a research group which points out that too much emphasis is put on quantity rather than on quality, and that it is important that institutions are not punished when they achieve (merely) good results (as may be the case for research improvements if other institutions have improved their research production even more). The Stjernö Commission generally accepted the present system but also proposed a number of changes, as for example that the strategic components should be increased at the cost of the output base funding components, that contracts should be set up between the Ministry and the institutions on a three or four-year basis, and that evaluations should be used when allocating money for research. The first two of these measures would increase the margin which institutions would have for choosing diverse institutional development paths. The Norwegian Association of Higher Education Institutions points out that the current funding system contains disincentives for cooperation and rather stimulates competition and fragmentation. The Association would also like to see three-year budgets.

Another aspect of the funding structure deserves attention from the diversity point of view, namely the challenge of defining artistic development work which is included among the tasks for higher education institutions. The institutions providing education in the artistic fields do not normally perform scientific research or scholarly work, but can conduct artistic development work which, although rather small (or even tiny) in budgetary terms, puts the university colleges of art (and corresponding institutions or programmes) on the same level as institutions with scientific research in their portfolios, at least in terms of principle. However, in addition to the challenge of defining artistic development, measuring such activities for the purposes of determining funding differentials is even more problematic. The Ministry has thus commissioned the Norwegian Association of Higher Education Institutions to investigate the question. In its report, its *ad-hoc* working group concludes that at present the only basis for calculating funds for artistic development is the programme currently in operation for PhD candidates in this field. It underlines that the documentation of artistic development work must improve – so that the institutions in question can compete better with institutions of "traditional" research, and can be more accountable to their stakeholders regarding their performance. From a more fundamental point of view, the current definition of knowledge and research and their forms of practice are clearly too narrow to do justice to the diverse achievements of institutions which specialise in the creative sector. In Norway, as in the other countries, this problem of institutional diversity is only beginning to be addressed.

1.5 Institutional Policies and Development

The survey data suggests significantly less mission spread, in terms of weights attributed to different dimensions of institutional activity, in Norway than in the other binary systems included in this study (Switzerland and France) or than in the integrated HE system of England. Only in the current state of the Slovak HE landscape before the imminent new institutional categorisation with different mission mixes regulated by law, are missions similarly homogeneous.

Taking a closer look at the survey data, let us start with the least surprising result: 82 % of Norwegian higher education institutions (universities and university colleges) find that teaching ("preparing school leavers to become highly skilled workers for industry, government and academia" as formulated in the survey) is a vital part of their mission. This view is expressed even more often than by their peers abroad (the cross-national

average is only 61 %). Oddly, however, considering the supposed teaching-orientation of the university colleges, university colleges have a teaching support service less often than universities, although universities clearly value the teaching function less highly than research, judging from their hiring and reward structures.

Even more surprisingly, research training for academia is nearly as highly ranked, with relatively small differences in attitude between universities and university colleges: 86 % of all Norwegian institutions find research training for academia a vital (64 %) or important (23 %) part of their mission. Only 5 % find this function not very important; none finds it irrelevant. Interestingly, the UC do not differ as much as one may expect in a binary system in which academic research is supposed to be primarily vested in the university sector. Among the UC, research training for academia is also found to be vital by a majority, namely 54 %. In contrast, the more professionally oriented research training, namely research training for industry is only found vital by 27 % of UC. Clearly the two institutional types do not think of themselves as pursuing different missions in this respect.

By a considerable margin, the third most often mentioned priority is applied research, which 41 % of HEIs find to be a vital dimension of their mission (slightly more among the universities). Another 55 % find it important and no institution finds this part of their mission irrelevant or not very important. A great majority of institutions (68 %) also believes that the applied research dimension of their provision will become even more important in the years to come. It should be added that the applied research function is not prioritised more strongly in the university colleges than at universities, as is the case in Switzerland, but that it is much more often judged to be increasing in importance at the UC, which reflects their expanding research activities.

The weights attributed to basic research, however, show higher prioritisation by the universities: all universities but one find this dimension vital, while only 8 % of UC share this view. Nevertheless, unlike the Swiss *Fachhochschulen*, 41 % of UC still find basic research an important part of their mission, thus revealing less mission differentiation in this respect between the formally differentiated types of institutions than in the other binary systems.

Business innovation plays a relatively unimportant role in the missions of Norwegian universities compared to the other countries. Only 18 % find this function vital (compared to the 31 % cross-national average) and 32 % find it not very important (20 % more than the average). Interestingly, unlike in the Swiss FH sector, business innovation is not regarded as a particularly important part of the core mission of the UC either: only 17 % find it vital, only another 9 % find it important (and the reward structures show no attention to the UC innovation performance). The explicit regional orientation of the UC is thus not associated with their contribution to regional business innovation.

In contrast, continuing education for professionals is seen as an important or even vital part of HE missions by 87 % of Norwegian institutions, compared with an average of 75 % across the five countries. This means that this function is more often found to be important by Norwegian institutions than basic research although continuing education is less often found to be a vital part of their missions (only by 26 %), than basic research (44 %). There is also no institution which finds continuing education irrelevant or not very important, which means that this function is more integrated into the core missions than in the other countries. Like their European peers, more than 78 % of HEIs believe that continuing education will become more important in the next five years.
The two institutional types are clearly differentiated with respect to their engagement in continuing education: 50 % of UC regard this part of their mission as vital and another 42 % find it important. In contrast, no university sees continuing education as a vital part of their mission, but rather as important (83 %).

Turning to the target communities that are prioritised by institutions, there is a clear distinction between institutional types, especially regarding the target communities for research. The majority of UC rank the regional community highest for their research, a few adding the national one, while all universities rank the global or national community highest with respect to research.

All in all, global, European and local communities are the least favoured targets for research (about half of the institutions find them the least important or second lowest priority). The differences with the cross-national average are striking, but may be partly accounted for by the high proportion of university colleges in the sample. Fewer than average Norwegian institutions prioritise the global community as a target for their research (25 % as against 33 % on average); but more institutions find the global least important. Universities and UC differ significantly in this regard: while 33 % of universities target the global community in their research, only 11 % of the UC do so.

The national community is ranked most highly by the greatest number of institutions (30 %). It should be

added that the universities target the national level much more often than the UC in their research. (The overall score is not higher because the sample contains more UC than universities.)

The European community is clearly less important a target for Norwegian institutions. No institution ranks it among the highest priority (versus 13 % in other countries), 45 % regard the European community as a second priority target for their research, and 50 % (18 % more than average) give it one of the lowest two ranks.

Universities and university colleges do not diverge as much in their targets for teaching as they do for research. Positions are only reversed when it comes to national versus regional level as targets (50 % and 33 % for universities and 33 % and 50 % for UC). In general, with respect to teaching, the priority target communities of Norwegian institutions resemble those of their peer institutions abroad, reflecting strong divergences between the target groups for research and those for teaching within institutions: regional and local target groups are weighted more highly as target communities for teaching than for research. More than 60 % of Norwegian institutions give the regional community the two highest ranks of importance, similar to their peers abroad. However, the national target groups are more highly placed than in other European countries. In contrast, the global community is ranked as the most important target by only 14 % of Norwegian institutions, compared with 20 % average across the countries.

Institutional policies relating to diversity of institutional profile show significant differences of focus among different types of institutions, as revealed in the interviews conducted during the site visits. The major comprehensive university visited has focussed mainly on enhancing research quality and research profile. After having voluntarily undertaken a major assessment exercise, it has focussed on strategic priority setting in order to sharpen research profiles. In particular, diversity becomes an issue when its strength in terms of a broad spectrum of academic fields was intended to lead to new inter-disciplinary programmes that would emphasise the uniqueness of its profile. The specialised university institution visited concentrated strongly on individualised support for each student, and on close cooperation with the community in subject-relevant events and projects. It had also initiated a major international assessment to help in the process of defining its institutional niche. The university college visited, which also conducts research and has a Doctoral programme with PhD candidates linked to a university (with joint supervision and degrees being awarded by the university), concentrated mainly on questions of optimising cooperation or mergers rather than profiling. The university college had been successful in its niche strategy so far. In a few subjects it was a leader in Norway, and one subject was even unique in the country. With respect to future institutionalised cooperation, the university college preferred to work together with a university rather than with institutions of its own category, of which there were four in the region.

Another diversity-relevant aspect deserves mention, namely the recently opened opportunity to diversify institutional governance. Since the Quality Reform of 2002 (and further changes in the law of 2005), the law leaves more options of different forms of institutional governance than before. Institutions can choose between two types of leadership: the traditional model of an elected rector, and the new model of an appointed one. In both models the board is the body that has the responsibility for all activities, with a decision-making role.[7] If the rector is appointed, she or he is responsible for all branches of management of the institution; in this case the rector is not a member of the board. The board consists of 11 members: five internal members (four academics, one support staff), two students and four external members. Interestingly enough, when the possibility to choose the management model was offered, all but two institutions opted for the traditional model with an elected rector. Increased diversity was not hindered by limited regulatory options but not seen as a value because of the wide consensus on a particular model of democratic university governance. This was in 2005, and only the universities and specialised university institutions were able to change at that time. The university colleges could make the decision to change their governance model in 2007, and six did so then. In contrast, the other new option made possible by the Quality Reform, namely to have appointed deans, was more readily espoused as a desirable option, again with a wide consensus but in the other direction. Most institutions (about 95 %) have taken this opportunity for stronger leadership at faculty level and, perhaps in some cases, a somewhat more top-down management style.

Another broad consensus on university governance concerns the strong position of students in institutional decision-making. By law, students have the right to

[7] The law stipulates: "All decisions taken at the institution by persons or bodies other than the board shall be taken with authority delegated by the board and at the responsibility of the board."

nominate two representatives to the boards of all institutions (out of a total of 11 members). The law guarantees them a 20 % representation on all collegiate bodies with decision-making powers. If this would lead to just one representative, the number is increased to two. The law also stipulates that "student bodies shall be heard on all questions concerning students at the level in question". There is also one student representative on the board of NOKUT. Students attend plenary meetings of the Norwegian Association of Higher Education Institutions. The two national student unions have their leaders as representatives on the board of the Association. Given the long and successful tradition of student involvement in HE governance, one may thus predict that, even if diversity of university governance were to increase in Norway, student participation would probably not diminish. As a result, more corporate models of governance would not stand a chance in Norway.

1.7 Stakeholder and Academic Values

Stakeholder interests are communicated to higher education institutions through two channels. One is formalised membership in various institutional bodies; the other is "normal" cooperation in more informal ways. By law, four external members sit on all boards of HE institutions, irrespective of institutional type. The institution sends a proposal for external members of the board to the Ministry which makes the final decision on the four external members. They are selected from a variety of backgrounds: CEOs from large or small companies, persons active in the cultural sphere, civil servants at national, regional or local level, academics from another country (mostly Nordic), etc. It might be said that their "value" to the institution is two-fold. They can provide experience from society at large, and they can provide the institutional leadership with valuable external contacts. Just as important is their role of giving legitimacy to the institution in the eyes of society.

The less formalised ways of working with stakeholders are of course innumerable. During the site-visits, close contacts with the municipal cultural bodies and municipality management were mentioned. They concern general matters. However, in spite of its interest in housing a university or university college in town, the municipality does not subsidise building infrastructure or development.

In general it should be emphasised that the activities of Norwegian higher education institutions are by tradition strongly "anchored" in their regions and surrounding society, to the extent that there does not seem to be a public debate on this topic but a general assumption that this is understood. The interests of regional stakeholders are quite easily integrated into the definition of programmes and activities. Given the diversity of these interests in the different regions, this stakeholder responsiveness clearly contributes to diversifying the offer and profile of HEIs in Norway.

This regional anchoring may also be among the strongest reasons undermining support for the idea of bigger, merged institutions as proposed by the Sternjö Commission. Norway has, by tradition, very strong local policy undercurrents in its social fabric, which to some extent relate to its geography. Norway is a highly mountainous country with deep fjords cutting long distances into the landscape. At the risk of oversimplifying long societal developments or processes, one can say that each valley had to rely on its own population, and that communication with other communities could be difficult. Educational opportunities were linked to these local communities. When educational institutions were up-graded to higher education status, they were still locally/regionally based. In 1994 a major merger process was enacted, reducing the 98 colleges to 26 merged university colleges. For natural reasons most of them are still deeply rooted in their communities. Under such circumstances, any government must be able to produce quite strong arguments for closing down or merging institutions. The strong regional links are also promoted explicitly in the official district policy in Norway, which seeks to support both business and good living conditions in all districts of Norway; higher education is regarded as an important ingredient to sustain such policies.

As in many European countries, Norwegian higher education policy development over the last decades can be described as a continuous process of devolving decision-making powers from the Ministry of Education at the centre to the institutions. While many higher education laws and stipulations still determine standards and limit institutional choices, the institutions want to safeguard what they have so far achieved with regard to increased autonomy. The institutions' reactions (expressed through their Rectors´ Conference) to the Stjernö Commission's report, which explicitly sought more state governance and implied a new kind of centralism, reflects this new espousal of institutional autonomy and devolved decision-making. In Norway, this position receives an extra charge from the strong local and regional traditions.

At the same time, the strength of many local communities is declining, with increasing migration

from the north towards the southern industrial strongholds, with their higher potential for economic development. The consequence of this seems to be a decreasing number of candidate students for the more remote institutions, and a diminishing pool of candidates for academic jobs in those regions. These developments may strengthen the arguments for greater concentration and for advantageous niche strategies at the institutions which cater for these regions.

Another important feature of Norwegian values, which is shared by external stakeholders and academics alike and influences (and to some extent limits) possible institutional choices, concerns its comparatively weak support of any notion of elite. The underlying egalitarian and cooperative attitudes govern institutional cultures as much as the relation of the institutions with their environments. In our survey, the Norwegian responses show low support for the idea of HEIs preparing a societal elite for leadership roles. While on the average 10 % and 32 % of the institutions in the other countries find this goal respectively vital or important, no Norwegian institution regards it as vital, and only 9 % find it important, reflecting the much more egalitarian approach to access in Norwegian HE, at university colleges as well as at universities. There are also many Norwegian institutions which find this goal irrelevant or not very important (9 % and 44 % respectively, compared with only 30 % across the other countries).

The interviews in all institutions also revealed no strongly hierarchical, condescending or bitter feelings between universities or university colleges, in spite of the current process of redefining the boundaries between the two categories. Values of cooperation were generally espoused much more often than those of tough competition among institutions.

Taking a closer look at the academic values which may contribute to underpinning the functional differentiation or convergence of institutional profiles, the survey data reveals that basic and applied research are more strongly valued than teaching in Norway (as well as on average across the countries) but that there are strong divergences between institutional types. Basic research is much more strongly valued at universities (70 % more than average) while teaching is much more strongly valued at university colleges (37 % more than average). Surprisingly research training for academia seems quite important to university colleges, as it does to universities; and while the university colleges do not value it as strongly, there is no institution which values it weakly.

The less traditional functions of higher education, such as continuing education and business innovation, are valued least strongly by academics at the majority of institutions across the five countries. This is even more strongly the case in Norway, where these functions are only valued weakly, even at the university colleges, in spite of their stated missions. Likewise, the values attached by academic staff to service to society and to institutional leadership are ranked even lower in Norway than abroad.

2 Diversity of Staff Profile

2.1 Regulatory Framework and Staff Structures

Within some limits, the Norwegian Higher Education Law grants HEIs autonomy with respect to staff hiring and promotion. While the law prescribes what kinds of posts (e.g. fixed-term appointments or temporary ones) can be established, it leaves salary decisions up to the institutions, which decide on the latter in a process of negotiation between employer and employees.

The basic pattern of staff positions comprises the following categories: senior research and teaching staff (professors), university lecturers, and recruitment posts (post-docs and PhD candidates). While NOKUT stipulates that at least 20 % of staff involved in undergraduate teaching and at least 50 % of staff involved in postgraduate teaching should be senior staff having a PhD, there are significant divergences in the staff competence profile of the three institutional types as defined by these staff categories, as between universities and specialised university institutions on the one hand, and university colleges on the other (figures in %):

	Universities	Specialised universities	University colleges
Senior staff	44	55	36
University lecturers "researcher"	13	12	47
Recruitment posts	42	33	8
Other (junior teacher)		9	

The differences between the institutional categories also emerge clearly in the distribution tasks in the different categories of institution. The time that academic staff spends on various tasks has been analysed at national and institutional level (in % of overall work time):[8]

[8] Data source: Tilstandsrapporten.

Institutional Type → Function↓	Universities (excluding Stanvanger)	Specialised universities	University colleges
Teaching	29	36	56
Supervision (*Veiledning*)	13	9	2
R&D	29	26	21
Administration	17	20	14
External contacts	8	8	5
Professional work	3	1	2

Holders of different positions devote their time differently to these tasks. It is estimated that professors would typically devote one third of their time to R&D, whereas university lecturers typically devote less than one fourth of their time to this activity (Tilstandsrapporten, The Annual Survey). These data confirm that the division of labour among the Norwegian institutional types is reflected in staff time allocated to different HE activities, i.e. more time devoted to teaching at UC, more research time at universities. However, the research time differences are not as big as many outside observers might have expected, given the traditional binary divide.

The data also show that university colleges employ a greater share of their staff at the middle level of the staff hierarchy (university lecturers). But they also reveal that the staff categories are not fundamentally divided in terms of functional emphases. Professors do teaching as well as research, and university lecturers do research as well as teaching, as confirmed during the site visit interviews. In fact, a university lecturer is even entitled to a certain amount of time for research (e.g. 20-25 %).

It is also of interest to note how diverse the student/teacher ratios are among the three categories of institution:

	Universities	Specialised universities inst.	University colleges	University colleges of art
Student/ teacher ratio	8,1	**7,7**	16,5	6,2

The low student/teacher ratios at the universities do not mean that a student at the university necessarily meets her/his teacher twice as much as a fellow-student at a university college, but, more likely, reflects that there is more staff at the universities and the specialised university institutions so as to do more research. As mentioned above, the survey also shows that university colleges, while giving more emphasis to teaching in their missions and their hiring criteria, more rarely offer teaching support services than the universities. At the same time, it was often emphasised during the interviews that the university colleges offer the advantage of a good pedagogical environment, with sufficiently direct contact between teachers and students. This would definitely be supported by the figure for the university colleges of art which is based more on face to face methods, but is less visible in the overall data for university colleges.

2.2 Institutional Hiring Criteria, Promotion Policies and Staff Differentiation

Functional differentiation of professorships, based on hiring criteria and task descriptions, is found frequently in Norway, namely at 72 % of institutions (22 % above the cross-national average) with respect to hiring, and at 83 % of institutions with respect to task distribution (17 % above average). This differentiation also exists in terms of rewards or salaries, and is reported in our survey at 89 % of Norwegian institutions (in comparison to a lower 61 % average across the five countries). The site visit interviews about salary policies confirmed that professors' salaries can be set freely by the institutions, on the basis of research activities and, to a lesser extent, teaching qualifications. At around half of the institutions which responded to the survey, this differentiation between professorships exists even formally (slightly above the average of the five countries), most often for professorships which have more research than teaching (at 65 % Norwegian institutions) than for professors who do more teaching than research (although 50 % of institutions do make this differentiation formally possible).

Interestingly, task differentiation seems to be more frequent at universities, while institutions report in the survey that differentiation in terms of hiring criteria is less frequent here. Higher salaries would only be available for professorships with more research (24 % of Norwegian institutions, 6 % above average) or with more innovation activities (11 % of Norwegian institutions).

With respect to continuing education, Norwegian institutions provide the formal possibility of differentiating professorships (i.e. with more continuing education tasks and less other forms of engagement) less often than the average across the countries (10 % below average, at only 14 % of institutions), presumably because this function is expected to be included in the basic task portfolio of professors.

Informally, professorships are highly differentiated in terms of functions across all of the five countries, with more than two thirds of all institutions reporting such informal differentiation wherever the formal possibility does not exist.

The survey data with respect to hiring criteria show that a majority of institutions attribute the highest rank to research performance in their hiring criteria (for professorial positions), while teaching performance remains a second rank criterion. When it comes to hiring academic staff, research performance is weighted most strongly by 60 % of institutions in Norway (as on average across the five countries). But with the universities, this percentage is significantly higher at 89 %. At the other end of the scale, a third of Norwegian HEIs attribute the lowest two ranks to research performance in their hiring criteria, which is more than the average across the countries (one fifth).

Teaching performance is ranked most highly by only 33 % of institutions, even lower than the 42 % average across the countries. Among the university colleges this figure is higher, of course, but still only reaches 44 %.

Innovation performance is ranked much lower in hiring at Norwegian institutions than on the average, being ranked most highly by no institution (versus 17 % on average) and ranked second by only 19 % (compared with a 23 % average).

There is also no Norwegian institution which gives the highest priority to international experience in hiring (compared with 13 % across the five countries), but this is compensated by a high proportion of institutions which attribute the second highest weight to this aspect in hiring.

Promotion criteria also reflect a research-dominated landscape, with internationally visible publications or publications in general being the most decisive measures of performance, though considerably less so at the university colleges. Unlike those in other countries, however, Norwegian institutions do not value other research outputs or citations as much: only 20 % or 7 % of responding institutions respectively regard other research outputs as decisive for promotion (none at the university colleges); and only 36 % find citations important.

Although the sample included a considerable number of university colleges which are intended to be teaching-dominated, teaching is not valued more highly as a promotion criteria in Norway than on the average across the countries. Teaching experience is found important by 79 % of all institutions but decisive by only 29 % (6 % fewer than average), though by 42% of the university colleges. Also, evidence of innovative teaching approaches is a decisive promotion criterion at 25 % fewer Norwegian institutions than average.

Apart from research and teaching, the only other criterion of some importance regards the international experience of staff, which is found decisive for promotion by 14 % of institutions but regarded as important by the vast majority of institutions in Norway (as well as abroad).

Again innovation performance is not very high on the agenda. It is not found decisive at any institution but regarded as important by 64 % (15 % less than average).

Continuing education, while being more integrated into the core mission as we have seen above, is not valued highly in the promotion process: 20 % fewer Norwegian institutions than average use it as an important criterion for promotion.

Likewise, social engagement and engagement in institutional management are not regarded as important as often by Norwegian institutions as elsewhere (20 % below average); indeed the vast majority find both "not so important". Thus, we can generally observe a somewhat narrower set of rewards influencing the career advancement of academics.

While the above data show a clear research dominance and relatively narrow range of differentiation among professorial staff between the different institutional types, the picture may diverge significantly when other staff categories are included. The interviews suggest that teaching experience and evidence of innovative teaching approaches are regarded as important in promotion procedures among non-professorial academic staff. Hence, institutional differentiation among different types seems to occur more through the weights attributed to different staff categories than to the different approaches taken to hiring or promoting the most senior staff.

The interviews also suggested that two alternative academic career tracks exist in Norway, one for research-oriented staff and one for teaching-oriented staff. Or at least, that it is not impossible to have a successful career based primarily on teaching. Moreover, the salary differentials with a career based on research are not as high as the staff categories, and the fact of the highest staff categories being determined by research performance, would suggest.

2.3 Staff Diversity and Gender Equality

In Norway, diversity of academic staff is valued in three respects. First, by far the most important aspect of diversity concerns their professional and academic experience, just as for their peers abroad (68 %, slightly above the average of 61 %).

Secondly, Norwegian institutions also attach importance to the diversity of staff functions, i.e. their relative inclination to contribute to research, teaching, continuing education, business innovation or service to society, though less so than their peers abroad (50 % of Norwegian institutions prioritise this aspect compared to a transnational average of 66 %).

The third priority concerns gender, which is just as high a priority for Norwegian institutions (40 %) as for their peers abroad, although it is not considered an important aspect in hiring.

Other aspects of staff diversity, relating to ethnic, religious, or national identity are most frequently unimportant to Norwegian institutions (which applies also in attitudes towards the student body). With respect to ethnic background, overall prioritisation is even lower than the already low cross-national average (0 % versus 13 %), although, again, incentives are reported to exist at most institutions (83 %) to promote diversity in this respect. National diversity is prioritised only at 17 % of universities and at none of the university colleges; 50 % of the universities report incentives in this direction (i.e. even those institutions that have not prioritised this aspect).

The fact that Norwegian institutions only reflect an average rating of gender diversity in their priority setting may appear surprising to some outside observers, given the fact that Norway has a reputation for being generally at the forefront of gender policies, in politics and many public fields. Clearly, the higher education sector does not follow this pattern. In fact, there is a noticeable gender imbalance in staff composition at all higher education institutions in Norway (with the notable exception of the positions of university college rector, half of which are filled by women).

To address the gender problem in HE and research, the government established a commission on gender policies in research (2005), which reported back in 2007. The initiative was taken against the background that the EFTA court had ruled that Norway was not allowed to earmark academic positions for the under-represented gender, which it had done in the past. In its report, the commission criticised institutions for lacking interest in gender equality and for not living up to governmental regulations and recommendations. It suggested a number of measures. As the age structure of the staff is changing and a generational change is ongoing, it points out that now would be the right time to turn to action. Robust gender policies must be in place when these positions have to be filled. The package of recommendations includes financial incentives for increasing the number of female researchers, analysing the possibilities for discrimination in favour of the under-represented gender, career programmes for potential women leaders, requirements for the Norwegian Research Council to introduce gender as a parameter in funding and that NOKUT should also use gender as an assessment parameter.

The Stjernö Commission later endorsed these measures and also added concrete measures to promote women early in their research career (such as extended study time for PhD students on maternity leave). The Minister of Education has recently commented that Norway still has a long way to go when it comes to gender balance in academia and has announced that extra rewards will be given to those institutions that promote women in the science/technology field. In the last two years, an award was given to the best institution in this respect. The Minister also mentioned that a programme will be established to strengthen the qualifications of women, since gender imbalances have been found in grant applications and publication performance.

2.4 Academic Values

The only data collected in this survey on academic values regarding staff diversity concern the functional differentiation of staff. Regarding the values attached to different HE functions, basic and applied research are more strongly valued than teaching in Norway, with significant divergences between institutional types. Basic research is much more strongly valued at universities (70 % above average) while teaching is much more strongly valued at university colleges (37 % above average). Curiously, such divergences do not apply to the same degree to research training for academia. While the university colleges do not value it as strongly as the universities, there is no institution which values it weakly.

Continuing education and business innovation are valued least strongly at the majority of institutions, even more so in Norway than across the five countries. Most institutions value these functions only weakly, both universities and university colleges, which clearly conflicts with the high importance attached to continuing education in institutional missions.

Lowest on the value list, service to society and institutional leadership by academic staff are valued even less strongly in Norway than abroad.

In addition to this ranking of values, it should be noted that the strongest identification of the academic staff is reportedly felt toward their academic department

(64 % at Norwegian institutions, close to the 69 % cross-national average) and to the scientific community in their research field. In comparison, identification with the institution is strong only at 41 % of institutions. Only at 31 % of the institutions are academics reported to identify strongly with the faculty. It may therefore be concluded that institutional policies and priorities may have less of a hold over individuals than is often suggested, and that overall institutional behaviour may be determined more strongly by these academic values steering through the sum of individual members, and less through central leadership and its attempts to steer institutional direction through policies.

3 Diversity of Student Profile

3.1 Regulatory Framework

With respect to student selection, the Norwegian regulatory framework does not leave as much room for institutional autonomy and choice as it does for staff recruitment. The government lays down the detailed rules of Norwegian admission policies, which higher education institutions have to apply when recruiting students. The basis for the whole admission apparatus is laid down in the Higher Education Act:

> "The general basis for admission as a student (the general entrance requirement) is successful completion of the Norwegian upper secondary school and fulfilment of the requirements regarding subject combinations and hours of study laid down by the Ministry. The Ministry may stipulate that other suitable education or combinations of education and work experience shall constitute a general basis for admission. The institution shall consider whether applicants hold qualifications corresponding to the stipulated entrance requirements."[9]

In principle there is open access to Norwegian higher education. However, the government can decide that some study programmes are subject to *numerus clausus*. The institutions can also restrict the number of places following government guidelines.

Apart from implicitly allowing diversity of student qualifications through open access regulation, the law considers student diversity only in so far as age distribution is concerned. There is a special rule applying to applicants 25 years of age or older. They can be admitted to specific courses "if on the basis of their prior learning (formal and non-formal) they hold the necessary qualifications for the course concerned."[10]

Thus admission rules, with this exception, are the same all over the country. Likewise, the application process and study place distribution system is organised on a national basis. All students apply for a study place within one and the same admission system, according to a strictly standardised pattern. A student has the right to choose up to 15 optional study places.

3.2 National Policies

Official Norwegian policy is to have as wide-spread participation as possible from various social strata among the citizens. Tuition is free, and there is a public study support system meant to counterbalance social inequalities. Another priority is to promote gender balance. Ethnic minorities should be integrated into higher education. Age is another explicitly considered parameter.

Statistics show that 33 % of the 19-24 age group attend higher education (a bigger share for women than for men, 37 % and 25 % respectively). The corresponding figure for the 25-29 age group is 16 %. During the last ten years this figure has increased by 3 %. The site visits revealed that institutions are given quotas to recruit students in the 19-24 age bracket.

In overall gender terms 61 % of the students at Norwegian higher education institutions were women (2007). There is no gender policy to ensure sufficient access to HE for men. The gender imbalances differ greatly between subject areas. Certain study programmes have a very high proportion of women (80 % or more), such as dentistry, veterinary medicine, nursing, pre-school teaching, and social work. In natural sciences/technology and civil engineering women hold only 30 % of the total number of study places.

Imbalances can also be found with respect to immigrant access to HE: a well below average proportion of 20 % of the age group of 19-24 year olds attends higher education, and 10 % of the 25-29 age group. In addition to ensuring immigrant access to student loans, the government, HEIs and the Stjernö Commission do seem to have the issue of ethnic

[9] Act Relating to Universities and University Colleges, 2005-04-01, official English translation, Chapter 3, section 6, (1).
[10] Op.cit., Chapter 3, section 6, (2).

minorities (associated with the term "non-western immigrants") on their agendas, since some under-representation can still be observed. In the population at large, immigrants number about 9 %; in HE, only 7 % (2007). With respect to HE participation, there is a big difference between first generation and second generation immigrants (18 % of the first generation, 32 % of the second generation, compared with 31 % of the population at large), reflecting some success of the integration measures.

3.3 Funding instruments

In Norway, the main support measure for ensuring relatively diverse student participation is the absence of tuition fees for attending public higher education, as all the costs are covered by the Ministry of Education and Research. All students can apply for financial support (a part loan/part grant) from the Norwegian State Educational Loan Fund, with Norwegian citizenship as the main requirement. However, under certain conditions foreign citizens may also be entitled to financial support.

Eligible applicants may be granted financial support (part loan/part grant) of about 9200 Euro (NOK 80,000). It is initially given as a full loan, but upon successful completion of educational modules, around 40 percent of the amount is transferred to a scholarship/grant. There is no interest paid while attending the HE degree course.

While studying, all students also belong to a student welfare organisation that takes care of such services as housing, on-campus dining, bookstores, kindergartens, advisory services and some health care. Only part of this is financed through a student fee, typically at NOK 300-500 per semester. There are a total of 25 such organisations, each covering a geographic area and often more than one institution.

3.4 Institutional Policies and Development

The centrally decided admission regulations leave little or no latitude to institutions to design distinct student recruitment policies or develop a particular student profile. They can only compete with each other on the basis of what courses, programmes and teaching approaches they offer, and hope to attract the most appropriate students for their courses – but only within the detailed framework of nationwide admission rules. Nevertheless, it is interesting to study the results of their recruitment efforts, i.e. the resulting student choices. One publicly available parameter, which is relevant to institutional diversity, is the number of student applications per type of institution:

	Applicants per place (first choice, 2007)
Universities	1,8
Specialised university institutions	5,9
University colleges of art	7,4
University colleges	1,5

The above data shows relatively small divergences between universities and university colleges in terms of number of applications per place. The most sought after destinations are institutions with particular specialisations, either specialised university institutions or the university colleges of art. As for the university colleges there is a clear tendency for institutions in smaller communities to have greater difficulties in recruiting students than those in big cities. The big University College of Oslo (with some 11,000 students) has 3.3 first-choice applicants per place while five more remote university colleges have less than one applicant per place. Among the specialised university institutions the one with the keenest competition, 10.5 first choice applicants per place, is in architecture and design. There is less of a spread of applicant numbers among the universities, more so within universities: e.g. for professional programmes there are more applicants, up to 4.5 per place.

The basic recruitment requirement is school credits. The fact that the admission system is run at national level allows Norwegian authorities to collect data on the admission standard of all students (measured in this way). There is a formula for counting credits used in the admission procedure, with different averages of credits for entering students into different institutional types, and this clearly reflects the higher qualification profile for university students:

University colleges	48,2
Universities	64,4
Specialised university institutions	58,1
University colleges of art	(see below)

The only exception to these nation-wide regulations can be found within the arts, where admission is based on individual student application portfolios – on what the student can "produce" in terms of presenting a piece of art, etc. The admission rules combine the basic formal requirements (school-leaving certificate) with practical, oral and written tests which are the decisive factor for acceptance. To ensure fairness, the institutions work with admission panels. The teachers stressed that it is not necessarily the students with the best technical skills that are given the highest points, other potential strengths and values were also looked for.

With respect to regional spread and target communities, the university colleges recruit students mainly from the county in which they are located or a neighbouring county (60-80 %). The same applies to three of the universities (Bergen, Stavanger and Tromsö). Only, the universities of Oslo and the Norwegian University of Science and Technology in Trondheim recruit their students nationally (about 75 % of their students come from other counties).

The survey data are easier to understand against this background. When asked to rank various aspects of student diversity as priorities, by far the highest priority is given to level of entry qualification. Diversity of nationality, age distribution and socio-economic background are aspects which are given low priority, presumably because institutions cannot influence student profile in these respects. However, institutions do pay attention to ethnic diversity, which in Norway is associated with immigrant integration. Many institutions work with profiled programmes to encourage immigrants to enrol at institutions, above all the University of Oslo and the University College of Oslo (special programmes, visits to upper secondary schools, stipends, etc). Currently, universities have 8 % non-western immigrants, specialised university institutions 4 %, and university colleges 6 %.

In summary then, HE institutions have only limited means to apply any kind of diversity policies to their student profiles. Nevertheless, some institutional diversity policies can be found, e.g. with respect to immigrant recruitment. Moreover, there is institutional diversity of student profiles in so far as there are institutions and fields of study which are more successful competitors for students than others, and publicly recognised as such. The ratio of student application per study place shows a clear hierarchy in this regard. The university colleges of art are at the top, followed by the specialised university institutions (which also include an academy of art), and the two most nationally competitive universities, then the other universities (with differences among types of programme), and last – but with a great spread – the many university colleges. Some performance differentiation is thus realised through student selection rather than institutional selectivity (as would be the case in the UK or the USA, or the grandes écoles sector in France), with some very good students going to the most desired places or study programmes (statistically at least).

3.5 Public values

While no separate survey could be made on the underlying values sustaining the existing student selection policies, the underlying philosophy was described as demanding that the transfer from the school-leaving stage to higher education should be as smooth and predictable as possible, to provide the maximum degree of equal opportunity and of social and procedural justice. An additional justification concerns the high cost efficiency of such an admission system. And yet the approach does result in a relative loss of interest from the side of the institutions with regard to the composition of the student body.

In a country like Norway, with a stable democratic tradition and advanced welfare state policies, one would perhaps expect that concerns for recruiting students from all socio-economic strata of society would be high on the agenda. Interviews revealed that they are, even though they do not show in higher education policies. The mechanisms for achieving this are rather part of the welfare policies rather than institutional recruitment policies.

4 Programme Diversity

4.1 Regulatory Framework

In the Norwegian higher education system it is left to the institutions, within the general tasks given to them by the government, to ensure that programmes are adapted to student demand, labour market expectations and scientific development. The present regulatory system grants universities and specialised university institutions the right to establish Bachelor and Master programmes. University colleges can set up programmes at Bachelor level. Only with respect to the quality of Master programmes provided by the university colleges is a separate accreditation required by law. They must have their Master programmes accredited by NOKUT, with the exception of those subject areas in which they have already been granted Doctoral rights.

Before the Quality Reform of 2002, it was the Ministry that decided the number of students per academic field that institutions were allowed to enrol in each programme. With the 2002 HE Law, universities and specialised university institutions were granted full autonomy in this respect: they receive block grants and can decide on the nature and scope of their courses and programmes. The idea behind this new autonomy is that the best way to provide society with an academically trained skilled work force is to combine student demands with the institutions´ ability to forecast future labour market needs.

4.2 National Policies and Trends

In Norway, changes in the provision of programme of studies (studietillbud) can be monitored at the system level. During the last four years the overall number of programmes has doubled, after a major renewal which was linked to the transformation of the university college sector and to the implementation of the Quality/Bologna Reform with its new degree structure. While the overall policy with respect to programme development only consisted in changing to the new two-tier structure, the curricular overhaul resulted in the formulation and design of many new programmes and specialisations. Of the three categories of institution, the most far-reaching development has taken place at the university colleges (and here this development started even before the Quality Reform, as far back as 1998). At the specialised university institutions, the university colleges of art and the universities, the renewal of the study provision has been less spectacular. There are different degrees of intensity with respect to programme expansion among the group of university colleges. Interestingly, the two institutions with (successful) ambitions to become universities were in the forefront in this respect, especially at the Master level. Thus, in this context, increasing diversity with respect to programmes was linked to institutional convergence with respect to profiles.

4.3 Quality Assurance

As pointed out above (1.4), the ambitious national quality assurance system introduced in Norway in 2002 does seem to affect institutional diversity, by introducing some common accreditation standards wherever accreditation is required by law. The survey data also shows that institutions see the accreditation agency and process as a strong influence on programme development. In fact, quality assurance was judged to be the second strongest influence on programme development, although more often among respondents from university colleges than from universities. The answers do not reveal if this is a result of the institutions´ internal quality assurance procedures or of external assessments organised by NOKUT. But it seems that institutions regard the pressure to perform well vis-à-vis NOKUT as the trigger for the internal programme and quality development.

The extent to which programme development converges through such common accreditation criteria, or through the expectations institutions have of these criteria, cannot be judged at this point yet. However, the director of the agency was well aware of the risk and, during the interview, pointed to the dilemma between the need to establish a certain standard of quality as a response to deregulation and growing internationalisation, and the need to preserve the diversity of the system.

4.4 Institutional policies

With regard to institutional diversity policies, two concerns occupy institutional attention: the overall interest in promoting interdisciplinarity in teaching programmes and research projects, as well as the position and conditions of small subjects which often warrant institutional protection. In general, institutions are free to start or stop programmes. Both choices depend on the perception of institutional strengths, scientific opportunities, student demand and cost effectiveness.

Regarding this last criterion, some subject areas appear so small that they run the risk of being too costly for the institution. As is the case in many other countries, this concern applies in particular to rare languages, as well as to some humanities and science subjects. Linked to this, there is a continuous concern to avoid "duplicating" at two institutions some subjects with small enrolments. The Stjernö Commission also addressed this problem, suggesting that these are subjects that require major recruiting efforts but often fail to attract enough students or are able to compete in the internal funding battle. The commission refers to the same problem in Sweden and Finland, where a minimum number of students for each study programme is under consideration. The Stjernö Commission defended these small subjects, pointing to their contribution to diversity and pluralism, to the fact that they represent a cultural demand and that they can also function as important complements in relation to other subjects. Since the present funding system, with a basis in institutional autonomy, cannot solve the problem, the commission suggested that the solution be sought at national level. It is still unclear how this particular challenge will be resolved, since it is caught in the midst of the key conflict between institutional aims and autonomy and government steering. Clearly, the institutional will to provide disciplinary diversity is set against the government interest in cost efficiency.

Like institutions abroad, Norwegian institutions find that their own academics, as well as their faculty or department leadership, exert the strongest influence on programme development (this is found to be even more the case at universities than at university colleges). The interviews conducted in this study supported this, but

revealed a wide range of different actors contributing to programme development. In addition to ideas derived from external and international contacts, student profiles and student demand were highlighted as contributing strongly to programme development. However, as the questionnaire responses reveal, the existing external bodies are perceived as significantly weaker factors in the programme development process than the internal ones, be they individual academics or the academic apparatus and institutional boards.

5 Conclusions

The Norwegian higher education system is in transition from a binary system to an array of new institutional and inter-institutional arrangements which leave the neat old binary boundaries behind for an as yet uncertain future.

The transition is twofold. First and foremost, Norwegian institutions benefit from increased autonomy since the 2002 reform – although they are far from exploiting the whole range of choices open to them with respect to staff differentiation or governance structures. In some respects, the old institutional arrangements were not just imposed, but also conformed to strong democratic and egalitarian values. Moreover, some important limitations to institutional autonomy do remain, such as the centrally regulated and administered student selection (although this is not perceived to be a problem or a limitation by higher education representatives) and the limits set on programme development for university colleges. Clearly, the latter are making use of their increased opportunities by pushing programme development at Master and Doctoral Level, as well as the research and research training functions to accompany this offer, in accordance with the expansion of current needs. Undoubtedly, the system with its new institutional opportunities and comparatively narrow spread of academic values and mission emphases has come to a crossroads. Should it leave such developments entirely up to institutional choice, with the risk of reduced attention to some of the needs that have been met by the old institutional types? Or should it retain and maybe adapt the binary boundary, reviewing the definition and mandate of the university colleges, and ensuring public recognition, career advancement and institutional rewards to help them gain status without losing their uniqueness as institutional types?

Secondly, Norwegian higher education is experiencing an important transition in another respect which also affects institutional diversity. The recent focus on the international competitiveness of the country and the visibility of its research, which has dominated recent policy debates and instruments, has resulted in efforts to increase critical mass, create bigger institutions and centralise important new efforts. As a consequence there is a new tension at system level between, on one hand, the attempts to increase competitiveness by centralising and merging, and on the other hand, a resistance to giving up the traditional decentralisation of educational opportunities, underpinned by strong regional policies, or the newly acquired institutional autonomy. It is striking to see how far the reference framework and the concepts that frame the debate are linked to the idea and position of research universities and their contribution to national competitiveness. But in a country like Norway, where people nurture deep egalitarian values and seem to be naturally inclined to cooperate, such concepts and the vertical differentiation they imply are counterbalanced by strong voices which seek to contain the forces of pure competition in order to safeguard wide-spread educational opportunities in all regions and for all social groups, and thus defend a more regional and more horizontal form of institutional differentiation.

In this regard, some of the discussions and transitional tensions parallel those found in French higher education, where international competitiveness and inter-institutional cooperation have become close allies in recent HE policy development. While the ultimate policy instruments are still in the process of being defined, it has already become clear that the more extreme instruments of concentration or centralised steering will have little chance in Norway. Instead milder, more voluntary forms of inter-institutional cooperation are more likely to succeed, given the strong cooperative egalitarian values which dominate society as much as they do higher education institutions. At the time of writing, the Ministry is giving signals that financial incentives for voluntary cooperation and mergers will be introduced.

The Norwegian approach to institutional diversity is interesting in two other respects. Firstly, it shows perhaps most clearly the tensions between horizontal and vertical differentiation. While the country's higher education system has a long tradition of horizontal differentiation with respect to regional spread, with similarly high values attributed to regional and national orientation as well as to academic and professional education, new elements of vertical differentiation have entered forcefully through international competition and exchange. The increasing emphasis on performance-based funding and rewards, inherent in national funding instruments such as the centres of excellence or institutional measures of rewarding high

performance with budget bonuses (both of which are associated with international competitiveness), brings more vertical differentiation into a system and into institutions which have until recently been dominated by traditional egalitarian values. These values of equity, distributive justice and cooperation are clearly at odds with the newer choices of voluntarily imposed differences between better and worse performers, and begin to compete with values of competition and performance-based rewards (the best deserving the highest rewards.) As yet, it seems that institutional and systemic choices for the foreseeable future are still likely to be determined by values in conflict. As a consequence, there are complex approaches to institutional diversity which may seem inconsistent but are perhaps more fittingly described as attempts to strike a balance between, on the one hand, the deep-rooted belief in equitable justice and in the superiority of cooperation over competition, and on the other, the conviction that flexible responses are needed to address increasingly diverse demands, and that institutional or system performance will have to compete with international practices. While such a balance will not allow radical vertical differentiation between or within institutions, no matter how urgent international research demands appear, it is likely to allow an increase in the incentives which would increase vertical and horizontal differentiation.

In its attempt to seek a balance between competition between autonomous units and cooperation between institutions that are complementary in their profiles, and in the high value which it attributes to regional spread and exchange in higher education, the Norwegian system closely resembles the Swiss. But unlike the Swiss system, it does not seem to provide the high status professional elite (and resulting diverse reward structures) which would sustain the professionally oriented institutions as a separate type of institution. This difference may well result in a move to an integrated system without separately delineated types, but with strong incentives to expand higher education activities that seek to develop regional innovation and responsiveness to professional needs. Competitive instruments such as the centres of innovation may help to raise the symbolic value of such forms of higher education engagement to such an extent that functional differentiation and parity of esteem between different functional emphases may develop. It is unlikely, however, that this differentiation would be expressed in extreme external diversity between institutions. On the basis of the values observed in this study, it is more likely that institutional diversity will increase internally than externally.

Chapter 5:

Institutional Diversity in Slovak Higher Education

Sybille Reichert, with Lazar Vlanescsu

1. Diversity of Institutional Profiles

1.1 The Context: Recent Developments in Slovak Higher Education

Slovak higher education has undergone fundamental changes since the fall of the iron curtain. First, the new Higher Education Act adopted in the former Czechoslovakia in 1990 marked a new era, bringing academic freedom to higher education after a period of central management of content and procedures by the government. Twelve years later the Higher Education Act of 2002 introduced another set of radical changes, such as the implementation of the Bologna Declaration and the establishment of higher education institutions as legal entities (they had been state budgetary institutions until then), as well as profound changes in the allocation of funds to higher education institutions.

But far-reaching as these changes were, they were exceeded by the even deeper transformation which occurred in the context of rapidly widening access to higher education. The Slovak Republic has given priority to an increase in HE participation rates, so as to provide more opportunities to a wider range of its citizens as well as a sufficiently large and qualified work force for an until recently expanding economy. The number of students tripled in just a decade, but has since increased further (by more than 30 %) over the last three years. Several new universities have been established in recent years to absorb these increases and to satisfy the increased demand for higher education. Others were created by merging existing smaller institutions or individual faculties. Others again added many new programmes, even entire faculties, to face up to the challenges posed by doubled student numbers.

As a result, a considerable diversity of institutional profiles has emerged since the 1990s, in terms of size, subject portfolio and regional spread. There are five large, ten medium-sized and five small universities or higher education institutions. The five large universities comprise two comprehensive universities, two technical universities and one specialised university (with student populations ranging from 10,000 to 25,000). In addition to nine medium size universities (between 3,900 and 10,000 students), there are five public higher education institutions and one state higher education institution with around 2,000 or fewer students, namely the three academies of arts, the Police Academy and the University of Veterinary Medicine as well as the youngest of the universities, the Hungarian speaking J. Selye University in Komárno. The four private universities are also small in size: three have fewer than 1,000 students.

As explained above, the main focus of higher education reform has until recently been the quantitative development of the higher education system. Given that the rapid expansion was not accompanied by equivalent additional funds, the higher education system remains too under-resourced to be able to cope with the diversity of emerging demands (and this despite fund increases in recent years, which have allowed expenditure per student to rise from 3,045 Euro in 2000 to 4,678 Euro in 2006). While public funding has increased only slightly in real terms, it had to be divided among a higher number of HEIs and an ever growing population of students, reducing unit costs even further. Such a mismatch between an expanding system and an almost constant amount and unchanging formula for public funding has led institutions to focus on attracting as many students as possible (since student numbers have been the strongest determining factor of allocations between institutions). As student demand was geared dramatically toward the social sciences, economics and business studies, these areas were expanded at most institutions in the country, which produced a homogenising effect on portfolio development. In the

meantime, unit costs per student declined and student entry qualifications diversified to include more than just the most highly qualified high school graduates. Higher education institutions were inadequately prepared to address these diverse student clienteles, whether in terms of the adequacy of resources or in terms of didactic approaches.

At the same time, the Lisbon agenda and the Slovak government's awareness of the need to expand national research competitiveness added to the pressures on HEIs to develop their own research capacity (which had previously been focussed more on the non-university sector of the institutes of the Academy of Science). Research funds were increased very slightly, performance indicators for research output were introduced, and funds were more often distributed on the basis of competitive bidding. The most visible pressure to increase research performance and close the gap with international university research was exerted by the initiative of the newly established (2004) ARRA Foundation, which compared institutional research performance in different subject areas, on the basis of internationally available and comparable bibliometric data, including rankings of institutions by subject area performance.[1] This initiative was supported by various private global companies, the World Bank and the EU Social Fund; and the comparative data it produced, were received with a mixture of outrage, appreciation and high interest. The data are seen as reliable and, at least for the natural and technical sciences, as the best reflector at hand for the varying research performance at universities in the country.

All in all, HE representatives have been unable to address the widening array of challenges and the increasing number of problems with quality of provision which the rapid, un-orchestrated expansion had caused. In short, according to higher education representatives at all levels, the quality of educational and research activities has suffered from the pace and inadequate financial coverage of HE expansion. With a diverse student body receiving less individualised attention during their studies, with insufficient resources to expand support services, or to build research capacity or innovation support, higher education institutions were grappling for ways to respond effectively and efficiently to multiplying demands.

As a result, recent regulatory and policy efforts have been focused on increasing the quality of performance and on associating this with the agenda of expanding the research capacity of the sector. In this context, the Ministry and higher education institutions (through their rectors' conference) called for a system-wide institutional evaluation from EUA's Institutional Evaluation Programme, focussing on each institution's capacity for change and on the overall research capacity of the university sector. The results of this qualitative review and its recommendations with respect to system changes were widely discussed among HE representatives, ministry officials and other stakeholders in 2008. Key points of contention focussed on the relationship between the university sector and the Academy of Sciences, and on the degrees of deregulation and performance orientation needed to improve university performance in research without undermining the need to address massification.

Given these recent developments, it is not surprising that the issue of institutional diversity in higher education is associated mainly with concerns of vertical differentiation around different levels of quality, with research performance being used to differentiate between different institutional types.

1.1 The Regulatory Basis

In spite of the remarkable expansion mentioned above, it was not until 2007 that the Slovak national authorities introduced any regulations or incentives to differentiate the profiles or mission definition of higher education institutions. Officially, institutions were supposed to respond in equal manner to the demands of the expanding system. While institutions had diversified in terms of size, portfolio and (often regional) stakeholders, the system had not introduced legally differentiated types of institutions with significant differences in mission, staff or student qualification profiles (as was done in Norway or Switzerland, or through particular units such as the IUT in France). Moreover, despite massification, universities had not fundamentally adapted their expectations with respect to student qualifications as compared with the old elite system. Until recently, they had not felt pressed to reconsider their missions with respect to their own tasks. Hence, until 2007, instead of differentiation in terms of mission mixes or student qualifications, diversification of profiles of higher education institutions developed only in response to their different regional clienteles and orientations, or, regarding disciplinary orientation and programme portfolios, in response to student demand. If the latter converged, institutional responses would also converge. All institutions carried the label "university" and regarded themselves as alike in basic institutional type, missions, and core functions. According to the

[1] ARRA (2005), Assessment of Public Universities and their Faculties. Bratislava. See www.arra.sk

law, the three basic functions of teaching, research and service to the community (including cooperation with external partners and continuing education) are part of the mission of all universities, in theory with the same weighting, although de facto the distribution of weight attributed to research functions varies widely both within and between institutions.

However, in response to the growing perception of policy makers and some representatives of Slovak HE that the Slovak higher education system lacks competitiveness and may even be falling further behind, the issue of institutional differentiation in terms of quality and competitiveness has gained in political importance and has even emerged as a key part of the policy agenda in recent years. Following a process that had been started through the 2002 Higher Education Act, the Slovak higher education system again entered a period of important transformation. In 2002, the first attempt was made to define different kinds of institutions. Until then the designation "university" was dependent entirely on the institutions themselves, regardless of their academic profile, professional or vocational orientation, research intensity or breadth. After 2002, when the new Higher Education Act came into force, higher education institutions were supposed to be strictly divided into research universities, universities and non-university HEIs. According to the law, "The university type of higher education institution shall provide education in the study programmes of all the three levels with a significant portion of study programmes of the third level". The non-university type of HEI "shall be named professional HEIs and they should provide higher education predominantly in the study programmes of the first level (Bc)" thus corresponding more to the German, Swiss, or Austrian "Fachhochschule" or Dutch "Hogeschool". The law also introduces a third type of institution, or subtype of university, namely the "research university" which "shall achieve outstanding results in the field of science and technology as well as implementing the study programmes of the third level (PhD)". In order to establish the institutional type of a given HEI, the law foresaw that the Accreditation Committee would make a proposal to the Ministry of Education which would then make the final decision. However, the law's typology was not realised. In spite of the above legal definitions, no HEI was designated a "research university" or given more money on the basis of its institutional type, and none of the higher education institutions which called themselves university before 2002 were pressed to stop doing so. Nevertheless, the issue of institutional differentiation continued to be widely discussed among politicians and higher education representatives.

The new HE Act which was drafted and adopted in the course of 2007, after a change of government in 2006, picked up the basic concern for institutional differentiation. The 2007 Act again differentiates between types of institutions, but no longer distinguishes the research university. The new criteria for the establishment (by September 2009) of a diversified system would allow the emergence of three types of HEIs which are respectively called university, higher education institution, and professional higher education institution, and are distinguished by the level of teaching provision and the kind of research pursued.[2]

1. According to the law, "a university higher education institution shall provide for education in the study programmes of all three levels and shall carry out especially the basic research. The study programmes shall be carried out in connection with its activities in the field of science, technology and art and in agreement with the current state and development of these fields. The word 'university', eventually the words derived thereof may be indicated in its name by a university higher education institution only".

2. With respect to the "Professional higher education institution" the connection with basic research and current developments in science, technology and art is not mentioned: "A professional higher education institution shall provide for higher education in the study programmes of the first level and shall carry out especially the applied research. The name of a professional higher education institution contains the words "professional higher education institution".

3. The third type, simply called "Higher education institution", seems to be an intermediate type, also conducting basic research but still different from the university: "The higher education institution which is not incorporated among university higher education institutions or professional higher education institutions, shall provide for higher education especially in the study programmes of the first level, second level and in the study programmes pursuant to Section 53 par. 3 and shall carry out especially the basic research. The name of the higher education institution which is not incorporated among university higher education institutions or professional higher education institutions contains the word "higher education institution".

The period 2007-2009 has thus become a phase of rapid implementation of radical transformation in the HE system. Whereas until 2007 there was no differentiation

[2] Section 2 of the 2007 HE Act.

between institutions on the basis of their missions, the new, formally imposed institutional diversity is to be mission-based – distinguishing between research- and professionally-driven institutions along a single axis of evaluation. The classification will be made through a process of accreditation, and will then be consolidated through a formula of differential funding. The Accreditation Commission which bears the responsibility of implementing the regulatory framework will review the relative performance of an institution to identify its type. Threshold levels of number of students per level and per head of staff, research performance (with three categories of performance fixed) and third party grant income have been set to determine the institutional type. Five out of the six parameters on which institutions are evaluated in order to obtain the title "university" are research-related, such as the number of Doctoral students per staff, the number of Doctoral graduates in all, the research results of their theses, the average grant income per professor and the overall research performance. For all of these parameters, threshold levels have to be reached.

Given the financial repercussions of the future accreditation decisions, it will not be surprising to see this research prioritisation also reflected in institutional policies (see 1.5).

1.2 System and Institutional Governance

At national level, higher education institutions are represented directly through the national rectors' conference, as well as indirectly through the Higher Education Council which advises the Minister of Education. With respect to diversity of institutions, there has been no national coordination so far. It is only recently that some funding incentives have been put in place to develop projects across institutional boundaries to combine complementary research strengths, such as the National Research Council's funds for centres of excellence. Some incentives also exist to foster cooperation between HEIs and the institutes of the Academy of Science. But in general, there are very few national efforts to steer the relations between institutions.

In contrast, there is far-reaching intervention by way of national regulation in internal institutional governance. As the governance structures of HEIs are regulated to a large extent by the HE law, which prescribes a whole set of elected decision-making bodies, institutions have limited ability to promote internal diversity or to change the direction of an institution.

In particular, institutions are constrained because of the overwhelming power of the faculties. While one of the most important changes of the 2002 Law had been the abolition of the faculties' legal independence, the history of strong faculty power can still be felt in most institutions. In the 2002 Act (and again in the 2007 Act) there are still very detailed provisions regarding the internal decision-making structure of faculties. The Law defines the internal decision-making bodies both at institutional level and at faculty level, with decision-making structures mirrored at several levels. Only those institutions which have no faculties but other types of sub-unit are free to design the governance structures of these sub-units. However, the transition from a faculty structure to a non-faculty structure is not easy since, by law, senate approval is needed to decide on the dissolution of the faculties. Thus, most Slovak universities are relatively similar in their governance structures. At institutional and faculty level, there are academic senates with far-reaching decision-making powers. Faculties also have departments as sub-structures. In addition to the senate, there are scientific councils at both levels, essentially responsible for academic decisions and strategic perspectives. The faculty deans and the rector of the university have limited strategic power and may not be members of the senate. Faculties have autonomous control over their own budgets, with very little reserve left at central level, and are of course keen to defend their resources against institutional initiatives. Thus they often act as straight-jackets opposing flexible institutional responses to new opportunities; and because they tend to oppose many overarching institutional policies, are seen to be a major cause of institutional fragmentation. As a result, an institution's ability to develop a coherent institutional profile is somewhat limited.

The multi-level and mirrored management structures which include all university levels in most types of decision satisfy a historically justified need for democratic participation in all aspects of daily institutional life. Both institutional leaders and senate representatives reported that the necessity to convince many people one by one before decisions are reached in the public senate sessions, contributes to a consensual environment which many HE members appreciate. But of course, it also means that more difficult and controversial changes or shifts of strategic direction, as well as changes which do not average out over the units, are less likely to happen. Similarly, redistributing powers or resources among the different parts of the institution, or dissolving particular units, is virtually impossible in such a governance framework and institutional culture.

This far-reaching faculty independence is also reported to hinder interdisciplinary initiatives in research or teaching. As a result, the creation of interdisciplinary structures, courses, professorships or centres across

faculty boundaries, which is becoming frequent practice in England or Switzerland and which is often used to mark institutional profiles, is rarer in Slovakia.

The results of the questionnaire for this study confirm that the governance changes which were so often observed in the other four countries were much more rarely seen in Slovakia. While 85% of all institutions (averaged over the five countries) reported more steering from institutional leadership, this was only the case at half of the responding Slovak institutions. Similarly, the increase in autonomy frequently noted elsewhere was less often observed in the Slovak Republic.

The observation that autonomy at Slovak HEIs is limited with respect to institutional governance should be qualified, however, since those institutions that do not have faculties are truly autonomous as to their internal organisation and are free to look for the optimal choices as to structure. Strangely, even those smaller institutions which do not currently have faculties, and which benefit from their absence, aspire to establish faculties, as though they were an important status symbol.

Another significant development with respect to governance concerns the increasing importance of stakeholder boards and influence. Until recently, universities have hardly been accountable to outside society. While the top management of a university includes "the Board of Trustees" which "implements and promotes the public interest in activities of a public higher education institution" (Section 40, par.1 of the 2002 HE Act), these boards have only exercised a mild advisory role. With the recent legal change, the board of trustees will gain more influence. It is still unclear whether these boards will develop into forces that will exert a substantial influence on institutional profiling. However, it seems likely that regional stakeholder needs will gain in importance, as confirmed by the questionnaire results in this study. The extent to which varying regional needs will lead to a diversification of institutional profiles will depend on the availability of regional funding to support the relevant investments. The 2007 system evaluation revealed considerable support for HEIs from regional stakeholders. While regional funds were still limited, it became evident that the availability of EU structural funds could greatly strengthen such regional forces at least for a medium-term period (as long as these structural funds are available).

1.3 National Policy Priorities

The key policy aim of the period 2007-2009 concerns institutional diversity as such, namely the achievement of institutional diversification within the system through legal prescription. The categorization of institutions is to be implemented by means of programme and institutional accreditation in a process called "complex accreditation", as well as through a differentiated supporting system of public funding. The idea of this "complex accreditation" had already been introduced by the previous government, in an effort to increase quality orientation through vertical differentiation. The previous proposal of establishing different types of institutions through regulation and accreditation pursued the same basic idea, namely that existing institutions would be allocated to different institutional types through this process of "complex accreditation" which included a review of their staff qualifications and research, and would be led by the Accreditation Commission. However, the previous definition of institutional types differed slightly from the 2007 Act, including a so-called "research university" type; this was so contentious at the time that it was never implemented.

The introduction of a hierarchical system in Slovak HE is applied through a top-down approach, similar to many others to be found in the policies of post-communist countries. First, a set of normative rules is established by the HE Act of 2002 and amended in 2007 (i.e., three types of HEIs, differentiated in terms of quality measured by research criteria and institutional capacities); secondly, designated official bodies and institutions are to apply those rules (i.e., the Accreditation Commission and a set of "criteria for incorporation among HEIs" to be applied by the Commission); thirdly, consolidation mechanisms will be activated in order to control and maintain the intended lasting effects (i.e., the differential public funding of the identified types of HEIs). The top-down sequencing of actions is thus neat and clear: *political decision* to set the legal rules of the game; *official bodies within the HE system* (e.g. Accreditation Commission) to identify the institutional allocation to three predetermined classes; and *political decision* again as to the final allocation to institutional categories and to the funding formula for consolidating the institutional clusters identified.

The interviews conducted at Slovak HEIs in the context of this study confirmed that, at the level of institutions, HE institutional leaders and academics take the legislative framework as a given, and respond to it by providing the necessary information to the Accreditation Commission. While they have not been involved in the drafting process of the law, they are now involved in "lobbying" activities focused on politicians who have helped them to establish or develop their HEI, in order to influence the final political decision. They will then bear the consequences of this decision,

which by law is entrusted to the Minister responsible for HE, although they may reapply for a higher level of accreditation within a year after modifying or updating certain provisions. The HE governing bodies and their representatives are thus subject to legal regulation and to a political decision on the type of institutional profile to which they will belong. Beyond allocating each institution to an institutional type, the national policy does not foresee any incentives to develop (or for that matter to diversify) its profile further – the primary role of funding is to reinforce existing differences rather than to provide opportunities to develop new aspects of institutional profile.

1.4 Funding Structures

As described above, the hierarchical differentiation between institutional types is to be implemented through accreditation and subsequent different funding regimes. While the funding formula is similar for all HEIs, the amount which would be received by each HEI is weighted by a coefficient which varies as a function of the institutional position in the classification. These weighting coefficients may vary annually. If the student is taken as the funding unit of reference, the consequence would be that a student from a HEI ranked as university is much better funded than a student from a professional HEI. Thus, the three types are clearly conceived as vertically rather than horizontally differentiated, and the university type will receive the highest grant. It is not clear as yet whether the attribution to a particular type will also affect the eligibility for other kinds of funding.

The idea of differentiating funding on the basis of research performance amounts to a clear shift in policy, designed to redress the traditionally strong teaching bias of HE funding. Until now, the largest part of state funds for higher education was distributed to HEIs for their teaching function, based on the input parameter of student numbers. While public higher education is funded through four types of subsidies, by far the largest part of the subsidy is provided for teaching accredited study programmes. This part is based directly on number of students. The other three kinds of subsidies – for research, (including development or artistic activity), for institutional development (larger strategic and infrastructure investments) and for student welfare – are based on different criteria, but only make up a small part of the institutional budget. Until now, only 20 % of university budget has been based on research performance, although government officials claim that this will be increased to 30 % in the near future. With the new "complex accreditation" procedures, a strong incentive has been set to develop research capacity, although it is not clear with what means for institutions in the 2nd or 3rd category. In general, the vertical differentiation scheme is thus part of the wider agenda of increasing the research capacity of the HE sector, by way of concentrating the limited resources on the institutions with the most advanced research record.[3]

In addition to an increase in the (more output-based) research part of the institutional grant, significant attention has also been paid in recent years to increasing competitive grants for researchers. This results in a curious opposition (also observed in the other four countries) between the quality of HE output, which is being signalled through research performance, and the volume of HE provision which is measured largely through student indicators and thus primarily associated with the teaching function. It seems that in a massified HE system, the costs and pressures of research competitiveness (and the easier measurement of research success) result in teaching being associated with mass provision, while research is associated with the elite part of the system.

There are few funding incentives to develop other dimensions of higher education activity, such as business innovation or continuing education. Innovation activities have been targeted in some new funding instruments developed by the Slovak Research Council. The intention proclaimed by government that the greater part of research expenditures should come from the business sector has not yet been supported by appropriate incentives, such as tax deductibility or other investment incentives.

1.5 Institutional Strategies and Development

Apart from the five Academies (Arts, Performing Arts, and the Police and Military Academies) with their specific artistic and professional missions, the public universities do not yet differ much in terms of their missions as far as the basic functions and emphases: teaching and research, especially basic research, are ranked most highly. However, the answers to the questionnaires show some significant divergences of the Slovak responses from the average. Basic research

[3] With respect to research funding it should be mentioned that the greater part of national research funds does not end up with the universities or university researchers, either through institutional grants or through competitive research grants, but rather with the institutes of the Academy of Science or other government research institutes. The greater part (SKK 1 744 million) of the overall national research budget is thus spent on the "government sector" which does not include higher education institutions but does include the Academy (SKK 1 481 million) with its 56 research institutes as well as the 20 research institutes that are directly under the responsibility of individual ministries. The higher education sector itself only receives an annual budget of SKK 1 305 for research and development.

is more often ranked highest than applied research, which is not true for the other countries. When looking at the other country scores, one finds similarly high results only amongst the universities in the dual sector systems of Norway and Switzerland.

This dominant and rather homogeneous sense of institutional mission is clearly the product of recent policies and developments in the sector. It is only since 1989 that universities have been able to revive their original research mission. While they had conducted some research before, research was largely concentrated in the Academy of Sciences, especially the more internationally visible research. This principle of sector separation has been a point of debate during the last decade. In recent years, political support for increasing the research capacity of the university sector has grown. Given the high ambitions of the Academy, universities were under pressure to address the concerns through quality performance. With the new scheme of vertical differentiation through research performance, the high rating of the basic research function can be said to reflect the institutions' concerns about their own placement in this new hierarchical system. The previous government's intention to use a stratified classification of higher education institutions (through the "complex accreditation" procedure mentioned above), which would include research universities as a distinct institutional type, already released some strategic energy among those universities who wanted to consolidate and expand their research standing. The new government's amended law has not maintained the category of the "research university", but the institutional type with the highest standing is still defined by its research status, so the earlier strategic development plans of those universities are still relevant under the new government's policy.

In addition to this explicit positioning of their research capacity, many institutions also show an acute awareness of their subject area profile, both in teaching and in research, which they seek to strengthen further. While the specialised institutional portfolios of the 90s have been watered down through the frequent expansion into the ever popular social sciences, other specialities are still used strongly to define institutional niches. However, institutional strategies do not include prioritisation of resources to favour expansion of some particularly strong or unique subject areas over others (e.g. on the basis of their performance and development proposals), since these would have difficulties passing through the democratic and strongly egalitarian decision-making structures.

Apart from subject profiles, the only other aspects of possible institutional self-definition which receive some institutional attention in strategic plans or long term policies relate to staff profile. With a major retirement wave looming in the years to come, and a new system of programme accreditation requiring at least one guarantor (who can only be guarantor at one institution), offering attractive conditions for highly qualified staff is becoming a key strategic question for institutional development.

1.6 Quality Assurance and Accreditation

With respect to external quality assurance, the Slovak system has largely relied on accreditation mechanisms which have strong effects on convergence within the HE system. There are two kinds of accreditation procedures. First, there is programme accreditation which judges whether a proposed higher education programme corresponds to the predefined minimum criteria of sufficient number and qualifications of staff, as well as infrastructure, but also some formal aspects of programme design. The right to habilitate and nominate professors is also part and parcel of programme accreditation. This form of accreditation is essentially an external control mechanism which is meant to ensure minimum standards and prevent the mushrooming of under-resourced programmes.

A second, more recent, aspect of the Slovak accreditation system goes beyond the idea of formal ex-ante control by including the evaluation of institutional performance. This evaluation and accreditation method, called "complex accreditation", ensures the evaluation (by the Accreditation Commission) of the "research, development, artistic and other creative activity" of the HEI. "Complex accreditation" is to be carried out every six years and examines all study programmes, as well as habilitation and nomination procedures for professors. The current process of "complex accreditation" applies specific "criteria of incorporation" into an institutional category which are legally defined and differentially benchmarked in standards of varying degrees for each category of HEI. The process is finalised by a report from the Accreditation Commission, which also contains the proposal for categorising each HEI, and which is forwarded to the Minister of Education. The government will issue the corresponding bill, which is in fact a politico-legal way of managing the "reclassification of HEIs" through a process of institutional ranking.

This process establishes whether a higher education institution should be called a university (based on number of PhD programmes and involvement in basic research), a higher education institution (with Master and Bachelor programmes, conducting both basic and

applied research) or a professional higher education institution (which only offers bachelor programmes). The different profiles of these types of institution will then be reflected in the funding and grant schemes that apply to them. As mentioned above, this new complex accreditation is currently in process.

With respect to the third type of quality assurance, namely that conducted by higher education institutions themselves, which is emphasised so strongly in the European Standards and Guidelines, internal quality monitoring in Slovakia is still largely a monitoring of data according to standards introduced by the Accreditation Commission, rather than set by the institutions themselves. This means that quality assurance does not function according to separate institutional standards and aims, linked to separate and possibly diverse profiles, but is rather part of a mainstreaming external control system which does not take account of variations between institutional profiles. In quality assurance, variations in institutional profile are thus only associated with variations in the quality of institutional research performance, and it is this which leads to institutions being allocated to different hierarchical categories. Hence, diversifying institutional profiles in terms of attaching different weights to different missions and functions is not perceived as at all positive. The external and internal quality assurance systems prevent horizontal diversity and favour vertical (hierarchical) diversity, encouraging institutions aspire to a common higher level of performance with respect to research.

Institutions act accordingly in their own internal reward structures, wherever these have been introduced. While there are no incentives to improve teaching performance, some institutions or individual faculties within institutions encourage improvements in research performance through performance-based resource allocation, rewarding faculties or departments or even individual university professors with higher external grant incomes and more PhD graduates. This is not yet frequent practice, but it seems to be increasingly accepted.

1.7 Stakeholder and Academic Values

While no separate interviews could be conducted with external stakeholders in the course of this study, the previous system evaluation, the results of which were made publicly available[4], revealed increasing interest and pressure from external stakeholders towards diversification, from four points of view.

1. Stakeholders urged HEIs to broaden the scope of institutional missions to include more applied research and innovation and to create better conditions for it (especially regarding improved research infrastructure and support services), with the help of public funding agencies.

2. Stakeholders urged HEIs to strengthen their interdisciplinary research and study courses, targeting the interfaces between disciplines in order to expand their ability to solve real life and business problems.

3. Stakeholders urged HEIs to review their course portfolios, criticising the oversupply of social science and economics graduates and the under-supply of scientific and technical graduates.

4. Stakeholders also criticised the absence of intermediate level technical training which would become a much needed segment of the labour force.

As far as academics themselves are concerned, their values reflect a relatively traditional sense of higher education, even more so than in the other four countries. The questionnaire results show consistency between the declared missions of the institutions and the values which academics attribute to the different functions. Basic research is valued most highly (62 %) by a wide margin over other functions, while applied research is valued highly but nevertheless below the cross-national average (50 % versus an average 59 %). The teaching function is neither ranked as highly nor valued as strongly as by the average across the five countries (only 38 %, as opposed to 56 %). Other functions, such as continuing education, business innovation, service to society and institutional service or leadership are most often given medium value, and even valued only weakly by more than a third of institutions, thus receiving considerably lower value scores than those of the average across the five countries. Hence, a greater mission spread, beyond teaching and research, would clearly still have to work against the values of academics. For the time being, the key challenge for institutions is to expand their research performance and capacity and this value is clearly shared by institutional leaders and the academics.

Interestingly, an above-average and remarkably high score can be noted for the function of higher education as a preparation of a societal elite for leadership roles. Here, the system still reflects its old identity of elite education provision rather than that of an explicitly massified system.

[4] https://www.vedatechnika.sk/SK/VedaATechnikaVEU/Documents/Slovakia_SectorEvaluationReport_080208.pdf

It should also be noted that, given the frequency of major political changes in recent years, academics are reported to ask themselves how consistent and sustainable these past changes are for the medium to long-term institutional strategy. Since most, if not all, changes in HE were centrally promoted by the government policies, changes of governments were constantly associated with changes in the agenda of HE reforms. Each new government felt entitled to review previous changes, and in practice evaluated them rather negatively; and then promoted new changes through legislation. The end result, seen from the perspective of the present time, is that instability, unpredictability, short-term adjustments and a lack of lasting long-term perspective, are shared by all concerned and seem to prevail. A low degree of trust between academics and policy makers, and a low confidence in new agendas for change, are among the recent legacies of transition. When contemplating the horizon of a new set of changes, such as those related to institutional diversification, many academics ask themselves whether these new modalities are to be seen as lasting changes which warrant profound institutional reorientation or are just a whim of current political leaders.

Democracy is highly valued in Slovakia, much as in the other transition countries. This is reflected in universities and can be seen in their governance and management structures. A public HEI has a wide range of "academic self-government bodies": the academic senate, the scientific board, the disciplinary commission for students, and the rector. These bodies are reproduced at the faculty level, the rector being replaced by the dean. Participation and representation opportunities for academics are as wide as possible, while responsibilities are scattered among the various bodies. Governing by consensus seems to be highly desired and functions well, although assuming and exercising responsibilities is more diffuse in the governance constraints set down by the law. How this fits into a landscape of institutional diversity, which calls for an increased inter-institutional competition, remains to be seen. For the time being, one may observe the apparent mismatch between institutional governing structures that are highly collegial and democratic in practice and nature, and the expected institutional diversification. This latter will result in high inter-institutional competition and will probably require rapid and strong, even difficult, managerial action which would not distribute resources equally but would concentrate on the stronger units.

2. Diversity of Staff Profile

Diversity of staff profile is not a prominent concern in Slovak higher education institutions, since the most urgent issue regarding staff profile relates to availability and sufficient qualification. The only issue pertaining to diversity of academic staff which has become a central concern is that of age distribution. With many professors and associate professors over fifty, and age averages well above fifty in many faculties, institutions will have to renew a major part of the academic staff in the next decade.

For more than a decade, the rapid expansion of the student body and establishment of new institutions has been confronted by one overwhelming problem: the academic staff shortage. Until 2007, this had been partly compensated by the multiple employment of existing staff, a general consequence of low salaries. In order to reach a decent standard of living, lecturers (called "docents" in Slovakia) and professors had to teach not only in their "home" university but in several other HEIs. As a consequence of accreditation demands, some of them have left their "home" and acted as "guarantors" in the more recently established institutions, which needed to expand the number of accredited courses, since only students in these courses would count in the institution's public funding calculation. Even nowadays, prestigious professors are in high demand in all HEIs, faced as they are with the process of "complex accreditation", since ultimately the ranking of a HEI is heavily dependent on staff quality. Professors and lecturers are in high demand, their number being indeed limited. A process of "head-hunting" is under way and offers have to be very attractive, particularly since the "guarantor" position in an additional HEI is allowed only for one programme. The multiple employments of existing lecturers and professors are highly restricted, but the costs of hiring prestigious staff have risen dramatically. Inter-institutional competition for highly qualified academic staff has thus become a pressing reality for the whole sector, but affects the least competitively placed institutions most strongly.

Whereas searching abroad, particularly in the neighbouring countries, has seemed to be a way out of a national staff shortage, Slovak institutions have hitherto rather suffered from "brain drain" to other countries or to other sectors of the economy, rather than been able to attract academics from abroad. All of these conditions make the quest for staff diversity of little concern, and completely overshadowed by the question of finding qualified staff in the first place.

2.1 National Career Structures: Regulatory Framework and Accreditation

The career paths of academics are entirely set at national level, even though most academic staff spend their entire career at one institution, proceeding from student to Doctoral student to lecturer, with some being then habilitated to become associate and full professor.

In addition to uncompetitive working conditions or salaries in academia, the highly selective and demanding process of academic staff promotion has also contributed to making the academic career risky and thus less attractive. The path from PhD to lecturer passes through the process of habilitation, which demands a new thesis, a number of quality publications and a cumbersome procedure. To become a professor, a further path must be followed: a nomination procedure and a set of works which "influenced the development of the given field of study by creation of a scientific school or an original generally recognised group that follows-up his published scientific works"[5]. A professor is a "recognised scientific or artistic personality in the given study field". Of course, one can hardly expect to have so many "academic personalities" emerging overnight. This means that many more recently established HEIs and study programmes have difficulties meeting the requirements of the accreditation standards as regards staff profile. The natural response has been to overuse the existing pool of lecturers and professors who have benefited from multiple employments, some of them existing only on paper.

The process of institutional quality ranking and categorisation is thus associated with a highly selective process for academic staff, which evaluates them along the same dimensions no matter what career emphases or institutional profile they would prefer. Such homogeneous career promotion criteria will hinder the alternative profiling of some of the more recently established HEIs, which might have preferred to emphasise different functional staff profiles, while strongly consolidating the traditional ones. Hence a young institution which attempted to provide more individualised and interactive teaching, requiring higher motivation and time investment on the part of the lecturers, would have a hard time attracting staff with the right qualifications since these are not demanded in the nationally regulated habilitation and promotion criteria.

2.2 National Policy Priorities and Funding Structures

National policies explicitly mention the need to expand the research capacity of HE academic staff, and to a more limited extent, the need to promote innovation activities at universities. The greatest challenge in diversifying academic staff relates to the expansion of their research qualifications and engagement. This priority has regulatory support (through the complex accreditation procedures and resulting ranking of institutions, for which research performance and staff profile are decisive indicators), as well as funding support through a significant increase of performance-based funding and the increase of the research share in the institutional grants. The logic of vertical differentiation as determined through research performance is thus very consistently followed up, leaving no doubt that some institutional models with traditional research strengths and a greater number of habilitated staff will be favoured over recently established institutions which have seen their function more primarily oriented toward teaching, and have hired staff according to their teaching capacities.

With respect to the imminent overall renewal of academic staff required at most institutions and the threat of academic staff shortage, no national policies or additional funds have been put in place.

2.3 Institutional Policies and Development

Higher education institutions have clearly adapted to the system logic developed by national policies and regulations, focusing strongly on research performance and research intensity of units and staff. Most often it is for faculties to implement a differential resource allocation based on these values. But the pressures to respond to the more performance-based funding regimes that have been implemented in recent years, and to prepare for the complex accreditation procedures, have been overwhelming. Hence, the questionnaires show that research-related indicators, such as Doctoral student numbers, research performance and third party grants, are weighted strongly at more than three quarters of all institutions (100 %, 75 % and 86 % respectively), i.e. by a considerably higher percentage than the cross-national average (40 % for each of the three indicators). A similar picture emerges from the promotion criteria which are strongly predicated on research, with achievements in all other dimensions of HE being minor: 83 % regard teaching and innovation as important but not decisive, while continuing

[5] Higher Education Act Section 76, paragraph 7b

education and social engagement are even regarded as unimportant by half of the responding institutions.

As mentioned above, institutional strategies also reflect the concern with expanding research performance. A few institutions also mention concerted efforts to strengthen innovation engagement and partnerships with industry, especially in those regions where strong industrial sectors dominate the labour market. Other dimensions of HE are rarely found in institutional priorities. However, the system evaluation showed that exceptions can be found at two smaller, originally confessional institutions, the Art and professional Academies as well as the one and only private cross-national institution which was included in the review, where better student/staff relations and orientation toward international state-of-the-art research and infrastructure resulted in efforts to improve the quality of teaching methodologies and the prioritisation of competence orientation; the development of teacher competence constituted the key concern regarding staff profile. It should be noted that none of these institutions saw their primary role in being a research-oriented institution but judged their achievements in terms of student success.

2.4 Academic Values

The academic ethos at Slovak institutions is structured by values of collegiality among peers, with the implicit acceptance of distribution along value-loaded ranks which are determined by career status and research performance. Responses to the questionnaire show that academics value research performance much more strongly than any other dimension of HE engagement. Likewise, promotion procedures place an even higher value on all indicators of international research success as reflected in publications and citations (well above the already high average across the five countries). These choices have also been reinforced by the increased transparency on research results, as well as by the independent research performance ranking undertaken by the ARRA Foundation.[6] However, interviews revealed that while many Slovak professors seem to press for an institutional ranking system, such as the one currently being implemented, they are only ready to accept the final decision on the hierarchical categorisation of HEIs if it is favourable to them. Generally speaking, the current academic ethos supports a dynamic implicit ranking; when this is turned into an explicit ranking with clear financial consequences, it may encounter some resistance. This is probably why the EUA evaluation team noticed a certain scepticism in discussions and interviews with many academics with regard to the final result of the process of "complex accreditation".

It should be added that many academics expressed doubts as to the independence of the final decision. The interviewers noted a frequently voiced belief that political connections could tilt the final decision in favour of a superior status for an institution that would not qualify if the objective criteria were applied strictly. In general, it seems that there is little trust in the wisdom and good results produced by political decisions and their implementation, especially among the older generation which has experienced decades of pragmatic adaptation to a communist regime.

3. Diversity of Student Profile

3.1 Regulatory Framework and Funding Structures

According to the HE Law, HEIs are free to select their students and set their own entry requirements. This autonomy has not led to a great diversity of approaches however, given the combination of under-resourced HE provision and the financial incentives to look simply at student numbers rather than to differentiated approaches and different aspects of student profile. However, since universities have been largely funded on the basis of student numbers (although this proportion of the budget has been reduced significantly in recent years) it could be argued that there has been a systemic incentive to allow for greater variety in the quality of students' and graduates' entry qualifications, by softening or even removing strict entry requirements, such as *numerus clausus* or other strict selection processes. Only the most popular subjects, such as medicine, and some of the niche subjects such as fine arts, retain strict entry requirements.

As the overall goal has been to increase student participation, the number of undergraduate students (first and second level) has increased from 60,000 to 168,000 in just 16 years (1989 to 2005), with the percentage of new entrants to tertiary study rising from 27,2 % to 61,4 % of all 18 year-olds (two thirds of whom are registered as full time students). This is a remarkably high proportion and implies a considerable range of qualifications and abilities – and thus a great diversity of needs.

[6] ARRA, Správa 2006, Hodnotenie verejných vysokých škôl a ich fakúlt.

But the fact that institutional grants are mainly based on student numbers and that no additional funds are made available to address more diverse learning needs or the development of new teaching methodologies, means that institutions are not encouraged to differentiate among different target groups and qualification profiles. Even in subjects where specific qualification profiles may be needed for success, the rising demand for graduates in these subjects prevents institutions from introducing differentiated entry requirements. As a result, student drop-out rates have become an issue in subjects without entry requirements: in the natural sciences the drop-out rate is over 50 % of the initial student cohort, while in subjects with entry exams it is under 10 %.

The increase in student population also includes the third (Doctoral) level. During the last fifteen years, there was also a sharp increase in the number of postgraduate students, from about 600 in 1990 to 10,400 in 2005, with a wide range of new needs to be catered for. However, HEIs have not been able respond to them fully since the increase in resources for this hugely increased demand has lagged significantly, even though the national funding indicators have taken the number of Doctoral students into account in determining the research part of the grants.

3.2 National Policy Priorities

Apart from the overall goal of widening participation, which clearly implies an expansion of diversity of socio-economic and qualification backgrounds, there do not seem to be any national priorities with respect to diversity of student profile.

The overall goal of strengthening the country's research capacity has led to a policy of increasing the number of PhDs which is also reflected in rewarding the number of PhDs in the funding formula for institutional grants. However, the low of level of stipends still makes PhD training a relatively unattractive option in many subject areas with a dynamic labour market, as is the case for example in the natural and engineering sciences.

3.3 Institutional Policies and Development

The aspect of student diversity which receives the highest degree of attention among the Slovak institutions, as for the majority of responding HEIs in this study, relates to the level of entry qualifications. These have clearly diversified with the greatly increased participation rate, and this diversification poses some difficulties in terms of teaching approaches and time invested, as many of the younger teachers and Doctoral students who bear much of the burden of lower-level teaching have observed. While diversified student clienteles would also require more tutoring and counselling support, there are insufficient resources to respond to these needs. For teachers and many institutional leaders, therefore, this aspect of diversification of the student body is clearly not a positive development.

The only aspect of student profile which HEIs have prioritised in recent years, concerns the difference between part-time and full-time students. Accordingly, the questionnaire results show that more than two thirds of the responding institutions regard a spread of students as between part-time and full-time, or physical presence and distance learning mode, as desirable. Many institutions have addressed this differentiation by way of differentiated admission criteria and tuition fees, keeping their entry qualification standards higher for full-time students and softening the requirements for the paying part-time students. However, this differentiation is not reflected in different pedagogical approaches, tutoring or counselling support. There is also no evidence of differentiated qualification profiles. But many institutions reflect an awareness of the diversifying needs for lifelong learning and provide a wide array of continuing professional development courses: some HEIs have established so called "3rd age universities", providing learning facilities for seniors. Others try to raise interest among potential future students and organise "summer universities" for primary school pupils. Curiously, this active engagement is not explicitly reflected in any institutional priorities, strategic aims or incentives. It is also not reflected in hiring or promotion criteria. Likewise the responses on academic values do not suggest that these activities are held in high esteem among academics.

Only one responding institution (although this was also reflected in some strategic plans analysed in the EUA system evaluation) has prioritised diversity of national backgrounds among the student body, which is considerably less often than among peer institutions abroad. There is no evidence of other aspects of the student profile being prioritised by HEIs. Ethnic, religious, socio-economic background and even gender distribution in the student body are looked at with indifference by 75-87 % of the institutions, while no concern could be identified regarding ethnic, religious or socio-economic background. The site visits revealed similar attitudes.

In general, student intake of most of the HEIs is regional. This holds true even for the most prestigious universities

located in the capital city of Bratislava. However, while student intake is limited by the borders of the surrounding regions for the subject areas which can be found at most universities, there is considerable diversity of regional origins in specialisations which can only be found at a few places (e.g. forestry or environmental engineering). The questionnaire results also reflect a limited spread of geographic targets, in that only one institution ranks the global level highest in its teaching, none in its research.

3.4 Quality Assurance

No evidence suggests that criteria regarding the diversity of institutional student profiles are taken into account in the national accreditation procedure (apart from the number of PhD students being seen as one indicator of research intensity) or in the internal institutional quality assurance processes.

3.5 Stakeholder Values

The key concern of external stakeholders regarding student profile relates to the diversity of competences needed in the expanding labour market. Industrial stakeholders in particular point to the growing need for technical skills as well as problem-solving skills, both of which require a wider and more interdisciplinary approach to portfolio development at higher education institutions (see section 4.4).

4. Diversity of Disciplines and Programmes

4.1 National Policies and Funding Structures

After a decade in which HEIs with very different subject portfolios have been set up, there appear to be no government policies, priorities or incentives with respect to disciplinary or programme diversity, or the promotion of interdisciplinary programme development. Instead, some very limited attempts can be found to foster subject convergence in some thematic areas, such as information technology. Moreover, some ministries (e.g. agriculture) have developed thematic support which fosters a certain concentration in their areas. Likewise, the National Research Funding Agency has developed some thematic funding for research in particular scientific areas, thus implying incentives to converge in this respect, though these are comparatively minor. Otherwise, national level governmental or funding agencies seem to be indifferent to disciplinary or programme diversity in higher education institutions.

4.2 Institutional Policies and Priorities

In the competition for students, institutions are keen to develop unique selling points which put them in an advantageous position not only with their regionally-based students but also with students from all over the country. Given their different institutional histories, sometimes as single faculties, or with strong traditions in particular subject areas, it may not be surprising that the Slovak HE system is highly differentiated with respect to disciplines. More than half of the 20 public universities have some subject area monopolies, or a profile which is strongly dominated by a restricted group of subjects: the universities of Zilina (transport) and veterinary medicine in Kosice (veterinary sciences), the Slovak Medical University in Bratislava, SUA Nitra (agriculture), the Economic University of Bratislava, which is the largest of the strongly subject-focused universities, the Technical University of Zvolen (forestry, environmental and ecological technology, engineering and sciences), Presov University (Greek Orthodox and Catholic theologies), J. Selye University in Komárno (Hungarian Reformed Theology), the Academy of Performing Arts, the two Art Academies in Bratislava and in Banska Bystrica, as well as the two state academies (Police and Military). Four universities are restricted to humanities and social sciences and have a similar subject profile that combines theology, humanities and education (with some recent additions such as economics, law or health care). They have their origins in divinity schools or in catering to the needs of different Christian churches or denominations: the University of Trnava (Jesuit Catholic), Catholic University in Ružomberok, J. Selye University in Komárno (Hungarian Reformed), Presov University (Greek Orthodox). Their faculties of education are also responsible for teacher training and often attract large numbers of students. UCP Nitra also strongly focuses on education, but has added a strong focus on central European studies, as well as programmes in other arts and social sciences, the natural sciences, and health care, to its portfolio. Five universities are strongly technically oriented: the Slovak Technical University, the Technical Universities of Kosice and Zvolen, the University of Zilina and the Alexander Dubcek University of Trencin. Among the comprehensive universities, Comenius stands out in size and breadth of subject areas, followed by UCP Nitra which is in the process of becoming comprehensive, and Pavel Jozef Šafárik University in Košice.

Thus the Slovak higher education system is highly differentiated in terms of subject profile. At the same time the sharper contours of these subject differentiations are being blurred in the process of expansion, as most of the originally specialised

universities have added a wider range of subject areas in the last decade, moving little by little towards being more comprehensive universities.

4.3 Quality Assurance and Accreditation

Slovak higher education institutions have limited freedom to decide on their study programmes: while the institutions can freely develop programmes, these have to undergo an ex-ante accreditation by the national accreditation commission, which has a set list of programmes with input indicators as threshold criteria. Diversification of programmes to reflect new subject developments and interdisciplinary interfaces is thus more difficult to achieve, even positively discouraged by the external accreditation system. Accordingly, 71 % of Slovak institutions which responded to the questionnaire find that the national accreditation body has a strong influence on programme development, while this is only the case for 46 % in the cross-national average.

4.4 Stakeholder Values

In response to the new demands, universities have developed more programmes and educated more people in economics and business subjects, either at separate, often newly founded, faculties or in departments of existing ones. Since these subjects are seen as less challenging for a larger variety of students, they continue to be very popular to this day, even though there is no evidence of a corresponding demand for business graduates. In contrast, technical subjects have not been promoted. Since universities are paid by student numbers, and these subjects absorb more money than is covered by the government grant, there is a disincentive to offer difficult study programmes with higher expenditure and lower budget returns. Consequently, there is a major disproportion in student numbers in subjects of scientific or technical orientation, compared with those in economics or social sciences. While there is little evidence on stakeholder values gathered in this study, the recently published system evaluation revealed that the only aspect of student diversity which was of clear concern to industrial representatives concerned the limited availability of natural and technical scientists and engineers for the country's until recently expanding economy (which is increasingly also attracting development facilities). As a result, the convergence of HE portfolios towards courses in social sciences and economics and business are of concern to external stakeholders, but their voices have not yet led to an explicit policy to promote diversity of disciplinary choices or diversity of HE portfolios to address the apparent lack of graduates in some fields.

In the meantime, today's industry also shows, at least until the onset of the 2008 economic crisis, an increasing need for higher skilled and technical labour and a concurrent demand for both technical non-academic workers and university graduates with science or engineering degrees.[7] It is not yet clear whether this need for more diversified course profiles will also result in more positive support for the third type of institution which is to be part of the new Slovak HE system; or whether this would soften the system's hierarchical nature towards greater parity of esteem for the different parts of the system, thus promoting a more horizontal form of differentiation.

5. Conclusions

In this study, the Slovak HE system undoubtedly presents the clearest case of vertical differentiation. It illustrates a process of institutional hierarchical diversification which is essentially predicated on one differentiating dimension: research performance. The differentiation process is legally regulated and follows a top-down approach, using accreditation as a differentiating mechanism and public funding as a consolidating factor. The fact of such a clearly hierarchical approach to institutional differentiation is all the more remarkable since the Slovak HE system had witnessed mostly horizontal differentiation in its preceding seventeen years of rapid expansion, with different institutional profiles, often narrowly defined in their portfolios, emerging in different parts of the country. Many of these institutions have largely been supporting different regional needs, even though the regional authorities had no competence or money to support them. In recent years, however, institutions have expanded further, responding to student demand, and have slowly moved towards a more comprehensive subject range with less regional specificity.

In the process of rapid and under-resourced expansion, quality problems emerged. Moreover, given the uniform legal base and creation of many new institutions, the label "university" began to be used indiscriminately for any institution, regardless of size, portfolio, or the presence of any research activities. At the same time, the international and industrial pressures of research competitiveness increased, pushed by the Lisbon

[7] IMD World Competitiveness Yearbook 2006, Hayek Foundation, p.259.

agenda, the European Commission and its monitoring reports, as well as growing national concerns about the absence of research funds and low research performance. These pressures soon resulted in calls for a system which would apply quality standards more rigorously, would differentiate funding accordingly, and would strengthen the research capacity of its universities. However, since resources remain limited, the idea of concentrating scarce research funds on those universities with the more competitive research positions soon gained support. Ultimately, the national policy solution became a blending of these pressures into a new form of institutional differentiation which would use the volume and quality of research as its sole differentiating criterion. This policy took several years to be implemented, but it was conceived from the beginning, and is now being implemented, as a model of vertical differentiation which introduces a formal method of differentiating institutional types while clearly setting one type, that of the research-based university, hierarchically above the others.

As the recent EUA system review of the Slovak HE system and its research capacity has shown, nurturing the best conditions for research development at universities, and consistently rewarding those who show research strength and potential, are both clearly needed in a system which has not in the past developed the research capacity of its universities. However, while the new vertical differentiation approach to the sector may help raise the status and performance orientation of research at Slovak universities in a first phase, it remains to be seen whether those institutions that have been allocated to the second or third category of institutional types will continue to expand their capacity in a second phase. While one may expect a reinforcement of research capacity in the stronger universities, one may also expect a parallel weakening of research capacity in the less well-placed institutions. This effect may be reinforced by the increasing competition for academic staff, thus making other dimensions of institutional practice harder to realise.

Moreover, while the concentration of resources may safeguard the efficiency of (the still inadequate) research expenditure in higher education (which amounted to only 0,51 % of GDP for public R&D, and 0,71 % GDP for HE expenditure in 2005, as compared with the already low EU average of 1,84 % GDP for R&D or 1,13 % of GDP for higher education), it is not clear how the new research-based differentiation policy will be able to cater for regional development needs. It should be noted in this context that research policy and governance is considered a matter for central government in Slovakia. No special arrangements were made for regional governance of R&D and the country's first self-governing regions were created as late as in 2002. The country is subdivided into eight self-governing regions. Governments in the eight Slovak regions were given powers over regional development, primary and lower secondary education, social care, health care, regional culture, transport and trans-border cooperation. No special arrangements were made for research and development, science, technology and/or innovation, or higher education. The university system is an explicitly national affair. Regional governments may establish and support regional R&D centres and/or technology parks, but they lack financial resources and have no special competences to design regional knowledge policies with universities as motors. Hence there have been no regional R&D programmes or policy initiatives in Slovakia so far. Bratislava is the major centre of R&D activities, stemming from its strong academic tradition and concentrated knowledge capital and the consequent support from central government and/or large enterprises.

In addition to the absence of mechanisms for responding to regional needs, neither the old nor the new form of institutional differentiation pays any significant attention to the growing diversity of student qualifications, which presents an increasing challenge to teachers and teaching quality because individualised attention to varying competence profiles is often lacking. Similarly, business innovation and continuing education are ignored as dimensions in higher education in the current system, even though they may deserve to be rewarded in their own right, as the 2005 National Lisbon Competitiveness Strategy of the Slovak Republic highlighted.[8] It remains to be seen whether the experience with the first phase of this mono-dimensional differentiation model will lead to the development of a multi-dimensional one in a subsequent phase.

Clearly, this approach to differentiation leaves little room for HEIs to organise themselves according to their own autonomous aims and estimates of their future potential. The strong top-down guidance of the HE landscape is deeply embedded in public policy approaches and, as the site visit interviews revealed is also remarkably internalised within HEIs. A more autonomous process of institutional profiling does not seem to be on the horizon for public higher education in Slovakia in the next few years.

[8] Martin Bruncko (Ministry of Finance) et al., for Ivan Mikloš (then Deputy Prime Minister and Minister of Finance of the Slovak Republic) (2005), Competitiveness Strategy for the Slovak Republic until 2010. National Lisbon Strategy. Bratislava.

Chapter 6:

Institutional Diversity in Swiss Higher Education

Sybille Reichert

Diversity is not a neutral term in Switzerland. Even in the most general self-descriptions, Switzerland prides itself on its diversity in several respects: its federal structure means that the 26 cantons offer different regulatory and financial conditions for many aspects of public life. Also, the four different official languages with their different cultural contexts and values, together with a high proportion of foreigners, provide a high degree of variety in attitudes and political solutions.

In the higher education sector diversity is also regarded as an explicit value in several respects: the highest value seems to be attributed to the diversity of institutional profiles, especially different institutional types (see section 1 below). As we will see, diversity of staff profiles (e.g. in terms of weights attributed to teaching, research, innovation activities, services and continuing education) is approached differently not only by the institutional types but also between individual institutions of the same type. Between the institutional types a certain degree of diversity is also foreseen with respect to career paths of the academic staff (see section 2). Diversity of the student body is not a very prominent political issue either at systemic or at institutional level although policies and measures exist with respect to some aspects (e.g. gender, students from abroad or from other cantons). More targeted measures tend to be pursued rather within parts of institutions rather than whole institutions (e.g. gender in the technical fields and some natural sciences).

1. Diversity of Institutional Profiles

In Switzerland, there are three official types of higher education institution (Tertiary A): universities, universities of applied sciences called *Fachhochschulen* (FH) as well as teacher training institutions called *Pädagogische Hochschulen* (PH) which are classified as FH but within different governance and financial frameworks. Today about a third of all higher education students (about 200,000 in 2005) are enrolled in FH (including teacher training institutions), a proportion which is rising slightly but expected to become stable in the medium term.[1]

1.1 The Regulatory Basis

As a federal system, Switzerland regulates the higher education sector at three levels, the federal, the state (cantonal) and the institutional level:

1. At the federal level, there is first of all, as an overarching framework, the federal constitution which has contained since 2005 an article on higher education (Art. 63a). This states that the federation is responsible only for the federal institutes of technology (ETH), while supporting the cantonal higher education institutions and, together with the cantons, ensuring the coordination of the sector which is to be laid down in a new law (see below). If such coordination should fail, the federation is allowed to publish directives on degree structures, transfer between the different cycles, on continuing education and on accreditation and recognition of degrees and institutions. For the purposes of our inquiry into institutional diversity, it should be noted that the earlier constitutional article on the Swiss educational area (Art. 61a) stresses that general education and professionally oriented

[1] According to the Federal Agency of Statistics (Bundesamt für Statistik, 2007) Studierende und Abschlüsse BFS – Statistik des jährlichen Bevölkerungsstandes – Bildungsperspektiven.

educational paths should be recognised as being of equal value, a parity of esteem which the federation and the cantons should safeguard.

At federal level, three laws relate to the three different kinds of higher education institutions:

- There is a federal law (1991) for the federal institutes of technology (ETH) which are the only higher education institutions for which the federation is wholly responsible, both as regulatory authority and as primary funding source. The law also defines their focus as being scientific and technical education and research.

- There is a federal law on the FH (October 1995). While the federation shares the regulatory and financial responsibility for the FH with the cantons, the key regulations are fixed at the federal level which is also responsible for the establishment phase of this relatively new sector (while only paying up to a third of its recurrent expenditure). The FH are defined as institutional types with a distinct mission, namely as "training institutions which prepare for professions in which scientific knowledge and methods or creative abilities are required and which build on prior professional training".[2] In addition to professional training, FH are explicitly called on to provide continuing education, applied research and services for the business sectors in the area of their portfolio.[3] This type of higher education institution was only recently established in the Swiss HE system, in the mid 90s, with the explicit aim of revitalising the economy and building on the successful Swiss professional and vocational training by lifting it to the higher education level. As in most countries with a dual sector, the origins of the FH lie in former higher technical schools which were partly integrated into the FH in 1998. The official motto attached to the FH is "of equal value but different kind" since they offer an education which is explicitly oriented toward the needs of professional practice. In 2003 the government approved seven regional FH, in 2005 a private FH was approved.

- There is a federal law on support for the cantonal universities (October 1999), which allows the federation to provide institutional grants, investment grants and project grants for the universities, while being regulated and supported by the cantons. With respect to cantonal universities, regulation at federal level is limited to a few procedural conditions which allow for federal directives on accreditation, degree recognition, common quality assurance guidelines, knowledge transfer. The key coordination body which "can be made" responsible for such coordination and the formulation of directives is the Swiss University Conference which, as experience shows, usually cooperates closely and seeks consensus with the Swiss university rectors' conference.

In contrast to the federal institutes of technology (ETH) and the FH, which are defined in their mission and tasks at national level, the cantonal universities remain undefined in type and mission at national level:

- The constitution does not contain a definition of higher education institutions or their mission.

- The university support law (UFG) only states that the term "higher education institutions" comprises the cantonal universities, the ETH (federal institutes of technology) and the FH, without further defining their purposes or differences.

2. At cantonal level, the ten cantons which host and fund universities all have their own university laws. The 10 cantonal university laws, like the federal ETH law, contain definitions of the university's mission, which posit a whole set of key features and core tasks related to their mission of fostering critical, analytical, methodical and ethical education as a core social and cultural public value. The range of tasks the university is expected to fulfil varies slightly between the cantons, although it always includes contributing to the advancement of science through research, research training and the preparation of students for academic professions and scientific careers, as well as academically based continuing education. In some laws, university tasks also include the responsibility of the university for knowledge transfer and for delivering services which are associated with teaching and research for external stakeholders, for advancing reflections on the ethical, social or technological consequences of scientific research or for advancing scientific culture and its values and consequences or for general adult education.

3. At institutional level, universities and FH define their own statutes some of which add some details to the basic mission described in the cantonal laws but without changing the mission itself.

Interestingly, the abundance of laws on higher education and the fact that they are defined at federal and cantonal level still preempt a wide agreement between

[2] Art. 2 and Art. 3 of the Federal Law on Fachhochhochschulen.
[3] Art. 3 [2] Originaltext: Sie ergänzen die Diplomstudien durch ein Angebot an Weiterbildungsveranstaltungen. In ihrem Tätigkeitsbereich führen sie anwendungsorientierte Forschungs-Entwicklungsarbeiten durch und erbringen Dienstleistungen für Dritte.

these different laws on the key mission of universities (federal technical and cantonal) and of the FH.

If we contrast the core tasks of universities with the nationally-defined portfolio of FH core tasks, we see that universities and FH share those tasks that concern transfer of knowledge and training to the outside world: services, valorisation and continuing education. With respect to the traditional core tasks of teaching and learning, however, the description of core tasks diverges significantly:

- Firstly, FH and universities (cantonal and ETH) differ with respect to the orientation of the education and training they provide and the competences they are meant to emphasise. The FH are supposed to provide training with a clear professional orientation while the universities are supposed to foster an academic, critical, reflective orientation.

- Secondly, the kind of research that is advanced is supposed to be limited to applied and professionally oriented research in the case of the FH while no limitation is mentioned in the case of universities. Only the subject portfolio is defined more narrowly for a few universities.

- Thirdly, research training is seen as a task that is restricted to universities.

With respect to diversity of institutional types, one last point should be emphasised: All of ten cantonal university laws and the national ETH-Law and FH-Law emphasise the importance of inter-institutional cooperation, first and foremost within the national context (as well as in an international context in the case of some of the university, ETH or FH laws.)

1.2 The Draft HE Act

In order to improve coordination in the HE sector, establish a coherent and transparent system of HE funding and allow for some national strategic influence on the sector, a single Higher Education Law was drafted in 2007, on the basis of the new constitutional HE article of 2005 which presses for the establishment of a common Swiss educational area in Switzerland "of high quality and permeability". This draft law is currently being commented on by all relevant stakeholders. It contains new provisions for a common governance of the HE system, for a common quality assurance and accreditation system (which also applies to private institutions in so far as they seek to bear the title of university or FH), for common funding principles and some national strategic planning processes. Interestingly, the present version of the law contains no definition of institutional types at all, even though the difference between the institutional types and their respective needs is explicitly mentioned as a determinant of the funding structure (reference costs and funding criteria). In the commentary on the draft law, the two responsible departments justify the absence of a definition with an emphasis on the variety of institutional profiles since the latter are regarded as much more decisive than the institutional type. Furthermore, the commentary finds that some competition between the universities and the FH is desirable.

> "The reason for not defining institutional types in the law lies in the variety of higher education institutions. Such variety, e.g. in admission or degrees, is too great for normative delineation in the law. Moreover it is the basic decision of the constitution and legislator to create a unified Higher Education Space. That does not mean that there are not, or should not, be differences among the universities and universities of applied sciences. These differences relate most of all to their differentiated profiles in terms of content, e.g. the greater research orientation of the universities vs. the stronger orientation to professional practice at the universities of applied sciences. Finally, it is intended by the legislator that universities and universities of applied sciences are placed in a certain competition with one another and that their strategic orientation will emerge from such competition. The legislator takes these differences into account, e.g. by way of the criteria for calculating the institutional subsidies, or in the context of the accreditation criteria, where the different characteristics of both types of institutions are taken into account." (Translation by author)[4]

In their reaction to the draft law, the university rectors' conference deplores the absence of an institutional typology in the law and proposes such a definition, which it has formulated together with the FH-

[4] Original text: „Der Grund für den Verzicht auf die Ausdifferenzierung von Hochschultypen ist die Varietät der Hochschulen. Diese ist beispielsweise beim Zugang oder den Abschlüssen zu gross für eine normative Festlegung im Gesetz. Zudem ist es der Grundentscheid des Verfassungs- und Gesetzgebers, einen einheitlichen Hochschulraum zu schaffen. Das bedeutet nicht, dass es keine Unterschiede zwischen universitären Hochschulen und Fachhochschulen mehr gibt oder geben soll. Diese Unterschiede beziehen sich vor allem auf die inhaltliche Profilierung der Hochschulen; z.B. grössere Forschungsorientierung für die Universitäten versus stärkere Anwendungsorientierung an den Fachhochschulen. Letztlich ist es vom Gesetzgeber durchaus gewollt, dass universitäre Hochschulen und Fachhochschulen auch untereinander in einem gewissen Wettbewerb stehen und daraus auch ihre strategische Ausrichtung erwächst. Der Gesetzgeber nimmt auf diese Unterschiede durchaus Rücksicht, z.B. bei den Bemessungskriterien für die Grundbeiträge, oder im Rahmen der Akkreditierungsrichtlinien, wo auf die unterschiedlichen institutionellen Eigenheiten eingegangen werden kann."

rectors' conference. The latter, while agreeing with the formulations proposed by the university rectors' conference prefers leaving such a definition out. But it should be noted that both the departments that were responsible for drafting the law and the two primary commentators on this issue all seem to agree on the notion that permeability and flexibility and even possible modifications of institutional attribution to one type or the other should be part of the system.

1.3 Governing Authorities and Institutional Governance

In accordance with the above-described definitions of different institutional types, HEIs are subject to a wide range of different governing arrangements. The two federal institutions have been relatively autonomous but report to a board, which is composed mostly of external stakeholder representatives who, apart from the presidents of the institutions, are elected ad personam. This board combines supervisory and strategic functions, but is also responsible for nominating the presidents (who are then appointed by the minister of the interior) and for distributing the budget between the two federal universities [ETH and EPFL] and the four other federal research institutes. The federal universities are free to decide their own internal governance structure and financial allocation and thus have opted for different internal organisational structures. Since the board does not primarily defend the interests of one institution, both universities have composed their own advisory boards of external partners to stimulate and carry forward institutional interests.

The cantonal universities are governed differently in the different cantons, in accordance with the respective laws. Many have governing boards composed of external stakeholders, often with the canton's education minister as president of the board. The education ministers of the cantons coordinate some framework conditions such as the maximum tuition, the level of the stipends and the conditions of inter-cantonal financial transfers for students studying in another canton. The coordinating body (EDK) is also an important political body in any national policy definition and has to be consulted, or acts as co-author of new policies and sets HE funding levels, since the federal funds also include university grants and other incentives. One should note that for any matters concerning the FH, a different (but largely overlapping) set of education ministers is responsible. Any directives for universities concerning degree structures and mutual recognition are the raison d'être of yet another body, the Swiss University Conference (SUK, *Schweizerische Universitätskonferenz*).

While the FH are funded mainly by the cantons, the main regulator has been the Federation, more precisely the Federal Agency for Vocational Education and Technology (BBT, *Bundesamt für Berufsbildung und Technologie*), which orchestrated and steered the build-up phase of the FH. Most recently, the BBT has also been directly responsible for the accreditation of the new Master programmes. In the new law however, the FH are to be accredited (like the universities) by an independent accreditation council, supported by a QA and Accreditation Agency. Such accreditation will take the form of an institutional audit of their internal QA system, while programme development should become largely the autonomous decision of each FH in financial negotiation with its canton and in strategic negotiation with their own boards (FH-Rat) which again are composed of external stakeholders.

Yet another governance arrangement exists for the teacher training colleges (PH, *Pädagogische Hochschulen*) which are solely under the responsibility of the cantons (no institutional grants from the Federation). While they have the status of FH, they are subject to relatively strong intervention from their cantonal authorities since these will also be the employers of the PH-trained teachers. Only one PH, which is incorporated into a large intercantonal FH, has its programmes accredited by the EDK.

While the rather complicated coordination structure is supposed to be simplified in the new law, the fact of the different combinations of authorities for the different institutional types remains undisputed, which means that largely divergent external and internal governance structures will continue to exist for the foreseeable future. A key feature of the new draft law is the common governance of the system, which is not welcomed by all stakeholders: both the ETH and the main economic stakeholders (e.g. *Economiesuisse*) want to ensure that the ETH continue to be governed by their own law and separate funding conditions, in order to maintain their exceptional international competitiveness. Other stakeholder groups emphasise the importance of keeping the FH separate in their governance and funding structure to prevent academic drift.

The draft law also concerns the institutional level of governance by mentioning, as a condition for institutional accreditation, the existence of a "capable" institutional organisation and leadership and of ensuring sufficient participation of the institution's members.

With respect to the institutions' internal governance one should add that these are not just influenced by cantonal legislation. In some cases, their history or recent development contributed to the choice

of internal governance structures. Thus the FH institutions were only formed recently, through mergers of independent, sometimes well-known, higher vocational or professional institutes or Academies of Music and Arts. This means that strong separate institutional identities often remain together with their own governance structure. The FH are still in the process of addressing this challenge of developing a collective institutional identity, vision, instruments, and management. While strategic directions may have emerged already, some internal diversity of governance, communication traditions and overall identity is seen to be an asset rather than a barrier to innovation. However, reportedly, external stakeholders are often less convinced that such diversity is an asset than internal members or institutional leadership.

If we look at the different governance structures chosen by the universities we can find, again, a considerable range of profiles. While some institutions are more strongly steered through the institutional leadership (such as the University of St. Gallen or the Federal Institute of Technology at Lausanne, the EPFL), others combine relatively autonomous faculties or departments with some strategic resources and priorities from the institutional leadership (e.g. the University of Zurich, ETH Zurich or the University of Geneva). Again, the co-existence of different governance approaches is generally seen to be positive by many university representatives while often political voices are reported to favour stronger institutional steering from the top.

1.4 Funding Structures

Swiss higher education institutions attach high value to the diversity of funding sources since this is seen as enhancing the degree of autonomy from individual funding agencies and as allowing them a more diverse portfolio of functions. Increasingly, funding is also sought from private sources to lessen vulnerability to public budget cuts or stagnation of public funding. Again, the federal structure brings with it a wide degree of variation with respect to the overall level of income. While the funding categories are the same for all cantonal universities and FH, there is a large variation in the relative distribution between the institutional types and within one type of institution.

If we leave aside the two federally funded institutions (ETH Zurich and EPF Lausanne) with around 90 % of their annual expenditure met by the Federation, other universities are funded from five primary sources:

1. The cantonal contribution which constitutes 42 % of the overall institutional annual income.
2. The federal contributions which make up about 14 % of the institutional subsidy for teaching, and another 11 % for research and is calculated in both cases on the bases of input and output criteria (e.g. third party funding), including some grants for specific strategic projects of the *Schweizerische Universitätskonferenz* (SUK).
3. Contributions from the cantons from which students originate (like internal portable grants) according to the *Interkantonaler Universitätsvereinbarung* (IUV) (1997), equivalent to about 14 % of the institutional annual income.
4. Third-party funding (SNF, KTI, EU programmes, research mandates from the federal ministries, project support from industry), which varies considerably from one institution to another, but makes up about 16 % of institutional income on average.
5. Tuition, constituting about 3 % of the overall income.

The funding sources of the FH are similar to university funding as far as the types of sources are concerned but are rather different with respect to relative distribution:

1. The cantonal contribution constitutes only about 32 % of the institutional annual income.
2. The federal contribution amounts to 20 % (for the teaching function) and only 3 % for research. For continuing education and other services no funds are provided since they are supposed to be self-funding.
3. The contributions from the cantons from which students originate amount to 25 % of the overall income.
4. Third-party funding derives most substantially from industry and from the KTI (innovation funds) and constitutes about 16 % of the overall income.
5. Tuition varies between the cantons but makes up 4 % of the annual institutional income.

In contrast to the symmetry of the funding sources, there are considerable differences between both institutional types when one looks more closely at the weighting distribution among the different dimensions of higher education (teaching, research, continuing education or services).

In terms of federal funding, the Swiss Federation funds about a quarter of the institutional expenditures in both cases (25,2 % of university current expenditures and 23,6 for the FH for 2004, increasing to 28 % in 2008). However, the relative distribution between teaching and research of these funds is very different for

universities and FH: the universities only receive 52 % of their federal funds through the basic institutional grants (*Grundbeiträge*) and 44 % for their research activities whereas the FH receive 80 % of their federal funds through the institutional grants and only 13 % for (applied) research.[5]

Likewise, if one takes into account their other sources of income, the costing structure of universities and FH reveals similar differences in functional distributions between teaching, education and other functions (according to the *Kostenrechnung* 2004): while universities receive only 37 % of their funding for education and 49 % for research, the FH receive 72 % for education and 14 % for research.

Among the common features between both institutional types is the attitude to institutional support for continuing education and for services which are supposed to be largely self-financed, i.e. financed through the contributions of the (private) participants or service recipients. In contrast to some other European countries, the potential public benefit of continuing education, particularly in less lucrative areas, is not really a consideration. Incentives for continuing education teachers are not really financial since only a small part of extra income can be gained that way (if continuing education is given at the home university). Incentives for teachers are more intrinsic to the activity: mostly the networking opportunities and the benefits that such courses can bring to their research and teaching perspectives. The time the teachers/researchers invest in the service function is taken into account in their overall teaching budget but is costed to prevent public subsidy of private interests at the FH. At the universities, professors or other academic staff may spend a certain small percentage of their time conducting such services, which are intended to bring in (very limited) income to the professor, as well as to the institute, rather than becoming an expenditure.

With respect to funding research and teaching, internal allocation differs widely between the institutional types. The FH concede that only a given percentage of the costs related to applied research have to be covered externally (e.g. 28-30 % institutional contribution or full cost coverage, at the FHNW) since such research is seen as a core competence of the FH. With the further extension of applied research capacity at the FH, the degree to which such activities are covered by external resources is supposed to increase further. At the universities, research (basic and applied) is regarded as core business. While the amount of external third party funding is 16 % of their expenditures, like the universities, their research grants come mostly from the federal innovation agency (KTI) which supports research cooperation projects between higher education institutions and companies with the aim of transferring innovation to Swiss industry. A small percentage of third party funds derives from the National Research Funding Council (SNF), which is the main third-party funding source for the universities. While a separate funding instrument has been established at the National Research Council for the very different needs and quality criteria of creative disciplines, which are hosted for the most part in the FH, such funding again amounts to only a small part of the overall third-party income. One may thus conclude that the funding structure of the two institutional types largely supports the official and regulatory difference in basic functions.

Beneath these differences between the institutional types, however, one finds a wide degree of variation between institutions, both in the relative level of incomes between the different institutions as well as with respect to their internal financial allocation, which sets different incentives. First of all, one should take note of the varying levels of third-party funding, which may be said to reflect (albeit not linearly) either different levels of research activity or different distributions of disciplines since the research organisation of the humanities and social sciences makes external resources less vital for researchers in these areas.

Furthermore, the strategic priorities reflected in funding practices reflect different values attributed to various aspects of diversity. Thus, the University of Zurich dedicates a significant proportion of its funding to larger cross-disciplinary strategic areas which can be applied for by the faculties, thus fostering inter-faculty cooperation to make sure the large diversity of disciplines at the university (which is the largest comprehensive university of the country) can be exploited fully as an asset. Also, at the University of Zurich as well as at ETH Zurich some competitive research funds are made available internally to make sure seed funds exist for high risk research that would be likely to be filtered out by peers in the normal funding council procedures. In this respect, the diversity of funding sources is very positively valued: both universities and funding agencies emphasise that

[5] Kostenrechnung Universitäten und Fachhochschulen (2004) cited in: Eidgenössisches Departement des Innern EDI, Staatssekretariat für Bildung und Forschung SBF, Eidgenössisches Volkswirtschaftsdepartement EVD, Bundesamt für Berufsbildung und Technologie BBT (2007) "Bericht über die finanziellen Grundsätze und Auswirkungen des neuen HFKG" http://www.admin.ch/ch/d/gg/pc/documents/1504/Finanzbericht.pdf

any peer system is liable to mistaken judgements so that several sources with different filter criteria are important to sustain the diversity and innovative quality of research directions. Another interestingly separate profile is offered by the University of St. Gallen: while the other universities have an average of around 6 % of their income from the national research council (SNF) and between 10 and 20 % of their income from other third-party funds, St. Gallen derives ca. 40 % of its income from such sources and only 1 % from SNF, reflecting its close interrelations with business partners. Another variation in terms of funding source distribution can be found with the *Università Svizzera Italiana* which has developed its offer also in view of students from Lombardia in Italy and which obtains a significant proportion of its income through tuition from these students.

1.5 National Policy Priorities

The most recent national policy contains priorities which are separated out for the different institutional types as well as for national science and innovation funding agencies. First, it should be noted that vocational education received the biggest increase in attributed funds in order to allow a stronger proportion of federal funds and steering in this sector, reflecting a continuing or even increasing emphasis of the importance of this sector for the Swiss system which was recently fixed in the reformed law on vocational education. In particular, the national policy points to the increasing competition between employers who offer vocational training positions for secondary school students after obligatory schooling and general education schools where students would continue until *matura* (giving them access to higher education). The national policy attempts to safeguard the quality of this sector, as well as the recognition of the dual system by other national systems.

With respect to institutional diversity and complementarity, some national goals are mentioned also for the priorities attached to the ETH institutions: ETHs should engage actively in creating "a common Swiss Higher Education Area", also cooperating in trans-institutional cooperation projects (including other HE types) and should contribute the permeability between the different institutional types.

With respect to the cantonal universities, national policy aims do not relate to aspects of diversity, apart from the mention of their participation in the federal programme of "Equal opportunity for men and women" as well as in intensifying cooperation and networking with other institutions. Finally, the strengthening of (diverse) institutional profiles and emphases is an important last emphasis.
The policy aims concerning *Fachhochschulen* highlight their profile as interface institutions between the economy and science and their contribution to the Swiss innovation system. Their attention to regional "anchoring" is emphasised, as is the extension of their (applied) research activities. It should be added that the Swiss National Research Council (SNF) pursues increased FH participation as a policy aim.

Another medium term priority concerns the national innovation agency, KTI, which is responsible for knowledge and technology transfer between higher education institutions and businesses and which is particularly important as a funding agency for research at the FH. As the KTI has set as a medium-term priority the aim of reaching out to SMEs which have hitherto not cooperated with HEIs, this aim is likely to affect the incentives set to the FH to broaden their SME relations even further.

1.6 Quality Assurance and Accreditation

In Switzerland OAQ is the only quality assurance agency for all higher education institutions in so far as institutional accreditation is concerned. The new FH sector underwent a separate *ab initio* accreditation and extensive peer review which is recognised as accreditation until 2011, but will then also be accredited institutionally through the OAQ. Even private institutions have to be accredited by this agency if they want to be recognised as belonging to one of the four possible categories: "university", "university institution", "Bachelor-awarding Institution in the university HE sector", or "Continuing Education Institution in the university HE sector". For these university institutional types, all of which presuppose a general *matura*, differentiating criteria hold the condition that professors spend at least 30 % (or 20 % for the Bachelor-awarding one respectively) of their time in research for the universities or "university institution". The university is the only type which awards doctorates and has to show a certain range of disciplines so as to allow for interdisciplinarity. A certain minimum threshold of staff positions is also laid down for the different types. Separate guidelines exist for the FH and PH. Institutional audits are linked to the financing of the Swiss universities and Institutional accreditations are linked to the right to deliver degrees at the UAS.

The institutional accreditation of the OAQ is essentially an audit following a "fitness for purpose" approach. This means the institutional profile and development

aims are taken as a basis on which institutional quality processes and provisions are judged. Institutions are thus not limited in any way and can develop into new directions if they want, as long as they show consistency in their methods of implementation. In order to address the danger of mainstreaming academic norms, the quality assurance agency takes a certain amount of care in ensuring an appropriate (with respect to institutional profile) and sufficiently mixed composition of their peer review panels. If the composition of the panel members is well balanced, an overemphasis of particular peer norms during the procedures can be avoided, according to the agency.

With respect to programme development, universities are fully autonomous. Again the OAQ only looks at the processes but does not set any criteria in terms of content or orientation. There are no accreditation standards which would hinder (or foster) diversity with respect to programme content, delivery modes, staff profile, student qualifications, learning outcomes, since the institutional processes and offering are only looked at in terms of their own aims. Some accreditation/audit criteria deal with qualification of teachers, student assessments and admission criteria, but in such a general manner that institutional profiling is not hindered. There is also no fixed subject list with certain content requirements or other expectations for these subject areas, apart from medicine in which national regulations have to be applied.

The quality and accreditation guidelines do formulate some expectations regarding governance and institutional management, namely in terms of having defined mission, strategy, transparent decision processes and responsibilities, and an internal quality assurance system. But, again, the general nature of these expectations does not prescribe forms or models of governance for institutions.

1.7 Institutional Missions and Policies

The survey which was conducted in the context of this study revealed a range of institutional missions which clearly support and sustain the systemic diversity created by regulatory and financial conditions. The Swiss results show some interesting divergences, especially when compared to the results of the other five countries.

Like their peers abroad, Swiss higher education institutions (HEIs) find that preparing school leavers to become highly skilled workers for industry, government and academia is either an important or vital part of their mission although there are fewer Swiss institutions than among their peers abroad (48 % vs. 61 %) which find this function vital (rather than important). One should point out, however, that the results clearly differ between institutional types. While preparing school leavers for highly skilled work in academia, industry or society is always ranked as vital among FH and PH, sometimes with the addition of applied research and continuing education, it is only ranked as important among most universities where research and research training are ranked as vital.

In comparison to the other countries, the Swiss responses show comparatively strong support of the aim of preparing a societal elite for leadership roles: While on average only 10 % or 32 % of the institutions find this goal vital or important respectively, 19 % of the Swiss institutions find it vital, more among the universities, and 52 % find it important, reflecting the different approach taken to widening participation in Swiss HE. There are also hardly any Swiss institutions which find this goal irrelevant or not very important as compared with 30 % in the other countries.

Among the vital functions of institutional mission, Swiss institutions mention applied research most often: 57 % HEI find this function vital and no institution finds this part of their mission irrelevant or not very important. The applied research dimension of their provision is also judged by a great majority of institutions as becoming more important in the future. It should be added that the applied research function is prioritised more strongly in the FH than the universities.

The basic research function is more diversely weighed by the Swiss institutions than by their peers abroad: while 33 % find this function vital and 19 % find it important, more than a third find it not very important, 22 % more than the average of the countries. Similarly, research training for academia is seen to be not so important by a higher proportion of institutions than the average (15 % above the average score). The distribution of scores again clearly reflects the mission mixes which the system foresees for the different types of institutions. If one looks at the different types of institutions, one finds that basic research and research training for academia is regarded as vital by all universities, while basic research is not regarded as a vital part of the mission of any FH or PH; only few FH and PH mention this function as important or quite important. Similarly, research training for academia is only seen as a vital or important mission dimension by one PH; and as important (but not vital) by 40 % of FH.

Close to the average across the other countries, continuing education for professionals is seen as a vital

function by 43 % of Swiss HEIs and as important by 38 % (compared with an average of 37 % and 38 %). One may be surprised to find that this means that more Swiss institutions find this function important than the basic research function. Again, here, the Swiss sample shows great internal diversity with a comparatively higher number of FH and PH ranking continuing education more highly than the universities. Most FH and all PH regard this part of their mission as vital. Like their European peers more than 70 % of HEIs find that this function will become more important over the next five years.

Similar to the average in the other countries, addressing other societal challenges is identified as a vital or important function by 65 % of Swiss institutions and, together with continuing education, applied research and business innovation, belongs to the HE functions which is expected to gain even greater importance in the future.

One may conclude that, on the whole, Swiss institutions seem to show a wider spread of different mission mixes. In particular, the research function is more diversely approached by the different institutional types: while applied research and contribution to business innovation is prioritised more often by the FH than by universities (which, one should note, also find this function important), basic research and, to a lesser degree of exclusiveness, research training are clearly being seen as the speciality of the universities (with only some pockets of basic research being conducted at the other types of institutions). The picture is slightly less neatly separated for the PH although the applied research bias can also be found here. The phenomenon of a research drift affecting all institutions regardless of their original missions, as can be found in Norway, England and Slovakia, can thus not be observed in Switzerland.
Swiss higher education also seems to be still more defined by a sense of elite and societal leadership than the average across the countries.

The institutional missions are also defined strongly by the geographic targets which the institutions cater for. Again, the Swiss survey results reveal a considerable spread of target communities, especially as regards the research function.

Unlike their European peers, the highest percentage of Swiss HEIs (39 % vs. 34 %) ranks the global rather than the national community as their prime target in their research (the national target being weighed highest by only 33 % Swiss institutions compared with a 42 % average). Like the trans-national average, a little over a third regard this target community as not very or least important.

Likewise, the regional target communities for research are also weighed most highly by a slightly greater proportion of institutions (29 % vs. 20 % average). At the other end of the scale there are more institutions which value this target group lowest, reflecting a greater spread in this respect (24 % compared to 13 % of the European peers). (The local community targeting is slightly less widespread but largely mirrors the regional score.)

Within this range of emphases, the vast majority of FH and PH rank the regional community highest as target communities for their research, a few adding the national one, while all universities rank the global or European community highest with respect to research, sometimes adding the national community.

With respect to teaching, the priority target communities of Swiss institutions resemble their peer institutions abroad, in that the regional and local target groups are more often weighed highly as target communities for teaching than for research, i.e. reflecting strong divergences between the target groups for research with those for teaching within institutions. Unlike their peers abroad, however, the regional community is ranked most highly by the absolute majority of Swiss institutions (57 % as compared to only 24 % average) while the national target groups play a less important role than in other European countries (35 % vs. 44 %). The global is ranked as the most important target by a quarter of institutions (26 %) still 6 % higher than the average across the countries.

But these results should not be seen to suggest that the institutions are internally consistent in these attitudes and mission mixes. Further desk research and the site visits in particular revealed, especially within the FH, a wide mix of different orientations across different parts of the institutions, with respect both to the relative research orientation (regarding the relative research intensity as well the mix of applied and basic research and business innovation activities) and to target communities. Within one generally regionally oriented institution, a particular faculty or even individual institute can be successfully oriented to an international target community in its research and recruit students largely from abroad, while another neighbouring institute caters to a completely different regional clientele. It seems that within the only recently merged FH such institutional diversity is tolerated and even positively valued. These internal divergences are not only historically grown but seem to be important for institutional development. In contrast, the universities (federal or cantonal) are officially explicitly set on a national or international target community for their research, even though regional stakeholders

are often important sources of finance and support. With respect to teaching, universities largely cater for a regional community in their Bachelor studies while spreading the net to the whole German-speaking and often also international community for Master and especially Doctoral level students.

1.8 Stakeholder Values

As pointed out above, the separate institutional types are strongly supported by public opinion as well as other stakeholder and political actors. The FH are perceived as representing the tip of a very competitive vocational and professional training sector. The high quality of technical workers is seen as a national competitive advantage which should be protected as much as possible through national and cantonal framework conditions. The high reputation of vocationally trained workers is reflected not only in public opinion but also by comparatively small differentials in salary advantages of academic training vs. tertiary B vocational training.[6] Nationally visible career success stories of former apprentices are cited repeatedly, with concurrent mention of continuing professional development accompanying working life. Indeed, system representatives as well as different employer associations underline that graduates of vocational training may also acquire leadership positions. The FH route is perceived as only one possible path along which the transition from professional practice, starting with apprenticeship, to managerial positions may be realised. Alternatively, professional development may also lead directly from vocational practice to managerial leadership via different steps up the professional ladder rather than through the "detour" of higher education. The perceived danger which is therefore associated with the rising success and status of FH training is precisely the possible loss of status of the purely professional tertiary B route, which is seen to offer a wide spectrum of opportunities to a larger group of workers than the higher education route may allow. Some associations fear the "academisation" of vocational and professional training through the new law, since the latter puts FH and universities into the same framework and emphasises that separate regulations and financial frameworks are needed to keep the institutional types intact.

The protection of hitherto separated institutional types is also reflected in the stakeholder comments on the status of the ETH. The main employer association *Economiesuisse* would like to see its status and financing remain separate to retain its international orientation and competitiveness and prevent equal terms with cantonally based institutions.

Beyond the question of institutional types, stakeholder values reveal different attitudes towards the development of institutional profiles. Autonomy, which is seen by institutions (universities and FH alike) as a necessary precondition of institutional profiling, is not unanimously espoused by stakeholders, indeed is even viewed sceptically by some. While *Economiesuisse* supports the new law's greater emphasis on institutional autonomy, also for the *Fachhochschulen*, other commentaries (e.g. by professional associations) look for more direct paths of influencing institutional offering, e.g. through some common national standards for curricula set by professional associations.

1.9 Academic Values

The Swiss university and FH academics showed remarkable support of their respective separate roles in the overall national HE landscape. In the interviews or questionnaires there appeared to be no current tendency of academics of the FH, for example, to emulate university values and behaviour in terms of shifting weights to basic research performance or more theoretical education programmes. The professional profile of the FH is not only supported by public and political actors but also by the academics themselves. This seems to have something to do with the professional background and hiring criteria of the academics which emphasised professional experience and orientation strongly in the case of the FH academic staff (see section 2).

In contrast to the universities and FH, the PH academics expressed more concern about the current place of their institution in the system. Given their staff and student profile and background, they resemble the universities much more strongly than the FH, even though they themselves are treated as FH in the system logic for historical reasons. This institutional type may thus be assumed to be significantly less stable in the medium and long term.

Academics and institutional leaders alike showed significant consensus with respect to the need to increase institutional autonomy in order to increase flexibility and adaptability of institutions to external needs and developments. Such autonomy was seen both as a precondition for responding more easily to academic developments as well as to external market needs. Interestingly, lack of autonomy was not just associated with strong state interventionism but also with some of the strategic roles institutional board members have developed or are developing, especially

[6] Schweizerische Koordinationsstelle für Bildungsforschung (2007), Bildungsbericht 2006 www.bildungsbericht.ch; p.151.

in the recently formed regional stakeholder boards of the FH. These boards are, in some cases, criticised for their narrow corporate models of institutional steering and relative lack of information on what institutions are already doing to respond to external needs, generally, for their lack of understanding of the unique nature of higher education institutions as institutions and of the type of strategic leadership or steering needed to mobilise institutional potential. Hence, such boards are sometimes perceived to be at least as constraining as traditional state interventionism. It was often pointed out that the FH are already taking considerable care to interact on all levels with external stakeholders to identify their needs and build partnerships around individual programmes or projects so that top-down attempts to orchestrate responsiveness to external needs is seen by some academics to be more simplistic than helpful.

2. Diversity of Staff Profile

Diversity of staff profile is an important issue in the Swiss higher education sector in several respects:

1. Firstly, in so far as different career paths are foreseen for universities, FH, and PH, but to some extent also within each type of institution.
2. Secondly, diversity is valued with respect to different levels of staff investment into core higher education functions, such as teaching, basic or applied research, knowledge transfer, continuing education and professional development, or services.
3. Thirdly, other characteristics such as national and gender composition of the academic staff have become political and, in some cases, also institutional goals.

2.1 Regulatory Basis

With respect to the possible diversity of members of higher education institutions, only two aspects are mentioned explicitly in the laws: equal opportunity in terms of gender participation is laid down in all national and cantonal higher education laws and non-discrimination against persons with disabilities is mentioned in some of the laws. (FH)

Staff diversity is also an implicit consequence of the different salary regulations which govern higher education institutions: different cantons have considerably differing salary levels for professors (both for universities and FH) so that professors of one university may earn considerably more than colleagues living an hour away. A professor of a FH in one canton may also earn more than a university professor from another canton. Also some PH professors traditionally receive higher salaries than their FH colleagues within the same institution, resulting in a pressure to reduce the relative levels of the PH salaries, which may in turn disadvantage their market chances for attracting professors who would be likely to gain higher wages at other PHs. Moreover, the allowance as to how much additional income may be gained differs between cantons and institutions.

Within each institution however, salary levels for professors are generally quite uniform (with the above-mentioned exceptions). Even at the very internationally oriented federal universities there is not much margin to negotiate salary levels which are set by federal regulations. Only start-up funds and surrounding investments may differ widely. Thus one may say that high diversity of salary rules across the country is accompanied by relatively uniform salary levels within the institutions.

With respect to their core activities, staff positions may differ widely, in accordance with the different rules of the general framework labour contract GAV (*Gesamtarbeitsvertrag*). Regulations prescribe a certain amount of teaching contact hours. But at some FH, e.g. academic staff may choose to teach less and invest more of their time in research, if they agree to bring in the relevant level of external research grants. While different incentives are set to reward increased research activities at the FH, research time investment is not specifically addressed through contractual instruments at universities.

2.2 System Governance and Coordination

Beyond the above-mentioned regulatory frameworks, there is no reported public authority interference in staff or career diversity. However, the permeability between the different institutional types is of concern to national coordinating bodies. Whereas permeability usually concerns student paths and their possible transition from one type of institution to another, the understanding of the missions in term of the relative weights of the basic functions of teaching, research, innovation, continuing education and services (*Leistungsauftrag*) of the different institutional types also forms part of the national discussions.

2.3 National Policy Priorities

With respect to staff profile, two issues pertain to diversity in the national policy priorities, as laid down in the medium term research and higher education

policy (BFI). First, higher education institutions are supposed to work towards including more female scientists in the academic staff, especially at senior level. Secondly, diversity of function is an issue as well: the high value of "first-class" teaching and increased technological and economic promotion of research and cooperation with industry are highlighted as a goal for the federal technical universities (which are very strongly oriented towards successes in research). Also, the FH are supposed to expand their applied research capacity, for which special funds have been reserved at national (and cantonal) level. The contribution HEIs can make to innovation in the business world is also a priority, reflected mainly in the increased funding for KTI which supports research cooperation between businesses and HEIs (both universities and FH).

2.4 Funding Structures

Diversity of staff profiles is addressed through some targeted funding. Most prominently, there are increased funds for research at FH which may thereby diversify staff functions which have been mostly geared toward teaching.

Some special grants also exist to encourage female academic staff to enter or resume their academic careers, e.g. to support returning to their careers after a family pause, or for special mentoring support structures at universities.

2.5 Institutional Strategies and Development

The survey data shows that by far the most important aspect of diversity with respect to the academic staff, in Switzerland as well as in the other four countries, concerns the diversity of professional and academic experience (found to be very important by 90 %).

Like their peers abroad, institutions attach also high importance to diversity of staff's relative inclination to contribute to research, teaching, business innovation or service to society (67 %). Internal functional differentiation is thus a key concern for Swiss HEI, just as it is for most of their peers (average being 66 %). This is also reflected in hiring criteria which differ between institutional types but also vary within institutions. While research performance is weighted most strongly by 55 % for Swiss institutions (close to the average of 60 %), around one fifth of all institutions attribute the lowest two ranks to research performance in their hiring criteria. While in comparison to research all other aspects are ranked far more weakly by most institutions in the other countries (often with a wide margin), this is not the case in Switzerland where teaching performance is ranked nearly as highly as research on average (52 % of institutions rank this criterion most highly). This result is highly distributed among the different types of institutions: while most of the universities rank performance in research most highly, all other institutions ranked teaching most highly, sometimes together with applied research or continuing education.

Similarly, when looking at the performance-based promotion criteria (which can be found at 84 % of all institutions) the Swiss responses diverge significantly from the average. In the other countries included in this study these reflect a highly research-dominated landscape, while the Swiss institutions show a slight dominance of the teaching performance as decisive for promotion (56 % find this decisive, as compared to an average across the countries of only 34 %, while only 50 % find publications decisive). This again reflects the large number of FH and PH in the sample, where teaching performance is more highly placed in the mission but also valued most highly by academics. Publications in general are regarded as decisive by around half of all institutions, i.e. not just the universities, while publications in reputable journals are only seen as decisive for promotion by several of the universities, though in all but one cases this rank was shared with one or two other criteria. As for their peers abroad, other research outputs are weighed as decisive for promotion much more rarely (20 %), but are regarded as important by most other institutions. Citations are only seen as decisive by 20 % and regarded as not so important by 40 % of the institutions (all of which are FH or PH).

But beneath the differences between institutional types, interesting internal differentiation policies exist. In some particularly research-intensive universities, such as the two federal institutes of technology, for example, considerable attention is now being paid to the quality of teaching and student support. At ETH Zurich a teaching innovation fund has existed for 10 years, professors are evaluated regularly and approached whenever evaluations are consistently negative. A few years ago, a new student orientation, tutoring and counselling service was established to provide more individualised support for students. At EPFL, similar quality instruments exist and diversity of pedagogical methods is actively encouraged and coached. A dean responsible for Bachelor and Master studies approaches the professors who show repeatedly bad teaching evaluations and may prescribe didactic support measures. Most decisively, hiring or tenure decisions, which are most strongly driven by research performance and potential, are vetoed if teaching performance is

not up to standard. Hence, while research capacity is the key decisive factor for a hiring decision, teaching performance has to be up to threshold.

Similarly, the FH, which have been mostly teaching-oriented are looking at the research record and potential of their professorial candidates, especially wherever new institutes are being established. The result is a high degree of internal differentiation in terms of functional mixes of the academic staff which is even reflected in contracts and performance contracts (*Zielvereinbarungen*).

Functional differentiation of the professorships in terms of hiring criteria and task description is found frequently in Switzerland, at 67 % institutions with respect to hiring and 81 % of institutions with respect to task distribution. This exists not only informally but at around half of the institutions exists even formally (slightly above the average of the five countries), more often at the FH than at the universities. However, such differentiation is not reflected very often in differential salary or rewards: whereas on average 61 % of the institutions provide different salaries and rewards to different professorships, only 38 % of the Swiss institutions do so.

If one looks more closely at the kind of differentiation of the professorships, Swiss institutions again show that teaching is more often taken as a definitive criterion, nearly as often as research. Innovation is nearly as often used as a differentiating criterion. In all three respects, Swiss institutions use formal differentiation more often than across the other countries, especially for professorships with more teaching or more innovation.

Informally, professorships are highly differentiated in terms of functions across all of the five countries, with more than two thirds of all institutions reporting such informal differentiation. In Switzerland, such informal differentiation is particularly frequent with respect to higher research engagements.

Other functions, such as innovation or continuing education activities, are appreciated but not generally counted as decisive factors for hiring professors in most environments. However, some institutions or individual faculties may behave quite differently in this respect. In some departments of the University of St Gallen and also of some FH, for example, the continuing education offer is regarded as a key ingredient of the profile so that the willingness and ability to teach mature professionals with their diverse perspectives and backgrounds is regarded as an essential hiring condition. Also, medical faculties consider clinical experience and capacity as a key competence of their professors, together with research. Different professorships may be given different weights for each. In cross-country comparison, continuing education engagement is honoured in promotion more often at Swiss institutions: 60 % find this aspect important in promotion, 20 % even among the decisive aspects (12 % more than the average). Again, this high score is due to the key role of knowledge transfer and continuing education in particularly for PH and FH. Among the universities all but one regard continuing education as important but not decisive (the other one finding it not so important). Swiss institutions provide the formal possibility of differentiating professorships with respect to continuing education (i.e. with more continuing education tasks and less other forms of engagement) slightly more often than the average across the countries, though unlike in France such differentiation is not accompanied by differential pay.[7]

Diversity of function is encouraged also through effective support services. While the motivation to pursue such activities must come from the academics themselves, support in organisational and legal tasks can remove the obstacles which would otherwise hinder participation. It was reported that the quality of innovation support services is being looked at by some international applicants.

Diversity of staff could also be looked at in terms of career paths and relative distribution of functions over such different career profiles: for instance, while some mix of teaching and research activities is necessary for all academic staff at universities, some staff at intermediate positions are expected to spend more time on teaching than senior professors. Very different functional distributions also exist among Doctoral assistants in terms of teaching duties and research management duties. Post-Doctoral positions are often pure research positions while other academic positions at the same level may have more teaching than research duties. Professorships also differ in their functional distribution although this is most often the case informally rather than formally. In spite of such variability, the demand for diverse academic profiles seems to be still higher than the diversity supplied in terms of different post descriptions. In particular, research and academic management tasks as well as management and development of scientific infrastructure are not yet viewed as separate professional career paths. This means that these functions are mixed in with those intermediate academic positions that are conceived as steps in a career ladder toward professorships,

[7] A recent study of continuing education at Swiss universities showed that additional pay is only offered for professors from other institutions, cf. Sybille Reichert (2007), Universitäre Weiterbildung in der Schweiz. Bestandsaufnahme und Perspektiven im europäischen Vergleich. Commissioned and published by the Staatssekretariat für Bildung und Forschung.

rather than as independent tracks. Moreover, most intermediate positions are contract positions rather than permanent ones, again because they are conceived as stepping stones rather than as permanent perspectives. This is considered to pose some problems in terms of continuity of know-how, e.g. in positions which are responsible for the development of highly specialised scientific infrastructure which demands high levels of scientific experience and research background without necessarily requiring the sort of research profile that would be expected for a university professorship.

Another prominent aspect of diversity which is often prioritised at Swiss HEIs relates to the international composition of their staff. Across all five countries, international experience and engagement is found to be important or decisive for staff promotion by more than 80 % of institutions, but the international composition of the staff seems to be more highly prioritised at Swiss universities (in 2005, 32 % of the Doctoral students, 52 % of post-Doctoral researchers, 31 % of academic staff and 39 % of professors come from abroad, with the greatest proportion often from Germany). Some institutions, such as the two ETHs, have more than 50 % of their professors from abroad. This reflects not just very internationally open recruitment procedures and hiring committees but also the limited supply of national academics. Due to the good job market in recent years which offers very attractive conditions for highly qualified university graduates, many Swiss graduates take up non-academic positions rather than pursuing a doctorate or postdoc. The dried-up pipeline of indigenous academics means that, in some subjects, advertisements for professorships may attract 20 foreign applicants for one Swiss applicant. Some institutions are beginning to show concern at this lack of young Swiss academics. For instance, the University of Zurich which hosts many German professors has asked new professors to reserve some of their positions for local assistants rather than taking all of their assistants from their university of origin to allow for sufficient opportunities for home-grown staff to reach *habilitation* level. International diversity has thus become an issue in a very different manner.

Another diversity issue which is connected to the high degree of internationality concerns the language of instruction. While some diversity (local language plus English) is explicitly pursued, the presence of English-speaking international students who do not understand the local language, and the growing predominance of English at Master and Doctoral level, have caused some problems since they undermine the Swiss bi-lingual practice of letting students participate in their own language (French or German) in the same course (and understanding each other).

Gender is a higher priority for Swiss institutions (67 %) than for their peers abroad (40 % average), and also important (though not ranked most highly) as a criterion in hiring, as the survey results showed. However, the site visit interviews showed concern that the overall policies are not yet sufficiently reflected in adapted behaviour or sensitised procedures and communication. Hiring committees did not seem sensitive to the sort of power and networking structures which create discriminatory practices.

Other aspects of staff diversity, relating to ethnic or religious identity, are generally indifferent aspects for institutions.

2.6 Quality Assurance

Staff profile is addressed in general terms in the accreditation procedures, namely as the requirement to have a sufficient number of FTE academic staff and full-time professors.

Their activity is considered in so far as a minimum level of engagement and time investment in research is required for professorial staff of universities. Otherwise, the different dimensions of performance (research, teaching, services or innovation) are not judged separately in the institutional audits, but globally.

It should be noted that innovation activities (in terms of knowledge transfer to business or government practice) are not an explicit area to be examined in accreditation or in institutional audits.

Turning to the internal institutional quality assurance, the most important instrument here is clearly the hiring or tenure procedures. Interestingly, universities report some shift of focus in recent years. While the profile of a candidate is still evaluated most strongly with respect to his or her research profile, teaching performance is clearly becoming more important. While the quality of teaching alone would not be decisive, a clear record of below average teaching performance (as evidenced in repeatedly bad teaching evaluations) will or may result in a decision against that candidate. At the EPFL, for instance, one may veto a hiring or a tenure proposal on the basis of poor teaching record (this has reportedly happened in a number of cases). At the University of Zurich, academics also reported that increasing attention was being paid to teaching ideas, performance and interest and candidates would be questioned about this (including the requirement to write about teaching plans and ideas as part of the application).

Other activity records e.g. with respect to innovation or continuing education engagement are seen as additional bonuses but not treated as essential. Obviously, some different emphases can be found across the range of subject areas.

Gender as a hiring criterion is supposed to be decisive if all other qualifications are equal among two candidates. Whether this policy is likely to lead to increasing the gender balance remains doubtful, unless it were accompanied by an awareness of hidden discrimination and by proactive searches for qualified female candidates. Some academics observe that the typical power networks of senior professors on hiring committees still play against the often less networked female candidates.

Promotion or other rewards play an insignificant role as a quality assurance instrument since there is hardly any *marge de manoeuvre* within the nationally or cantonally regulated salary scales.

2.7 Stakeholder Values

In the public and political debates, diversity of staff profile is only discussed, if at all, in terms of internationality and gender balance. The high degree of internationality of academic staff in the Swiss HE sector is generally positively valued, with the exception of a perceived danger of becoming dominated by a particular national group, thanks to the high proportion of German professors (up to 30 % in some universities). This has raised concerns regarding the possible effects on the communication and institutional culture at universities (e.g. the perception that German professors are less likely to seek consensus and are often more assertive) and the drying-up of the Swiss pipeline of future academics. Some students deplored the fact that Swiss German can no longer be used in discussions since the foreign professors do not speak it.

Gender balance is not very prominent in public debates. It is treated mostly as an institutional leadership or management issue. Some public attention has been paid in recent years to the availability of institutional support for child care to make the combination of academic (or other professional) careers more compatible with family life: traditionally many cantons did not see this as a necessity.

As mentioned above, the diverse profiles of academic staff at universities vs. FH in terms of academic or professional background and orientation has been emphasised strongly in political debates about the new HE law. Different professional associations have underlined the value which a high quality vocational and professional training means for the competitiveness of Switzerland. The FH are seen as the tip of that qualitative professional training. The fear of an academic drift of the FH and an increasing depletion of the tertiary B vocational training of its qualified professional into "academic" tracks dominates several critical commentaries on the draft law. The responsible agency (BBT) understands the concern and is therefore quite responsive to suggestions of how to prevent such academic drift and maintain the high quality and recognition of vocational training.

2.7 Academic Values

Academic values with respect to staff diversity are reported to have become more open to diverse measures of success, moving away slightly from the dominance of research performance at the universities and teaching performance at the FH. At the latter institutions, academics report that applied research performance is institutionally encouraged and has been better valued recently. At universities, academics and support staff report that interest in teaching innovation and knowledge transfer has increased among academics.

The survey reveals that, in Switzerland, teaching is much more strongly valued than both applied and basic research (unlike the other four countries) and continuing education is most strongly valued nearly as frequently as basic research. These judgements reflect the composition of the sample again, as well as the divergent priorities between the FH and PH on the one hand and the universities (where academic staff was reported to value research more strongly) on the other. As may be expected, applied research is valued more highly at the PH and FH than at universities.

It should be noted that among the Swiss respondents to this survey, identification with the professional community linked to the discipline or field is ranked more highly than identification with the disciplinary community which is valued equally strongly in the other countries.

3. Diversity of Student Profile

3.1 Regulatory Framework and Consequent Diversity of Student Profile

Diversity policies with respect to student profiles cannot really be designed at institutional level in

Switzerland since entry requirements for all HEIs are regulated at national level, at least with respect to Bachelor level studies. All applicants with a Swiss general *matura* are allowed to enter university without additional requirements. All students with a Swiss professional *matura* are allowed to enter a FH without additional requirement. Even at Master level, all university students are allowed to enter Master level studies in their field without additional conditions. Only for the so-called "specialised" university Master and for the FH-Master can HEIs set their own priorities in terms of student qualifications or other aspects. Naturally, this means that universities are particularly avid in developing such specialised Masters and FH in developing their new Masters.

However, within the above-described limits, diversity of student profiles may be said to be strongly fostered through the different student profiles which are associated with the institutional types through the different regulated entry requirements. Indeed the institutional types are defined in part through the student profiles they are meant to cater for.

The universities address all students with a general *matura*, i.e. the 19 % of an age cohort that performed most highly in academic terms during their lower secondary school and therefore gained access to the Gymnasium. A tiny number of students without "*Matura*" may access through a special entrance exam (*Eignungsprüfung*).

Access to the FH follows a different route altogether. The FH are open to those students who, after their secondary schooling (up to the obligatory school grade 10), followed an apprenticeship as well as a professional school leading up to the more practice-oriented professional *matura* (*Berufsmatura*). Students with a general *matura* may only enter the FH if they have also followed an internship. It should be pointed out that most FH comprise programmes in the creative arts which attract more students with a general *matura*.

In general, the requirement to offer practical professional experience also means that FH students are typically older than their university counterparts. The fact that many will retain their employment while studying is being accommodated by the FH through appropriate scheduling.

Given the socio-economic bias of the *Gymnasien* (secondary school), the FH, with their *Berufsmatura* entry requirement, cater for a more socio-economically diverse student body than the universities. Indeed, the establishment of the FH as a new higher education sector was also associated with the inclusion of more students from socio-economically less advantaged backgrounds in higher education. A third of the FH students come from families in which at least one parent has an apprenticeship as highest educational degree.[8] The proportion of FH students who have at least one parent with a higher education degree amounts to less than a quarter. The social composition varies between age groups. The younger the entering students are, the higher is the proportion of those students whose parents hold a HE degree. Inversely, the proportion of students whose parents only hold a secondary school degree is higher among the older entering students. An interesting shift in student diversity is introduced through the two groups of foreigners which may be distinguished at the FH. While the foreigners who come from abroad generally show a higher proportion of parents with HE degrees than the Swiss students, the reverse is true for foreign students who have undertaken their previous education and training in Switzerland.

The professional profile of the FH also implies that, with respect to potential students, the FH usually compete with employers rather than universities since the professional *matura* constitutes the typical admission requirement and since the latter could also give access to professional practice. Only about 50 % of those who obtain a professional *matura* enter a FH. This stands in contrast to the general *matura* which is not regarded as relevant to the labour market in the immediate sense and whose graduates usually continue with higher education. Hence, as an alternative to immediate employment, FH have to be sure to offer added value to their students, in the form of additional professional potential or opportunities which FH degrees would give access to. The FH degrees do seem to live up to this promise in two respects: they give access to jobs which could not be accessed without a higher education degree in more than 70 % cases (university degrees offer this added value in more than 80 % of cases).

Interestingly, in spite of the slightly lower success rate of being employed in an area in which a higher education degree is needed, FH graduates seem to be more content with their employment than their colleagues from the universities, at least when looking at employment situations right after graduation. The FH degrees also pave the way to higher incomes of their graduates in later years.[9]

[8] Bundesamt für Statistik (2007) Studien- und Lebensbedingungen an den Schweizer Hochschulen. Hauptbericht der Studie zur sozialen Lage der Studierenden 2005.
[9] Bundesamt für Statistik (2008) Befragung der Hochschulabsolvent/innen (Absolventenstudien), http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen__quellen/blank/blank/bha/00.html

3.2 System Governance and Coordination

With respect to student profile, there is only one concern which is addressed through national level steering and coordination: the mobility of the students between the different types of institutions which is seen to be the key feature of the (desired) permeability of the system. With the introduction of the Bologna degree structures, the latter was supposed to be facilitated. To ensure that students who want to change their basic orientation from a more professionally oriented to a more academic one or vice versa may do so without unreasonable additional requirements, a list of maximum conditions for transfer between the institutional types has been agreed upon between the rectors' conferences of universities, FH and PH. These conditions (*Konkordanzliste*) have defined a maximum of additional credits which a university may impose to bridge the qualification gap after successful completion of a degree in a FH or vice versa.

Before successful completion of a degree, a transfer is also possible in principle, although it is the exception and is dealt with on an ad hoc basis looking at the individual case. The FH report that many of the ETH students who failed the end of year exams twice (50 % of first year ETH students) continue their studies at the FH in the technical subjects.

3.3 National Policy Priorities

While being targeted through the regulatory framework, diversity of the student body is not a very prominent political goal, neither at institutional nor at systemic level. However, some policies and measures exist with respect to individual aspects (e.g. gender, students from abroad, or student import and mobility between the cantons). In the medium-term policy (*Botschaft für Forschung und Innovation*), the only aspect of diversity which is highlighted as a political priority is gender equality.

More targeted measures tend to be pursued rather within parts of institutions rather than as an overarching institutional goal (e.g. gender balance in the technical fields and some natural sciences).

3.4 Funding Structures

At system level, student diversity is not a relevant indicator for determining institutional grants. Even gender balance, which is mentioned as a national policy priority, is not reflected in funding patterns (the national support for gender studies addresses gender as a content of study but not in terms of student body). There is some positive or negative discrimination of other groups of students, however: universities receive head grants for those students that originate from other cantons. Otherwise, institutional grants are allocated to a large extent on the basis of student numbers. The number of international students contributes toward the level of the federal grant, for both cantonal universities and the ETHs.

At institutional level, there are no funding mechanisms to support student diversity, apart from support for special marketing measures to attract more women into traditionally male-dominated subjects.

3.5 Institutional Policies and Development

Beneath the differences of student profiles between the primary institutional types that have emerged through the separate admission paths and regulations, there is also some degree of diversity of student profile both within and between institutions of the same type. Only two aspects of diversity are targeted through institutional policy measures in universities: first, the international composition of the student body which is a policy goal for some institutions for the Master and Doctoral level (only three institutions – USI, EPFL and University of St. Gallen – seem to have formulated an explicit policy to attract students from abroad right from undergraduate level); and second, special school days and marketing events are organised to encourage female students towards traditionally male-dominated subjects.

If we consider the university student profiles in practice, we note different degrees of regionality (students with local or region origin) and internationality (mainly at graduate level). Attention is paid to the special needs of international students and some institutions also invest time, money and strategic attention in recruiting international Master and Doctoral students (e.g. ETH, EPFL, University of Zurich).

With respect to Swiss students, recruitment tends to be quite regional, with the exception of the two federally-funded ETHs who recruit their students from all over the country (although the French-speaking students in technical fields and natural sciences end up more easily at EPF Lausanne whereas the German-speaking ones most often go to ETH Zurich, and technical students from the Italian-speaking part of Switzerland who seem to be the most geographically and linguistically flexible may end up in both). Some universities stress their regional role in catering for a regional student and employers market. However, the FH emphasise their regional anchoring even more

strongly than the universities. In interviews they report that they not only recruit their students regionally but that their graduates tend to seek employment in the region. Especially their role as future employees and leaders of SME is highlighted.

The survey data show that, like HEIs abroad, Swiss institutions care most often about a diversity of entry qualifications (40 %), an aspect which is addressed more often through service units in Switzerland (in 39 % of all institutions) than on the average abroad (29 %). More often than institutions abroad, as the second most frequently mentioned aspects of student diversity, they prioritise gender distribution, again supported (much) more often than on the average through special services, data collection and a gender policy. The third important aspect of diversity is the diversity of socio-economic backgrounds which is as often prioritised by the Swiss as by the other institutions abroad (by 33 %).

A fifth of Swiss institutions prioritise diversity with respect to nationality. Such prioritisation can be found among half of the universities and one PH while all other PHs and most FH are less concerned about national diversity. A fifth also prioritises achieving a mix of part-time and full-time learners, or of distance and physically present learners (19 %), being thus close to the average in their priority scores. A smaller (and well below average) proportion prioritises ethnic diversity (14 %).

Swiss institutions are not concerned by the diversity of their student bodies with respect to religious backgrounds or age distribution, at least not enough as to define these aspects as priorities for institutional attention. Thus the greatest divergence from the average exists with respect to diversity of age distribution while it is prioritised by 31 % institutions on average. Regardless of the above priorities (or lack thereof), data are collected on most of the above-mentioned aspects of student diversity by most institutions. Only with respect to diversity of socio-economic backgrounds do Swiss institutions collect data significantly less often than the average (50 % vs. 69 %) even though just as high a proportion of institutions have some policy which concerns this aspect.

Older "mature" students are not separately targeted or catered for at universities in the first or second degree cycles. The general assumption on the part of the universities is that these students follow their university studies immediately after their secondary schooling, or after a brief interruption. Moreover, while the majority of students work part time to support their studies, there is no special scheduling or offer for these part-timers during their first cycle of studies. The only part-time and mature students that are targeted and supported as such are participants in Continuing Education/Professional Development Courses, many of whom may follow their courses in the evenings or at weekends. These students are fee-paying and receive targeted and often more individualised attention in their small courses which are supposed to be "self-financed" with only some overheads for the institution. While such diversity of student profiles is welcome and perceived as enriching by those who teach the continuing education courses, there is only one university where the continuing education student clientele is targeted as important and as part of an explicit policy, with institutional support measures and incentives for academics who teach continuing education courses.

In contrast, since many of the FH students are older and already have families to support, the FH pay more attention to the fact that many of their first degree students are older and pursue part-time work. Special part-time courses are offered for those who cannot pursue their studies during normal working hours.

Some PHs also emphasise the growing ethnic diversity of their student body, due to increased migration, but also of the future primary and secondary school student body which they have to cater for in their teaching.

Internally, institutions can also vary significantly between organisational units. Thus one institution which forms part of a FH is clearly regionally and internationally oriented in its student recruitment while another limits itself consciously to the regional student market. One institution which actively recruits students from abroad for its undergraduate programmes has to limit these to a certain contingent and thus imposes stringent entry conditions on these applicants while Swiss students, by law, may enter the university without entrance exams. This means that diverse quality standards of qualifications are accepted. Generally, a certain degree of internal diversity of student profiles among different faculties or departments is accepted by the institutional leadership as a necessary response to diverse needs, markets or conditions.

3.6 Quality Assurance

Quality assurance is regarded as an internal institutional responsibility in terms of teaching and students services. However, the extent to which institutions have made their own arrangements according to their professed aims and profile is evaluated by the OAQ. Institutional teaching quality assurance only pays

limited attention to the diversity of the student profile, apart from supporting more interactive teaching methods and tutoring services which may help to address a diversity of needs more easily than traditional teacher-centred methods.

3.7 Stakeholder and Academic Values

It should be repeated in this context that a non-academic professional background is not necessarily regarded with less esteem in Switzerland, since the country prides itself on the high quality of its vocational education. Indeed, several interviewees highlighted that "academic" is not necessarily regarded as a positive attribute while an orientation toward professional practice is a highly valued feature of educational institutions, as was underlined again in the commentaries on the draft Higher Education Law. The latter commentaries also reveal the high value placed on the quality of vocational and professional education in the Tertiary B and FH sectors.

Student diversity does not seem to be a value in its own right for academics, but rather a reality that has to be dealt with in teaching and individual support. The most frequently noted diversity with respect to student profile is the diversity of their levels of qualifications, which is reported to increase with the larger proportion of an age cohort entering higher education but also with the increasing number of international students from other educational and programme backgrounds. Such larger variety of qualifications is seen by teachers as a significant challenge and is moving more institutions and programme leaders to consider setting clearly defined entry conditions and communicating transparent expectations at different levels. With respect to the quality of entry qualifications, homogeneity rather than diversity is perceived to be a value.

4. Diversity of Disciplines and Programmes

4.1 Regulatory Framework

The HE laws and regulations set limits on disciplinary development in a few cases. The federal law on the Fachhochschulen lays down a set of subject areas in which these institutions are to deploy their activities. Recently their portfolio was extended to include some health and creative subjects. It now comprises: technical engineering subjects and information technology, chemistry and life sciences, architecture, planning and civil engineering, agricultural sciences and forestry, economy and services, design, health, social work, music, theatre and other arts, applied psychology, applied linguistics. In all of these, the curricular stress is supposed to be laid on the application of scientific and creative developments rather than on nurturing scientific progress itself.

With respect to universities, some cantonal laws define the scope of the subject portfolio: the HE Law of Luzern defines that the university is composed of the faculties of theology, humanities and law, thereby clearly limiting the portfolio. New faculties covering new areas have to be approved by the cantonal council. The HE Act of St Gallen likewise defines its university as representing the areas of economics, law and social sciences. The third portfolio definition of a cantonal university was undertaken by the canton of Ticino which defines, through the denomination of the university faculties, the portfolio of the recently founded university to comprise architecture, economics, communication sciences and computer sciences. It should be noted that the last two institutions were founded only a few years ago so that the definition of a clear niche in comparison to the established universities was deemed vital. All other universities are not limited by law in their disciplinary portfolios or development. However, some laws emphasise the value of interdisciplinary research and activities.

With respect to programme definition and definition of professorships, the universities are autonomous. They may, but are not obliged to, accredit their programmes by an outside agency if they so wish.

The FH went through a large international peer review process in 2003 addressing each programme separately. This process was seen to be equivalent to an accreditation. Their recently developed Master programmes (2007) were accredited through a council of the government agency BBT. In future, they should be autonomous in their programme development. Like the universities, the accreditation will be limited to an institutional audit of the internal quality assurance processes and mechanisms.

However, for some subjects in the regulated professions, such as medicine and pharmacy, national regulations define some elements of the curriculum to which the universities are bound.

4.2 System Governance and Coordination

In general, system level steering and coordination does not really interfere with disciplinary or programme development at universities and FH. However, increasingly, calls for portfolio coordination are being made by political actors and agencies. These concern

the presence of "small subjects" (i.e. with few students) at several universities or the co-existence of investment-intensive subjects at several universities. Especially for the latter, the new law proposes closer coordination between the universities through some pre-defined coordination mechanisms. A closer look at past developments, however, shows that universities have been quite active in coordinating their portfolio development with other universities wherever larger investments were concerned or cooperation could decrease costs or increase mutual benefits. The degree of bottom-up coordination is, in fact, quite remarkable. Examples comprise the remarkable extent of bottom-up coordination between ETH Zurich and the University of Zurich with more than 20 common professorships, many common institutes, shared scientific infrastructure and complementary research and teaching programmes and three common international graduate schools (life sciences, mathematics, plant sciences). Such coordination has grown out of the perception of win-win situations and was neither helped nor hindered, though sometimes supported later, by public authorities. Close coordination also exists in the life sciences between the EPFL, the University of Lausanne and the University of Geneva, or in a range of programmes between the Universities of Bern, Neufchâtel and Fribourg.

It is not clear yet whether the plans to coordinate from the top will take account of these past successes of bottom-up coordination or whether they will insist on pre-defined coordination mechanisms.

4.3 National Policy Priorities

Generally, the national priorities do not relate to any discipline, apart from a few national "innovation and cooperation projects" such as gender studies and a national effort to support the expansion of system biology, which were proposed by universities. Only indirectly does the national level influence disciplinary diversity or coordination, namely through the funding it agreed to provide for larger research consortia in the framework of the research council.

Otherwise, national policies may emerge from the attempts political actors undertake to coordinate subjects between the universities in the "cost-intensive" areas, which have been brought forward recently and are even set as a regular task in the draft law which foresees that such cost-intensive areas should be developed through coordinated planning between the institutions. Which areas these may be, where the limits are drawn, who defines cost-intensive and who decides what the coordination should look like, or who would be competent to decide that some subject should only be offered by one or two universities, all these questions would still have to be addressed. Given the impingement on university autonomy and the enormous error margins of top-down decisions in any area relating to scientific content development, the universities are obviously opposed to any such ideas of top down "portfolio-trimming" (*Portfoliobereinigung*) as politicians like to call it.

Generally, one may say that with respect to disciplines, institutions value diversity at institutional level and appreciate coordination only when it emerges from bottom-up perceptions of mutual benefit, while national priorities are indifferent to such disciplinary differentiation as long as they do not produce unwanted or unnecessary costs. If that is perceived to be the case, political brakes are put on such differentiation processes. One should add, however, that in Switzerland, any national coordination is most often circumvented by diverging cantonal interests which may support the presence of a particular subject area in one's own canton.

4.4 Funding Structures

Disciplinary diversity is not an issue or indicator in any funding arrangements at national or cantonal level. (Only the level of investment needed for different disciplines is taken into account in the definition of the institutional grant, through different multiplication factors for different subject areas.) The only national intervention that occurs at the moment which could be said to have some impact on differentiation or convergence of disciplines (unclear which) consists in national research funding incentives for larger institutional consortia or programmes, administered through the national research council (SNF), either in national research competence centres (NCCR), in national research programmes in areas in which some societal challenge has to be addressed (e.g. the effects of green genetic engineering), or in inter-institutional Doctoral programmes (Pro-Doc).

At institutional level, there are two important ways in which disciplinary diversity is addressed through funding mechanisms. Most decisively, disciplinary concerns define the orientation of new professorships which are the most long-term investments that universities can make. Based on assessments of the development and research potential in disciplines and interdisciplinary areas, departments or faculties define which areas best complement and develop existing strengths. The interplay between fields within the department or university is a key concern when defining the area in which the search for candidates will be pursued. Arguments for the area and its relation to future positioning of the department or faculty

will lead to decisions on where professorships will be granted and thus where the funding will be allocated (ex. Univ. of Zurich, ETH Zurich).

The second mechanism consists of strategic funds which may be allocated to overarching interdisciplinary research efforts. These may be expressed in new professorships, doctoral programmes, research positions or other infrastructural investments. But they aim to foster the interplay of disciplines to make the most stimulating use of the diversity of areas present at one institution.

4.5 Institutional Policy and Development

As introduced above, diversity of disciplines or programmes and the orchestration of an optimal interplay between the disciplines and programmes are two of the important strategic issues that institutional leadership has to address. At the University of Zurich, diversity of disciplines is a key dimension of its institutional profile. The mere coexistence of a maximum number of disciplines is already an asset in terms of attracting more students and researchers who are interested in combining also less omnipresent programmes. But in so far as diversity of disciplines is emphasised as an explicit institutional value, this means that some attention is also paid to the interplay and synergy between the disciplines and programmes. At the University of Zurich, for example, this is done through the above mentioned strategic programmes, through the definitions of the areas in which new professors will be hired, as well as through new programme definitions especially at Master level where an increasing level of diversity can be noted. One may observe in this context that the Bologna structures have allowed for increased attention to disciplinary diversity in the context of the development of new Master programmes.

In some institutional contexts (sometimes some departments within institutions) programme diversity is also taken care of through programme boards in which external partners convey the diverse needs of industry or other stakeholders.

4.6 Quality Assurance and Accreditation

External quality assurance processes are largely neutral with respect to disciplinary diversity since they take the institutional profile as a given point of departure. However, they do comply with the subject range limitations laid down by the national law.

Internal quality assurance systems have been expanded in recent years to include faculty or department-based evaluations which comment on scientific performance in addition to addressing strategic development perspectives. Here disciplinary or programme diversity often become an issue in so far as peers comment on the institutions' position with respect to developments in the respective fields. Diversity of disciplinary perspectives in terms of particular disciplinary combinations may be key in such evaluations. Diversity of disciplines is also addressed centrally in hiring procedures since the formulation of the field in which a vacant professorship is advertised is conceived in relation to its complementary nature to already existing fields and strengths at the institution. Interesting examples of such highly aware and proactive attitudes to disciplinary diversity can be found not just at the comprehensive universities but also at the more focussed ones where the limitation to a certain range of disciplines may be definitive of institutional profile but still has to adapt to changing developments in the field.

4.7 Stakeholder and Academic Values

There are clear potential tensions between the institutional and the systemic levels of diversity of disciplines and programmes: while diversity of disciplines and stimulated interplay between them within one institution may be a value from the point of view of the institution, political actors and public funding authorities tend to be interested in limiting such diversity to the system level and avoiding "duplication" of subject areas as much as possible. Often the tensions are exacerbated by different understandings of "duplication". For political actors and coordinators a subject is seen as duplication when programmes with the same names exist at two institutions. However, the content of the programmes may be very different since the institutions have looked for different complementary niches in these subject areas or even from different disciplines from the point of view of the scientific community. Indeed, institutions also have a vested interest in internal disciplinary differentiation since scientific research progresses through increasing specialisation and differentiation and the discovery of ever new interfaces between different scientific disciplines. In scientific progress, efficiency is an irrelevant concept since true innovation follows unpredictable routes, and may even be counterproductive as some of the most exciting new developments may occur at quite unexpected interfaces. Thus, values and attitudes with respect to diversity differ most strongly between the different levels in this regard.

One should also take note of the care taken by many institutions to facilitate communication across disciplinary boundaries. Such efforts are not taken

because of some abstract notion that internal horizontal communication is beautiful but rather because many academics and even more institutional leaders associate a higher probability of truly innovative work with the chance encounters between academics from different but translatable disciplinary backgrounds and seek to facilitate such encounters through new institutional instruments. In addition to the expectation of "creative discontinuities" through orchestrated diversity of disciplines, institutional leaders also expect a greater responsiveness to external social and business challenges if disciplines can be combined to solve these problems. Having some internal diversity is thus also of comparative advantage in this regard.

5. Conclusions

In Switzerland, institutional diversity is mainly associated with the diversity of institutional types and profiles and the diversity of programmes which they provide. Other values pertaining, for example, to the diversity of student and staff profile, are not as high on the agenda. Switzerland resembles three of the five countries in its relative indifference to diversity of ethnic, religious and even socio-economic background of students and staff, even though the latter aspect is targeted slightly more in the FH and PH institutions. Many Swiss institutions do care strongly about increasing the international proportion of their student body, at least at graduate level or in some highly visible "flagship" programmes. While there is only limited funding support for the internationalisation of student or staff profiles from the national or regional higher education authorities, the overall value system of the academics and many external stakeholders supports this orientation quite strongly, as does the national research funding. With respect to staff profile, there is a remarkable degree of attention and targeted measures to promote functional diversity. While research is being promoted and rewarded the most, other functions are rewarded in different degrees at various institutions. The respective emphases differ between the institutional types as well as between institutions of the same type. But the goal of promoting differentiated professorships or even career emphases is clearly recognisable across the boundaries of institutions and types.

But the key diversity concern which receives a greatest degree of public, political and institutional attention relates to the diversity of institutional types and profiles. First and foremost, the Swiss higher education system can be described as a formally differentiated system which sustains the distinction between institutional types through a wide portfolio of different measures. The three institutional types are differentiated through legally defined distinct core missions. These are also reflected in distinct funding regimes, and sustained even through adapted research funding instruments. The institutional types have largely distinct portfolios and programme orientations which are supported through distinct hiring and career advancement criteria. They even have different governance structures, including a different combination of governing or supervisory authorities. But perhaps, most decisively, the institutional types are also animated, in a majority of subject areas, by different sets of professional values motivating both academics and leaders of the two institutional types. It is this last aspect of different (though obviously overlapping) value systems that makes the system appear more stable than some other binary systems. At least with respect to the different orientation between the more academically oriented universities and the more professionally defined FH, the role of each institutional type seems to be not just upheld by legal definitions and prescriptions but also positively espoused by members of each institutional type. The fact that relatively distinct value systems were able to establish themselves has been made possible by the largely separate career tracks and backgrounds of at least these two institutional types. While academic staff at universities have been trained within that same academic system with an emphasis on advancement of theoretical knowledge and methodology and have been hired and promoted on the basis of their success therein, the FH academic staff are hired with a view to their ability to convey relevant professional expertise in their teaching. The latter are expected to continue close cooperation with, and orientation towards, the professional world so that positive identification with professional values is permanently fostered. In addition, a comparatively high percentage of professionally active part-time associated teachers contributes to ensuring an even more immediate link to professional practice.

This professional orientation has also been emphasised with the expansion of the FH mandate to include research which, in some other national systems, has contributed to making both types converge. While FH are no longer supposed to be purely teaching oriented institutions, their research mandate is supposed to be clearly distinct from that of the universities by being focused on applied and business-oriented and regionally relevant research.

Of course, the degree of distinctness and stability with which the institutional orientations can be upheld differs between the subject areas: in some, value systems or the nature of the research undertaken cannot be so easily separated out into different institutional approaches. Moreover, different disciplinary cultures have different kinds of links with the professional world

and not all of these sets of interrelations will provide separate niches for universities and FH to fill. To some extent the distinct programme and research portfolios between the two institutional types reflect the relative proximity to basic research or professional practice. In other areas, such as architecture and most engineering disciplines, both universities and FH have overlapping portfolios and have to sustain their distinctness through different programme orientations, both in teaching and in research. But the extent to which this is possible depends on the subject area. The distinction between basic and applied research which is used as an official distinguishing feature between the two institutional types is especially sector- and subject-dependent. In some areas, the life chain from basic research via applied research to business innovation and product development is long and separable into distinct phases with different functioning modes, and this allows for distinct roles for university researchers or FH researchers in different phases of this life chain and with different degrees of proximity to business goals. In others, basic and applied research, or academic research and private sector development are not as clearly separable in nature, so that more fluid forms of role distribution can be found. In these areas the roles of university academics from FH academics are also not as distinct.

The differences between the different subject areas and their respective functioning regimes are also a source of internal tensions, if not internal diversity, making the creation of unitary institutional profiles rather more difficult. For those FH which have been created through mergers of separate regional schools, such internal diversity may sometimes even be experienced as being internally divisive or at least as preventing overarching institutional "corporate" identity. The recently added research mandate may contribute further to dividing these institutions since some areas can be more easily oriented toward applied research than others, both from the point of view of their professional environments and from that of the existing staff profile. Furthermore, the internal diversity does not just comprise different disciplinary and professional cultures but even different governance structures, salary scales, funding regimes, professorial task differentiation and career tracks. In this context, one may conclude that institutional diversity in HE only begins with the institutional types but is even more developed beneath the institutional definitions. Clearly, the systemic positive value associated with the development of the FH as a distinct and coherent institutional type clashes with the often more challenging experience of internal diversity of these newly formed institutions.

Accordingly, as Lepori observes, the interrelation between the FH and the universities also works very differently in different subject domains. It may manifest itself as convergent behaviour in some subject areas, but is most often likely to bring distinct but complementary approaches to a given research or training subject in others. Therefore, the conclusion that the Swiss system is characterised by relative stability of institutional types has to be differentiated slightly since different degrees of such stability characterise the institutional approaches in the various subject areas.

In this context it should be emphasised that the diversity in teaching or research orientation does not necessarily have to be realised through entirely distinct categories of provision but could also be placed on a continuum of different options which are more interlaced than may be commonly assumed by politicians.

In contrast, the third institutional type, the Pedagogical Higher Education Institution (teacher training colleges) is less clearly distinguishable in its orientation and role than the other two types. While the PH are legally defined as being akin to the FH in orientation, their distinctness is relatively unclear in several respects. The subject area it covers also exists at universities, only distinguished by the clear professional orientation of the PH. Research in the area cannot be clearly categorised into basic and applied research. There is also no business sector which PH could cater for. Instead the professional world which they are oriented towards is also being targeted by the teaching and research which goes on at the universities. Moreover, while the staff structure and training background of PH staff is traditionally very distinct from university academic staff (teacher training colleges having belonged to further rather than higher education as recently as a decade ago) the recently hired academics have most often been trained at universities, are oriented towards educational sciences at universities, with career expectations that are also more often oriented toward similar choices, rights and rewards as university staff. Finally, the student clienteles between both institutional types are no longer separate: PH students usually have a general *matura*, like university students. All in all, it would appear that the PH are distinct institutional types for historical rather than for fundamental reasons. These historical reasons which related to the different staff and student profiles of both institutional types are losing their force while current practice is slowly building up new realities.

With regard to diversity of institutional types one can thus conclude that the system is relatively stable as far as the interrelation of universities and FH are concerned, but less settled with respect to the role of the PH. It is important to note that the stability of the system does not rely primarily on the legal distinctions but mainly on the value systems and career patterns which sustain the different types. Thus one may see relatively few

traces of academic drift in one institutional type but much more in another, even though both are defined as separate institutional categories by HE law.

The Swiss case is also interesting in its regional diversity. The regions play a strong, multiple and highly differentiated role. For some institutions (the PH) they are the only funding authority, apart from the possibility of additional national research grants. For others, such as the universities, regional authorities combine with national stakeholders to create a highly interlaced funding and supervisory system which leaves considerable leeway for the universities to pursue diverse programmes and emphases. Depending on the nature and extent of the regional support and the success with other national sources, some universities have developed into clearly internationally oriented institutions while others combine strong regional orientation with a few internationally oriented areas. But even the most internationally oriented universities still combine this orientation in their research and graduate training with a very regionally oriented undergraduate clientele. While the regional orientation is definitive for the mission and programme orientation of the FH and the PH, it is perhaps less developed and only implicit but nevertheless exists also for the universities. Thus the judgement that Switzerland is distributed into more international universities on the one hand and more regional FH and PH on the other (Larédo 2003) cannot really be confirmed in this sweeping form in our analysis. It applies to a large but not complete degree to the research realm but not to teaching. The "internationally" oriented universities are still strongly regionally embedded in their teaching orientation. Even the federal institutions which are supposed to address a national community in all respects cater primarily for their linguistic community in their undergraduate teaching offer, which in many other countries would be described as regions. It should be added that in some aspects, such as salary schemes and level of institutional support from the primary funding authority, regional differences between institutions may sometimes be larger than differences between institutional types.

In general, one may say that such regional orientation has a double effect on diversity. On the one hand it produces diverse institutional arrangements in terms of authority and governance structures, funding regimes and programme orientation, thus sustaining a high degree of diversity. On the other, it prevents competition to some extent since most higher education institutions have a separate target community, largely separate funding sources and a distinct range of stakeholder interests to cater for. The competition between institutions of the same sector is limited by the federal organisation of the country. Thus the strength of the region as HE authority and target community for many aspects of institutional provision does seem to undermine institutional profiling between institutions of the same type. To a very limited extent only (more limited than in many other systems) do institutions compete for the same sources, students or external partners. They only compete on the same national, or to varying degrees international, market in respect of research funds and academic staff. Hence the Swiss system is double in nature: it is characterised by very competition-oriented structures in the area of basic and parts of applied research where national or international grants are distributed on a competitive basis. In respect of teaching and training, however, their markets are more strongly governed by regional stakeholders than by national or international ones, and also more strongly pursuant of cooperative arrangements than of relative competitive advantage. Perhaps the most striking feature of the Swiss approach to institutional diversity consists in the fact that the above-described horizontal differentiation of the HE system is only weakly connotated as vertically differentiated. To the general public and society, the professionally oriented institutions and the whole idea of professional orientation are not inferior to the more purely academically oriented sector of the university sector. Large parts of society and many professional elites share a high regard for the traditional vocational and new professional education and practice in the country and see it as a stronghold of Swiss competitiveness. This attitude gives the professionally oriented institutions a true chance to be different but equal. Nevertheless, the funding structures are not yet fully supportive of such "parity of esteem": the advantage of offering smaller classes in the professionally oriented institutions is beginning to be undermined through pressures on unit costs while salary structures tend to still disadvantage FH professors.

Last but not least, one should point to the close cooperative network that accompanies institutional diversity in Switzerland. Generally, the cooperation between FH and universities as well as between PH and universities, and among institutions of the same type tends to be quite developed. With the pressures of the Bologna reforms on employability of university graduates and on the flexible access between both parts of the system, but also given the concerns of the new HE law's introduction of a common coordinated framework for all HE sectors, fears have developed, especially on the university side, as to their ability to retain their distinct institutional mandate as well as some of their privileges. But all in all, the complementarity between the different institutional types remains highly appreciated by members of both sectors and is seen as the foundation for many partnerships.

Chapter 7:

Institutional Diversity in Five European Higher Education Systems – Summary of Findings

1. Multiple Values of Diversity

Current higher education debates often lead us to believe that institutional diversity is generally regarded as beautiful, as a value in its own right. As this study has shown, the values of diversity clearly lie in the eye of the beholder, with different aspects of diversity being prioritised or ignored in different institutional or national contexts. Very few diversity values seem to be shared in the same manner across national or institutional boundaries. Even among the aspects of diversity which are most often positively valued, such as diversity of institutional profiles or functional differentiation of higher education institutions (and their staff profiles), the exact notion associated with this value, e.g. how the different types of institutions should be defined and promoted, or along which dimensions professorships should be differentiated, differ greatly from one national, regional and institutional context to the next.

The most visible example of this variety of values can be found with respect to the highly debated diversity of institutional types or profiles. In this study, diversity values were traced with respect to several aspects of institutional self-definition, namely:

1. the various clienteles or target communities, ranging from local to global, that institutional outputs (such as their research results, training offer, or graduates) cater to

2. the missions and functional emphases placed on different dimensions of higher education activities, i.e. research, teaching, research training of prospective academics or researchers in industry, government or society, continuing professional development, research or training contributions to business innovation, or addressing other societal challenges

3. the programme or subject profiles, creating institutional profiles with different mixes on a continuum from academic to professional orientation, as well as the different breadth of subject portfolios, ranging from comprehensive HEIs to highly specialised institutions

4. the staff profiles which define an institution, including a diversity of task distributions, salaries, academic, professional or personal backgrounds

5. the students' profiles which institutions seek to be defined by and which may vary with respect to their qualifications, geographical or national origins or other aspects of their background, with different modalities of admission (from non-selective to highly selective) contributing to institutional profiles

While most of these aspects of diversity of institutional types are valued positively in the five systems examined in this study, the degree of interest in promoting diversity with respect to these varies greatly between systems as well as within them, between and within institutions, and may also change significantly over time.

1.1 Diversity of institutional clienteles

Institutions define themselves, at least in part, through the clienteles or target communities which they serve. While all institutions will serve a mix of target groups, they usually prioritise some communities as part of their basic institutional orientations. These may be defined in terms of academic or professional communities, as is the case in the different institutional definitions of the formally differentiated systems of France, Norway or Switzerland, or they may be defined as part of institutional missions, often as a result of institutional tradition. Target communities may also be prioritised in terms of geographical scope for teaching or research conducted, reaching from the local to the global. The survey conducted as part of this study

revealed a wide distribution of priority target communities in the sample of 118 institutions that have answered the questionnaire.

The results show that, generally speaking, global targets are more often highlighted for research than for teaching, while regional and local targets are often more important for teaching than for research. Only the national community is ranked highest by the greatest proportion of institutions with respect to both functions (42 % or 44 % for research and teaching respectively). Conversely, very few institutions attribute lowest priority to national target groups, both in research and teaching. However, if one adds up the two scores for regional and local target groups, these would be the most frequently prioritised target group in teaching, though not in research.

Institutions are more divided with respect to the global target community. In research, one third of the institutions prioritise global targets while nearly another third attributes the lowest priority to the global target. When it comes to teaching, even fewer institutions target the global community: only one fifth; while a third gives lowest priority to the global community as a target for their teaching.

Priorities for the regional community are quite evenly distributed, with the lower priorities outweighing the higher ones for research and higher priorities outweighing lower ones for teaching (here two thirds give either the highest or second highest rank to the regional community). If one takes the regional and the local community together, two thirds of all institutions even attribute the highest priority to these communities for their teaching provision, while only one third attributes lowest priority to these two sets.

The European community is most often given second priority by most institutions (one third) as target community for research, but on average given remarkably low priority as a target for teaching (most often second lowest or medium priority). The Bologna aims of increased mobility within Europe cannot be recognised in these scores. Even in teaching the global orientation clearly outweighs the European one.

Hiding behind these summary distributions are significant national and institutional divergences. A noticeable divergence consists for example, in the considerably higher global orientation of English institutions in research (43 % rather than 34 %). In contrast, the French institutions showed lower global orientation in their research targets while the national level received higher scores. The Swiss results show a higher importance of global targets in research but also a significantly higher institutional divide in their research targets between universities predominantly targeting the global and European communities in their research with the *Universities of Applied Sciences (Fachhochschulen)*, more often catering for the regional and local communities and their needs. Norwegian and Slovak institutions are strongly focussed on the national level in research and teaching, with regional and local targets coming second and global ones only being prioritised highly by very few institutions in Norway or near to none in Slovakia.

The interviews at institutions reveal that with respect to their geographical orientation the dividing lines in institutional profiles are less clear cut than such summary data may suggest. Indeed, often, the degree of internal diversity may rival that of external diversity. Thus, institutions which have a dominance of global/international orientation in their research may still be deeply engaged with regional stakeholders. Moreover, some research may have a strong global orientation and still be very important for the region, with HE research actively targeting relevant business actors in the region (who may also be global players) at the same time. With increasing financial pressures, even the most globally oriented institutions place increasing weight on regional partners, as long as they can also retain their global orientation in such partnerships. Similarly, even the explicitly regionally oriented institutions, such as the English post-1992 universities, the FH in Switzerland, or the university colleges in Norway, which have been developed to cater to regional needs and clearly prioritise regional target groups (as the survey confirms), may still contain significant pockets of internationally oriented research and international partnerships. Therefore, one should not overemphasise the geographical orientation as providing clear delineations of institutional profiles. Institutions may be more easily distinguished through the high degree of globally oriented research or by their particularly high degree of responsiveness to regional needs than by any simple either/or constructions.

In general, the study shows an increasing dominance of international orientation associated with the growing importance of globally visible research for institutional recognition. Compared to the attention given to international comparisons of research performance, the incentives and public recognition to attend to regional needs appear relatively weak. At the same time, wherever strong institutional partnerships with the region exist in research and teaching, these seem to shield the institutions from feeling overly pressed to focus primarily on international comparisons and performance in international catalogues of institutional virtues (rankings, entries in ISI, citations, etc.).

1.2 Mission diversity and functional differentiation

Diversity of HE missions seems to be positively valued across all countries and institutions, in particular as they relate to functional variety, i.e. varying emphases on the different dimensions of HE activities, such as research, teaching, contributions to business innovation or continuing professional development. Indeed, functional differentiation within the overall HE sector as well as within individual higher education institutions has become a key concern of institutional steering, at system as well as at institutional level. However, the positive value associated with functional differentiation is not necessarily associated with promotion of diversity between institutions (external diversity), but can also be achieved through increased internal institutional diversity. At institutional level, functional diversity is often emphasised in declared missions or strategy documents. However, to ascertain how serious the declared priorities are, one has to look at the emphases set through staff hiring and promotion criteria and through resource allocation criteria on different dimensions of HE activities.

In its implementation, functional diversity is most often promoted through the functional differentiation of professorships and other academic staff positions, with varying emphases on teaching, research, innovation, continuing education and institutional administration. Our study shows that academic staff differentiation has become an important strategic concern of institutions across all five countries. Two thirds of all 118 responding institutions prioritise diversity in academic staff's relative inclinations to contribute to research, teaching, innovation or service to society. While some differentiation of staff profiles for different types of institutions may be laid down by law (as is the case in Norway, Slovakia and Switzerland), it may also be implemented, in so far as the national regulations allow, by way of differentiated hiring and promotion criteria, task descriptions and salaries.

Beneath the consensus that academic job descriptions should be differentiated, institutions diverge greatly, between countries as well as between institutions, with respect to the functional emphases they prioritise in policies and in practice.

Given the traditional missions of HEIs, it is hardly surprising to note that teaching is most often placed highest in all countries. Preparing school leavers to become highly skilled workers for academia, industry or society is found to be a vital function by 61 % of all institutions and an important one by another 31 %. Interestingly, the interviews revealed that in three countries (England, France and Switzerland), the research intensive institutions also showed increased attention to the quality of teaching, reporting new policies and approaches to promote the importance of teaching quality among academics, especially in terms of promotion or tenure criteria. While research remains the decisive performance scale, bad performance in teaching is increasingly judged to be a reason not to grant tenure or promotion. Such new policies are being introduced at institutional level and are seen to be necessary because of the increased pressures of the global academic labour market and the associated disposition of academics to concentrate on their international research performance.

The second most highly ranked HE function is applied research which is found to be vital at 52 % of institutions and important at another 40 %. It should be emphasised that, on average, applied research is valued significantly more highly than basic research. In the three countries in which formal distinctions define universities as a separate category from other higher education institutions (such as the university colleges in Norway, the FH in Switzerland, or the grandes écoles in France), the universities differ in that they tend to rank the basic research function only just more highly than applied research, while the non-university institutions limit their research activities to applied research. The research activities are more mixed in the English or Slovak institutions (which are only now beginning to undergo functional differentiation). The formally differentiated sectors thus seem to be more differentiated with respect to their research functions.

Beyond teaching and research, the emphases on other functions differ widely not only between institutions but also when comparing the national contexts in general. In England, France and the Swiss FH sector, for example, there is a significantly greater emphasis on business innovation. In England, this is not only reflected in institutions' sense of their missions but also in the higher values attributed to this function among academics: while academics in England value research by far (higher than teaching), engagement and success in innovation is rated far more highly than by the majority of their peers abroad. Likewise in hiring criteria, innovation performance is ranked as one the most important criteria by 23 % of English institutions, only 10 % fewer than the proportion for teaching. In Norway and Switzerland, most university colleges, universities of applied sciences or teacher training HEIs also regard continuing professional development as one of their vital functions.

Other divergences include the weight placed on research training for academia which is found to be a vital or important function by more than four

fifths of all responding institutions in England, France and Norway. Its importance is lower in Slovakia, and split among institutional types in Switzerland, where research training for academia is essentially a task of the universities, with cooperative arrangements between universities and other HE institutions taking care of research training.

In this context, one should take note of the clear correlation of some mission dimensions. For instance, as may be expected among those institutions which find basic research a vital function, one finds a large majority of institutions (75 %, i.e. 28 % more than the average) which also identify research training for academia as a vital part of their mission; similarly applied research (64 %, 10 % above the average) and research training for industry are linked (41 % find this vital, i.e. 15 % above the average). Conversely, there seems to be a negative correlation between finding basic research vital and finding continuing professional development (CPD) also as a vital dimension of the mission (here the score of 23 % lies 14 % below the average).

A strong correlation can also be found between a high interest in continuing education on the one hand and applied research and business innovation on the other. Institutions that see both teaching and CPD as vital functions more often find applied research vital (76 %, average + 24 %) or contribution to business innovation (52 %, average + 21 %) or addressing other societal challenges (50 %, average + 23 %). These institutions also find evidence of innovative approaches to teaching more often decisive for promotion than others (average + 28 % = 61 %). At these institutions, teaching is also more often strongly valued by colleagues (70 % vs. 56 % average). However, surprisingly, even though CPD was found a vital part of the institutional mission, it is still only valued strongly by 22 % of the academics at the same institutions.

As a last highlight, the divergent values attributed to the elite function of higher education in different national contexts and institutions should be mentioned. In Norway, the mission to prepare a societal elite for leadership roles is not found vital by any institution and found to be important by only 9 %. England also shows low ratings for this dimension of higher education provision: only 8 % of all responding institutions find this goal vital, and 24 % find it important. In contrast, in France, Slovakia, and Switzerland, preparing an elite for leadership roles is seen to be a vital function at 25 %, 22 % and 19 % respectively, or an important one by another 58 %, 56 % or 52 % of responding institutions. While these judgements reflect, to some degree, the different HE participation rates in the five countries the HE participation rates do not differ as much as the cultural emphasis of educating a societal elite for leadership roles is espoused or not, as the divergent results between France and Norway show.

Two key developments with respect to functional diversity at HEIs should be underlined:

- The increasing importance of the less traditionally embedded functions of HE: HE representatives believe that two activities will continue to grow in importance in the next five years: continuing professional development (80 %) and contribution to business innovation (74 %). 68 % also believe addressing other societal challenges will become more important as a mission for higher education institutions. One should add that, while the majority of institutions believe that basic research will not increase in importance, 61% believe applied research will gain further in importance (although it is already found to be more important than basic research by a majority of institutions).
- The wide-spread perception of the increasing importance of research for the competitiveness of an institution, and the measures needed to strengthen this function, were expressed as key concerns in all countries, and this was especially evident during the interviews at HE institutions.

In Slovakia, the recent introduction of three institutional types, which are hierarchically differentiated around their research intensity, has made research performance the key concern for most institutions. This has affected not only the hiring criteria and internal resource allocation but also the salaries which are becoming more differentiated.

In France, the *grandes écoles* are expanding their research capacity to compete in international rankings and to contribute to the global demands of knowledge societies.

In England, sustaining or expanding internationally competitive research capacity is a major concern of all institutions, since such research successes are decisive not only for the research-based institutional grant but also for the reputation of the institution in the eyes of potential students or staff. Even those institutions that prioritise teaching a diverse student body, widening and broadening access and offering programmes that respond closely to the needs of professional practice, research successes and visibility, at least in some chosen areas, are important in order to attract qualified students and staff.

In Norway, research performance determines the chances of university colleges to change their status

to become a university or to gain the accreditation of Doctoral programmes. Universities expand their internationally competitive research in order to obtain national centres of excellence awards, which help their market position with potential staff or students.

In Switzerland, internationally competitive research is explicitly the task of universities while the FH should limit themselves to applied research that is relevant for regional development and professional practice. But both types of research are clearly associated with competitiveness and are equally valued.

Hence one may conclude that the expansion of the research capacity of HEIs plays a differentiating role in all five national contexts, although in very different ways. In Norway and Switzerland, it is associated with horizontal differentiation between institutional types. In England and Slovakia, it has become, or is becoming, the key dimension of vertical differentiation among institutions (England) or institutional types (Slovakia). In France, it has the potential of becoming a new differentiating principle, cutting across the old divide between the elite professional sector and the freely accessible, largely egalitarian university sector. At the same time, one should note that internationally oriented research often exerts a clear homogenising effect on institutional profiles. If international research is the most decisive determinant of funding flows, as is the case in England, such a mainstreaming effect will be stronger than in national contexts such as Switzerland, where multiple types of research funding sources exist to sustain research with different orientations from international and basic to regionally oriented and applied research.

1.3 Internal mission diversity: academic communities cutting across institutional boundaries

The institutional missions and the relative weights they attribute to different dimensions of HE activities should not be seen as monolithic or even coherent institutional attitudes within all institutions. While some institutions may reveal a remarkable consistency of mission across different parts of the institution, the majority of institutions, especially the larger ones, are characterised by a wide range of mission mixes internally. Such differences may be found between faculties or even between departments or institutes within the same faculty. Indeed, a relative sense of mission coherence tends to run along subject area lines rather than institutional ones. As a main source of internal diversity, subject areas have distinct value systems, and differ in their relation to the professional world and its practices, including the different values linked to research and product development. All of these determine the network of partnerships and stakeholders within which academics situate their own activities – teaching, training and research – and the weights they attribute to each in their own measures of professional achievement and success.

Indeed, the value systems of disciplinary or wider subject communities seem to exert a stronger sense of mission coherence than those that exist within one institution. Accordingly, our questionnaire results confirmed previous findings: that academics identify much more strongly with the scientific community of their research fields (63 %) or even the professional community linked to their field or disciplines (61 %) than with their institution (with which only 44 % identify strongly). Looking at institutional boundaries, it is the department or institute with which academics identify strongly (69 %) rather than the institution at large. Value systems that are developed within these departmental boundaries are therefore likely to orient behaviour more strongly than those that are promoted by institutional policies should the two diverge.

Interestingly, identification scores differ considerably depending on the mission mix. If one looks at the identification scores of those institutions which have answered that basic research is a vital part of their mission, the identification with the scientific community of their research field is even higher (80 %) than average. In contrast, institutions that show interest in innovative and diverse teaching approaches by including continuing education as a vital part of their mission while attributing significantly less importance to basic research reveal different identification patterns: while the department receives the same strong identification score, academics of these institutions identify less often with the scientific community (56 %) than with the institution (61 %).[1] This does not mean, of course, that there may not be strong tensions between institutional mission and academic values. Indeed, the high value attributed to continuing education at institutional level is not mirrored in the value attributed to continuing education engagement among academics, for example.

It has been frequently asserted in the theoretical and historical literature on institutional diversity that academic values often have a mainstreaming (converging) effect in their overwhelming emphasis on competitive internationally oriented research. Our empirical data shows that academic values are indeed often biased toward the research function, and

[1] Please note that these are not mutually exclusive groups but that there may be an overlap between both.

international research in particular, but that these values are not quite as unvaried, monolithic and stable as is often suggested. It is certainly too simple to juxtapose the diversified outer world with the traditionalist academic value system. Interviews at institutions, especially in England, France and Switzerland, have revealed a broadening range and distribution of values among academics. How broad this range is and how the relative weights are distributed on different dimensions of HE activities depends on the disciplinary or wider subject community, which cuts across institutional boundaries, introducing an irreducible internal diversity of values, including those that relate to diversity itself.

But whatever the diverse value systems are within each institution, they have clearly been subject to recent shifts of emphases, as many interviewees have noted. However, the broader scope of possible emphasis which has been noted by many HE representatives is often not reflected yet in the academic career structures and peer review systems which govern the system at large so that conservative forces (in the sense of a concentration on a particular kind of research as being of superior value to all others) still gain the upper hand, acting as counter-forces to other diversity policies which may exist at institutional or national level.

England and Switzerland may serve as an interesting contrast in this respect. In both countries we have found ample evidence of a diverse range of functional emphases and value systems within institutions. But the two countries differ with respect to their career markets. In England, one common career structure seems to govern the whole country with mobility between institutions, irrespective of their different missions. In contrast, the Swiss academic market reflects the dual system. There may be substantial overlaps in some subject areas, but the different institutional types with their respective mission ranges attach different values to different aspects of academic and professional backgrounds, most obviously diverging in the fact that considerable professional experience is required as a necessary hiring criterion for the professionally oriented universities of applied sciences (FH) while the degree of peer-reviewed research publications is the most decisive criterion for the universities. Thus the values of business innovation and continuing professional development are also explicitly rewarded at the FH where most of the academic staff would have professional orientations, contacts and interests, to add to their teaching and research interests. Fostering such engagement at the universities would need additional incentives since the traditional career pattern is dominated by assessment and rewards for research performance, and some more limited demands on teaching aptitude and experience. Hence in Switzerland, functional diversity is promoted at system level through the different definitions of the respective types of missions of the institutional types and the corresponding career tracks. While there is staff career mobility between both sectors, the weights are clearly set differently. Within each type some diversity is possible within each institution and is even promoted through institutional policies, but a minimum degree of diversity is anchored at system level. In England, academic value systems may be more diverse as is commonly assumed and have certainly undergone some changes in the last decade, including the increased interest and recognition of contributing to business innovation through relevant research and teaching orientation. But funding and career structures are still dominated largely by the recognition of a particular type of research performance, leaving less room for excellence in other functions to be rewarded. This means that values which would support engagement in other realms of activities are outweighed by the opportunities found in the dominant funding and career reward system.

Thus academic values and reward structures are clearly interrelated, as are their effects on functional diversity within higher education systems and institutions. Given that most professional communities, including academic ones, will have a set of multiple even conflicting values guiding their professional behaviour, those values which are supported by financial and prestige incentives will be strengthened and gain the upper hand over those that result from pure idealism.

1.4 Programme and Subject Diversity

A key feature of institutional profiles and diversity lies in the combination and orientation of programmes. The latter are not primarily the results of conscious institutional attempts to define unique profiles but result, more immediately, from the increasing specialisation of science (Birnbaum). It is the progress of science and scholarship which makes diversity of disciplines and programmes a key value at the level of higher education institutions. However, as the interviews conducted in this study revealed, such science-led diversification is also met with strategies of containment, setting emphases, limits and conditions of diversification.

To start with the most frequently mentioned example, programme diversity has become an issue in the context of the Bologna reforms. For most continental European institutions at which a separate Master level presented a new opportunity for institutional

profiling, the introduction of Master programmes had the effect of considerable programme diversification and multiplication, by way of increasingly specialised programme orientations. To contain costs, ensure sufficient student numbers and avoid fragmentation, some institutions have imposed limits or fostered efforts to make use of programme overlaps, opting thus for a certain degree of convergence again. In addition, some national level actors (such as the Swiss rectors' conference, the Slovak accreditation agency or the French and Norwegian quality assurance agencies) have set minimum thresholds to prevent exceeding proliferation and over-specialisation.

In the context of the Bologna reforms, programmes have also undergone further diversification through the inclusion of interdisciplinary options or new minors, even though such developments did not go as far as many original reformers had hoped for (as was most recently observed again by the student representatives, in ESU's *Bologna through Student Eyes*). Thus considerable institutional attention has been invested in defining conditions for new programme progression paths leading from the Bachelor in one subject to a Master level programme in a cognate discipline.

In general, one should note that programme diversity presents the most direct response of institutions to the increasing diversification of needs, clienteles and stakeholders. Programme diversity contributes as much to the external diversity of institutions, in their quest for separate profiles and subject niches, as it does to the internal diversity of institutions. Such internal diversity is seen by many institutions as an opportunity for development of unique institutional characteristics as well as a challenge in so much as it calls for cost containment and attempts to seek synergies between programmes. In all five systems, programme diversity is most often valued positively by national-level actors on condition that it is linked to minimal conditions of efficiency as well as to efforts to maximise complementarity between different cooperating institutions. Especially for advanced level specialisations and research training, the pressures to seek cooperative programme arrangements are rising, animated by concerns of critical mass (e.g. in the area of "small" subjects) or cost efficiency.

At national level, programme diversity is pursued in the dual systems of Norway and Switzerland through the quest for a certain balance of academically oriented and professionally oriented programmes. However, these boundaries are unclear and are blurred further with the increasing emphasis on employability and employer needs at universities, moving the latter more in the direction of the more professionally oriented higher education institutions. As a result a certain programme convergence can be noted in this context. At the same time some programme diversification is encouraged in the non-university sector by allowing university colleges or *Fachhochschulen* to establish or expand their Master level or (as is the case in Norway) even Doctoral level provision. While these developments are sometimes seen as another form of convergence, because of the increasing emphasis which FH are placing on research, the programme orientation and contents seem sufficiently different and complementary to the university sector's academic orientation, to justify interpreting this development as a programme diversification effect, even though the diversity in terms of institutional profiles may have decreased, as is the case in Norway.

In France, programme diversification to address new needs has often involved the introduction of new types of programmes or even units. Thus, the introduction of the IUT as separate autonomous units within universities were meant to address the industry need of an intermediate qualification level for technically skilled workers and are now increasingly used by students as an alternative path into the selective and elite part of the HE system and by universities as a way to profile themselves on the market of selective programmes. Similarly, the introduction of the *licences professionnelles* caters for a part of the expanding student population and the need of employer-based higher education courses. Since the Bologna degree structures have not been implemented all over the French HE system, no effect of an overall reduction of the number of different programmes types (implying some degree of formal convergence) could be noted. Only at the Master level, which was also adopted by the *écoles*, programme structures may be said to converge, while programme orientations serve as a tool for institutional profiling for both universities and *écoles*.

In the integrated system of England, the concern with responsiveness to professional needs is reflected in recent national policy emphasis on programmes that cater more closely to employer needs or are co-designed and co-financed by employers, as well as in the foundation degrees which were designed to respond to a labour market need for intermediate technical qualifications. Other efforts to increase programme diversity in this respect include the introduction of sector skills councils and other coordinating councils.

Programme diversity and institutional programme profiles are usually associated with the overall development of institutional subject portfolios and subject distribution over different institutions. Diversity of institutional profiles in terms of subject portfolios

has been one of the key concerns at system level, especially amongst politicians and policy makers, in all continental European countries included in this study.

In Slovakia, there has been a tradition of defining different institutional profiles mainly through subject area portfolios, before 1989 up until the end of the 90s. While the single-subject area universities (such as the Slovak Agricultural or Medical University) predate 1989 and may be seen as part of a Soviet heritage of avoiding the potentially more easily rebellious comprehensive universities, the tradition of institutional specialisations was continued in the expansion of the HE sector in the 90s with the creation of specialised technical universities in different regions of the country. However, this positive value attribution seems to have disappeared in recent years, giving way to an opposite trend of subject area homogenisation. While the national level has recently shown little interest in subject profiles of the institutions, many of the formerly more specialised institutions have chosen to move toward a more comprehensive portfolio in recent years, to respond to student demand (which was concentrated in the social sciences and business areas) and thus to expand student intake and thereby increase institutional budgets.

In France, where the history (until 1960) of separate faculties and later of faculty-group-based universities had favoured specialisation, such institutional specialisation is no longer positively valued by national actors and institutional leaders. Increasingly the latter are concerned about fragmentation and insufficient possibilities of reaching across disciplinary boundaries, both of which are seen as competitive disadvantages and as hindrances to scientific progress and to optimal teaching and training offers. National and institutional policies are now concentrating on new cooperative structures (even mergers) to overcome the boundaries of institutional specialisations and create larger institutional structures which allow for greater critical mass and for more flexible exchange between disciplines. Thus values have shifted significantly from favouring external to preferring internal diversity of subject distribution.

In Norway and Switzerland, subject portfolios are part of the definitive features of the universities of applied sciences or university colleges, which, in general terms, are even laid down in the respective laws. But beyond this basic link between institutional types and subject portfolios, additional concerns with distribution of subjects occur at national level. As small countries, there is a strong political desire to avoid double offer. Often cooperative arrangements, such as common courses or joint structures (graduate schools, competence centres, centres of excellence) are promoted to ensure cost efficiency or "economies of scale".

In Switzerland, subject areas with particularly costly research infrastructures are increasingly leading national politicians to demand concentration of such subject areas at one or only few places, calling for institutional diversity of subject choices in this respect. To resist any possible interventionist policies, institutional leaders and academics point to the importance of institutional autonomy, to the abundance of bottom-up cooperative arrangements, and to the importance of safeguarding a certain range of disciplines within institutions (with separate research niches) since they have to ensure the relevant course offer and allow for sufficient mutual stimulation between cognate disciplines. This study reveals considerable attention to addressing subject diversity as part of institutional policies and strategic funding priorities, in particular in so far as interdisciplinary exchange in courses and research is concerned.

England presents the only HE system included in this study which does not address subject portfolio questions at national level. Subject diversity is seen to lie exclusively within the autonomy of the institutions, with a largely neutral value attached to the issue by any national level actors. Perhaps the role of medicine may be singled out as somewhat of an exception to this rule, since the large costs incurred by medical faculties and their training and research facilities make cooperative arrangements between institutions increasingly desirable, also from the point of view of national funding agencies. Recent funding calls reflect this concern.

1.5 Staff Diversity

In so far as it relates to functional diversity, staff diversity is valued highly by a majority of institutions. On average, 66 % of all institutions say they prioritise diversity with respect to the relative inclinations of their academics to engage in research, teaching, business innovation or service to society. Only in Norway and Slovakia, considerably fewer institutions (namely 50 % in both cases) consider this a priority.

Such functional staff diversity is reflected in the differentiated task distribution of professorships, which exist at two thirds of all institutions and is most often implemented informally. With respect to the tasks and relative work load regarding research or teaching, 45 % of institutions have chosen formal differentiation. This possibility exists more often in

Switzerland, where it is used more often with respect to differentiated teaching loads, and in Norway, where it is used more often with respect to differentiated research loads. In France, such differentiation is being debated currently as part of the increased institutional autonomy offering a new opportunity of institutional differentiation. (Until now, institutions have not been able to decide autonomously on the task distribution of the academic staff which was nationally regulated.) In Slovakia, formal functional differentiation is not reported, although it may be introduced in the wake of the new institutional typology.

The other most obvious aspect of staff diversity which is valued strongly relates to the diversity of academic and professional backgrounds, which is a priority for 81 % of institutions. While this may appear self-evident, interviews revealed considerable effort on the part of institutions to actually address and exploit such diversity with targeted measures aimed at exploiting the innovative potential which such diversity may offer. Rather than accepting the coexistence of different academic and professional backgrounds, many institutions reserve strategic funds and special support for intra-institutional cooperation projects between academics from different disciplinary backgrounds. Interdisciplinarity, as one form of pro-active approach to diversity of academic backgrounds, has become key in institutional strategy and management, as it is seen to be linked to innovation in science or scholarship as well as in study courses.

Gender diversity is not so frequently prioritised by institutions, only 40 % on average, though much more often at Swiss institutions where the proportion of female academic staff is still comparatively low.

Other aspects of staff diversity are only rarely prioritised: Diversity of national backgrounds is a priority for only 15 % of all institutions (higher in England). Ethnic diversity is a priority for only 13 % institutions (most of which are English), and religious diversity at only 6 % of institutions. Many institutions seem to have non-discrimination policies, but an active attention to such aspects of diversity seems to be the exception rather than the rule.

1.6 Student Diversity

While nearly half of the institutions prioritise diversity of entry qualifications, other aspects of student diversity do not receive much prioritised attention. With the exception of some institutions in England and France which seem to define their profile strongly through their student profile, most institutions take student diversity as an imposed reality they cannot influence but which may warrant some special services if required.

The relative indifference to diversity of the student body, at least on the average, which contrasts sharply with the highly visible and often charged "institutional diversity" debates and policies in the USA, reflects the limited leeway which institutions have in many parts of continental Europe in this respect. While other aspects of institutional autonomy have increased considerably in all of the continental countries visited, student selection is still the realm where government regulation plays a decisive role in the majority of continental European systems. In those systems or parts of systems where institutions cannot select their students since HE admission is nationally regulated (the university sector in France, Norway and Switzerland) or even centrally administered (Norway), there is of course no institutional steering or definitional capacity possible. Hence, missions or strategic documents usually do not even mention student profiles as part of the institutional identity. However, in the dual systems of Norway and Switzerland, student qualifications are still important for institutional diversity in so far as national regulations define the sector boundaries through different student qualifications. (The *Fachhochschulen* generally cater for students with a professional *Matura* while universities cater to those with a general *Matura* thus presupposing different schooling tracks.) Beyond these, no additional selection requirements are set for access to first degree studies.

With respect to selecting students, institutional autonomy exists only in England and at the *écoles* in France, whose very profile is based to a large extent on their selectiveness. Here, tuition fees can also be set freely up to a certain threshold. Moreover, institutional budgets are determined to a significant degree by retention rates so that institutions have an interest in looking for and after the most qualified students. Thus there is a greater institutional interest in limiting student qualification diversity and in looking for the market segment which matches student qualifications with reputation. In systems with varying degrees of selectivity, the overall system effect is mostly one of vertical differentiation among institutions catering to different student qualification profiles, increasing external diversity more than internal diversity in terms of student qualifications.

Apart from student qualifications, other aspects are prioritised much less often. Diversity with respect to gender or socio-economic backgrounds receives institutional attention at only around 30 % of all institutions. Targeted incentives clearly make a

difference, as the English case shows. With respect to socio-economic diversity of the student body, the score of English institutions is considerably higher, including the use of data for strategic decisions, reflecting the government widening participation policy and its concurrent funding and reporting incentives. Diversity of the student body in terms of socio-economic backgrounds, i.e. the inclusion of more students from educationally disadvantaged backgrounds, is an explicit aim of national and many institutional policies, producing an overall effect of external as well as internal diversity in this respect. Especially in some post-1992 institutions which can build on a tradition of having given access to students from diverse backgrounds, institutional policies and a wide array of support services pay considerable attention to catering to the needs of their diverse student clienteles. Examples range from counselling and financial support for students with more precarious financial or social conditions or for students from non-traditional educational backgrounds to help them succeed in their studies, to respecting religious diversity by accommodating Islamic holidays if a large proportion of students come from Islamic immigrant backgrounds. The Russell Group institutions are also increasingly under pressure to be proactively engaged in widening participation. On the whole, in England, institutional autonomy and financial incentives combine to produce more explicit institutional diversity policies and targeted measures to address diversity of student backgrounds than can be observed in the other four countries.

Diversity of national backgrounds is seen as a value which deserves priority attention at only 20 % of all responding institutions. One should point out in this context, that the modalities of admission and funding for international students differ from those used for home students in all countries, most decisively in England, where the absence of tuition fee thresholds for non-EU international students makes this group particularly attractive. Therefore, at many English institutions (no matter which mission group) privileged attention is paid to this target group. In the other countries, financial advantages of attracting international students do not exist. There may even be fewer resources provided for international students. Again, incentives directly influence institutional behaviour in this respect. The survey results clearly reflect the institutional responses to these conditions. While in England 32 % of institutions find diversity of national backgrounds a priority and 61 % institutions have a policy to address such diversity, international student composition is prioritised considerably less often in the other four countries.

As may be expected, significant differences exist not only between national systems but also between individual institutions. The interviews revealed that such differences of orientation also exist within each institution, with some faculties or departments being explicitly internationally oriented and others more regional or national in their recruitment and programme orientation.

The diversity of learning modes, presence vs. distance learning or full-time vs. part time, are prioritised significantly more often by French HEIs, the university colleges in Norway, as well as the Swiss *Fachhochschulen*, and, albeit to a lesser extent, by some of the post-1992 institutions in England. These institutional attitudes reflect a state-supported expectation that access of mature students, lifelong learning and continuing education constitute essential ingredients of institutional missions, support through flexible regulations and targeted support mechanisms, as well as additional regional support (France) or other incentives. On average, less than a quarter of all institutions say they have set priorities in this area.

One may thus conclude that, in general, diversity of student profiles in terms of student backgrounds is not a paramount institutional policy issue in the continental European countries included in this study. It is only when looking at learning modes and full/part-time status, that some institutional attention could be identified. Only in England has student diversity become a feature which contributes to defining institutional profiles, primarily in terms of diversity of student qualifications, and in some cases of socio-economic and ethnic backgrounds.

In the other four countries, institutions only have sufficient autonomy to address student diversity (e.g. through targeted student selection, admission criteria and support processes) at the Master and Doctoral level. Here one can indeed observe increased institutional attention to student backgrounds, usually targeting appropriate qualification standards and some international diversity (see EUA 2009 Master study).

Representatives at institutions that did show evidence of proactively addressing the diversity of their student body emphasised that diversity should not be treated as a value in itself but that student diversity can only contribute to producing a stimulating work environment if the diverse attitudes, backgrounds, learning approaches and qualifications are addressed and orchestrated in the institutional provision, e.g. through team composition, adaptation of contents and services. Otherwise, such diversity could potentially cause more friction and even make learning environments less effective, rather than add value.

2. Forces of Diversification and Convergence

Having traced the multiplicity and different emphases placed on diversity values at national and institutional levels, a closer look at the realisation of such values will reveal some of the inconsistencies which result from conflicting values and forces linked to different actors in a system.

At institutional level, the inconsistencies derive from the internal diversity of value systems which we have described above, as well as from the sometimes uneasy coexistence of institutional and system-level forces. To add to this complexity, the sum of individual academics' actions determines to a large extent the overall course of action of each institution.

At system level, the inconsistencies (or mutual reinforcements, as the case may be) result, first of all, from the diverging (or converging) attitudes of different national or regional authorities, funding and quality agencies or other important actors affecting higher education. These attitudes and actions are guided by a wide array of different aims and values, of which institutional diversity is only one of several (potentially conflicting) values. To give an example, international competitiveness of higher education, which is a key aim of all five countries, may call for concentrated support of particular types or profiles of HE institutions, thus promoting convergence rather than divergence, even though there may be an explicit institutional diversity policy within the same system.

A second reason for such inconsistencies lies in the fact that only some national actors actually care about the overall HE system, its institutional profiles and their diversity while other influential national actors have a narrower focus which may be indifferent to the question of institutional diversity altogether and may thus easily undermine it. Examples would be the research funding agencies which tend to address individuals or groups of individuals and their optimal environments, judging mostly on criteria of competitive position and project merit. These agencies have no particular reason to worry about the effects their funding instruments may have on institutional diversity. However, the sum of their grant allocations will influence institutional profiles considerably.

To describe the forces of diversification or convergence thus means tracing the interrelationships between these different influencing actors and to identify the net effect which derives from the sum of these forces.

2.1 The Interplay of Forces of Diversification or Convergence at Institutional Level

At a majority of institutions which have been examined in this study, the institutional reward structures do not reflect declared institutional missions with their stated emphases on particular dimensions of HE activity.

This is particularly the case with respect to the internal resource allocation. The indicators of teaching, research or innovation, which weigh strongly in the internal resource allocation, only reflected the relative importance attributed to these dimensions in the institution's declared mission to a very limited extent. For instance, if one takes those institutions that declare business innovation to be a vital part of their mission, one will note that they do not use innovation indicators more often than other institutions in their resource allocation, and only 3 % weigh these indicators strongly. Likewise institutions which declare teaching and continuing professional development a vital part of their mission, thus implying attention to diverse clienteles, teaching methodologies and staff competences skills, do not use teaching indicators any more often.

Similarly, there is only a very mild reflection of mission prorities in hiring and promotion criteria. In fact, hiring and promotion criteria are even more strongly research-dominated than resource allocation. While teaching seemed to have been weighted most strongly in the institutional missions, research performance criteria are ranked most highly both in hiring (by 60 % of all institutions) and promotion (50 %-60 % institutions, depending on the exact indicator used). Considerably fewer institutions attribute the highest rank to teaching performance in their hiring criteria (only 35 %-42 %). Among the group of institutions which attribute the highest importance to teaching in their mission, still only 56 % rank teaching most highly in their hiring (compared with 65 % rating research performance most highly). Rewards, however, do reflect mission emphases more clearly in promotion criteria. Thus, evidence of innovative teaching approaches is much more often decisive at the above-mentioned institutions (at 61 % of these institutions compared with 33 % average), mirroring also the higher value attributed to teaching successes by academics at these institutions (which is found to be valued strongly at 70 % of these institutions).

It should be noted that the reward structures are generally more traditional, reflecting less of a mission spread than would be expected from the survey results on the declared mission priorities. While continuing professional development and contribution to

business innovation are found to be vital at around a third of the institutions, successes in these domains are only found to be decisive for promotion in less than 8 % of all responding institutions and given highest importance in hiring by only 16 % of institutions. Hence these "newer" mission dimensions appear slightly more marginal in the reward structures. From the perspective of reward structures, continuing professional development, social engagement and engagement in institutional management are clearly the most marginal dimensions of HE activities.

Perhaps the greatest discrepancy between declared mission mixes and implemented reward structures can be detected with regard to the low rewards given to teaching experience and achievements which only receive comparatively low recognition in hiring and promotion criteria, reflecting the frequently noted dominance of research values. Indeed, most of the institutions which attribute a relatively lower importance to research in their mission still find research performance decisive as a hiring criterion, considerably more so than teaching experience. (One may note here that this is noticeably more often the case in England and Norway than in the other countries.) Only in Switzerland does one find that the dominance of teaching in the mission of some institutions is also more often reflected in hiring and promotion criteria.

There are two reasons that institutions reward research more strongly than teaching in their hiring and promotion criteria. Firstly, as mentioned in many recent HE articles on institutional convergence, the research dominance in academic value systems, which this survey also confirmed, is being strengthened further by the increasing influence of national or international academic reputational markets (Hazelkorn 2007, van Vught 2008) as well as of international reference points in career advancement. A second reason may be found in the relative measurability and comparability of research performance indicators (such as citations factors), which contrasts sharply with the difficulties which all HEIs face in identifying and measuring teaching performance and success, or other dimensions of HE performance.[2]

While research performance is clearly the most measurable and widely promoted dimension of higher education, some exceptions can still be found to this dominance, with some institutions as well as some national agencies having developed targeted measures to promote the assessment and reward of quality in teaching. Thus, the survey results show that innovative teaching approaches are found to be a decisive promotion criterion by 50 % of English institutions, and teaching in general is found to be decisive for promotion at 56 % Swiss HEIs. Moreover, during the site visits, representatives from institutions in all countries mentioned policies to promote and reward quality in teaching more than in the past in order to counterbalance nationally and internationally determined career structures and the rising degree of international competition, both of which are forces that are strengthening the emphasis on research quality and output.

2.2 The Interplay of Forces of Diversification or Convergence at National Level

To explain the interplay of conflicting forces which may be found at national level, one should emphasise, as mentioned above, that only some of the national actors are actually concerned by the combined effect of their actions on institutions in their profiling processes. Many important national actors such as research funding agencies or quality assurance or accreditation agencies, may actually target individuals, groups or programmes, rather than institutions, and may not even consider or study the effects of their decisions, grants or awards on institutional diversity at all. The only national agencies which will be explicitly concerned by the effects of policies and funding instruments on institutions and their position in the system are the ministries and their funding authorities, or the representative organisations of HEIs at national level, i.e. the rectors' conferences. Hence, significant effects at system level may occur where research funding is granted by independent funding agencies, and is of course vital to the country's competitiveness, which may implicitly counteract national diversity policies even if unintended. Moreover, the national ministry or funding authority may have a diversity policy which coexists with other policy aims, some of which are associated with more attractive funding incentives, so that diversity pales in comparison.

England is a good case in point. While the ministry formulated an explicit diversity policy in its last White Paper and has developed some funding instruments to support it, its aim to enhance national competitiveness through strengthened and more concentrated research funding is so much stronger in scope and impact on the institutions that the relatively weak funding support which has been put in place for widening participation and teaching awards cannot counterbalance these effects, let alone reshape institutional behaviour. In

[2] This is the main raison d'être of the multi-dimensional HE classification project which is based on the hope that increasing visibility of other dimensions of HE performance would make these more publicly recognised and valued than has been the case. Cf. Mapping Diversity in Higher Education (2008).

addition, the national research councils use critical mass and good research track records as criteria for awarding research grants (as most research councils would) so that research will be strengthened further, causing accumulated effects. Any institution would thus gain a great deal more by investing in its best research niches rather than in focussing too much on alternative dimensions of missions.

In general, national grant schemes show limited awareness of the need to promote institutional missions in their choice of indicators, i.e. indicators fit to specific institutional mission mixes, even in those countries where such diversity is declared as a political aim. This is not just the case for research councils which naturally have to put quality and research performance criteria above all else, but also applies to ministries or national HE institutional funding agencies. With the exception of the different indicators used for the institutional types in the dual sector system, none of these agencies offer any options of applying different indicator mixes for different profiles of institutions, so as to respond to different institutional profiles and thus promote institutional mission diversity.

It should also be emphasised that, while support for teaching still determines the bulk of the institutional grants in all five countries, such grants are mostly attributed on the basis of numbers (students or graduates) whereas research activities of institutions are often (rightly or wrongly) associated with quality through a wide array of recognised performance data. In the overall competition for students, staff, third-party funding support and sponsoring, institutions will thus have an acute interest in investing in those activities that will further their reputation in the eyes of these groups. Hence, as long as teaching successes are not as visible, measurable and rankable, they will not be able to contribute to the positioning of an institution and will thus also attract less favoured institutional profiling attention. While some initiatives have been taken at national level to make teaching performance more assessable and visible (e.g. through the Higher Education Academy and the National Study Survey in England) or to develop additional support measures to reduce drop-out (e.g. the recent initiative in France), these measures are very far from having a comparable effect to the award of major research grants. In this study, a wide array of initiatives could be seen at institutional level to strengthen the value attributed to teaching successes and to promote the standing of teaching experience and achievements in promotion, but the role of research at national and institutional levels is still overwhelming in comparison.

In this context, one should point to the role of the media in the national interplay of forces which contribute to diversification or convergence. In two of the five countries included in this study, the media were widely reported to be acting as a strong influence on institutional behaviour and national policy choices. In particular, the media show great interest in ranking HE performance, preferably coming up with their own ranking (Hazelkorn 2007). The first widely publicised international rankings (which are still the most widely observed ones) were entirely research-indicator based, favouring bigger institutions with high internationally ISI registered publication record, and hence favouring indirectly those institutions where natural sciences dominate the portfolio. This clearly acted as a force of convergence in the logic of institutional profiling. It is not clear yet whether the spread of more multi-dimensional rankings as it can be seen in England will develop the force and recognition to throw the established research rankings off their throne and thereby weaken this convergence factor.[3]

As mentioned above, academic values play a strong role in determining institutional behaviour. In most national contexts, these values are still largely dominated by research performance. Most other dimensions of HE missions, such as teaching for increasingly diverse clienteles in the course of widened participation, continuing professional development and contributing to business innovation and CPD are all valued considerably less than research at national level, whatever the explicit policy aims at national or institutional level may proclaim. Moreover, even where alternative dimensions are gaining recognition among academics, national and international career structures clearly undermine any attention being paid to other dimensions of HE engagement.

Another conflict of forces between institutional diversity aims and other HE aims is at play in some countries, such as Slovakia and, to a lesser degree, in France and Norway, in the national accreditation criteria and procedures. While this study has shown that diversity-neutral or even diversity-supportive quality assurance can be found in so far as QA takes a fit-for-purpose approach to institutional evaluation (e.g. in Switzerland and in England and to some degree in Norway), there were also examples of forces of institutional convergence at work in some accreditation standards contradicting national-level interest in institutional diversity. This could be witnessed in Slovakia, Norway, France (through the new AERES procedures), and England (in some of the accreditations conducted by professional associations). These may create convergence both between institutional profiles and programmes.

[3] For a detailed discussion of these effects, see Hazelkorn 2007.

The degree to which quality assurance processes (and not just the more obvious suspect – accreditation) may create convergent criteria and behaviours seems to depend strongly on the choices of the evaluating peers. If the latter reflect the mission mix which is intended by the institution the convergent effects can be avoided. Otherwise they may act just as strongly, only more obliquely, as accreditation procedures could.

A review of the interplay of national forces with respect to institutional diversity in higher education would be incomplete if it were not compared with those exerted by regional actors. Even though this study did not focus on regional actors and could not do justice to their influence, the site visits conducted within its framework revealed considerable variation in this respect, including reports of some remarkable increases of HE support by some regions. In those cases, regional support clearly serves to sustain distinct profiles and responsiveness to regional needs, thus contributing to diversification in the sector. In addition to diversification of programmes, regional support mechanisms often strongly emphasise HE functions beyond internationally competitive research, even though the latter naturally also serves regional competitiveness. Thus, business innovation, continuing professional development and skills training are important concerns of regional development which often receive less attention at national level. It should be highlighted in this context that the expansion and diversification of HE was supported strongly, in all five countries included in this study, by regional authorities interested in having HE institutions serve their needs. While regional needs and engagement in HE may sometimes have been pushed into the background in the name of national competitiveness, their increased importance in recent years has revived the diversification force which regional actors have contributed to HE landscapes. The extent of such influence naturally depends on the scope of regional autonomy and financial leeway.

2.3 Summary and Aggregate Effects of the Drivers of Diversification or Convergence

On the basis of the analysis, summary country overviews of the key forces of diversification or convergence of institutional profiles are given below. It aggregates and rates the forces which are currently driving diversification or convergence as follows: 0 is the neutral score, and means that neither convergence forces nor diversification forces have a stronger weight, while a dominance of convergence forces is reflected in scores below 0 (with a maximum of -2) and a dominance of diversification forces is reflected in a score above 0 (with a maximum of 2). The attribution of positive or negative scores represents the different directions of the forces and is to be understood as value-free. The visualisation in the form of a spider-web was chosen to illustrate the variety and frequently conflicting nature of the different systemic influences.

Since each score reflects an aggregate sum of multiple forces, it cannot claim to be an objective measure of the forces at play but reflects an interpretation of the data at hand and will thus necessarily remain a subjective judgement. Such aggregation was nevertheless thought to be meaningful as a way to raise awareness of the overall effect of the frequently conflicting factors involved in diversification or convergence, and thus to fuel discussion, perhaps also disagreement, which would hopefully help policy definition at national and regional levels.

Table 1: Summary of Key Effects of Diversification or Convergence in English Higher Education

Key Aspects of the HE System	Key Effects of Diversification or Convergence in English Higher Education
Regulatory Framework Diversification Rate: **0,5**	• Very little regulatory restriction of institutional development, autonomy and competition between institutions leaves development choices and profile to institutions – making a wide range of different profiles possible. • At the same time, if homogeneity is fostered through common values, career patterns or strong financial incentives, there are no regulations to promote diversity of institutional missions, staff orientation or student profiles. • Recently "university" title may also be granted for teaching-only institutions (to increase status of teaching), steering away from the research-based university model. • Borders between Further Education and Higher Education are permeable through HE-providing FE Colleges / foundation degrees, adding to diversity.
National HE Policies Diversification Rate: **1**	• Mission diversity is actively propagated, though research universities seem to receive more hard core support (through financial instruments). • Innovation rewarded more than in the past (in institutional grant allocations, and as performance indicator in RAE since 2008), as well as in Research Council grants and through need to diversify funding sources (funding gap). • Excellence in other functions is still not as highly placed, but incentives have been put in place, e.g. for widening participation (though not enough to cover costs or counterbalance concentration on research). • National career patterns are strongly research-driven, only some attempts to make teaching achievements more visible to counterbalance this.
Funding instruments Diversification Rate: **-1**	• RAE-based research funding for institutions pushes for strong vertical differentiation, and institutional isomorphism (modelling the internationally oriented research university). The financial and reputational consequences of the RAE results are strongly influencing institutional behaviour. While research excellence is greatly rewarded, other functions are (can) not (be) measured, Excellence in these areas is only rewarded slightly or symbolically through national or institutional funds or promotion decisions. • Research council grants also reward critical mass and previous track records, adding to concentration of excellence in fewer institutions, creating mono-dimensional vertical differentiation but undermining horizontal institutional diversity in terms of different types of research (including applied research responding to stakeholder interests. • In recent years, some financial incentives have been established to promote value and success in other functions but these are still weak. • Innovation funds have been made available, adding to functional differentiation, but are no longer distributed on a competitive basis so that they do not contribute to raising the reputational effect of successes in other functions such as innovation.
Quality & Accreditation Diversification Rate: **-1**	• Some convergence force is exerted through minimum standards and reference points. There is increasing pressure on common standards in programmes, with rising fears of low quality programmes. • Some convergence occurs through institutional expectations of QAA having particular notions of institutional models, even though QAA itself says it follows fitness-for-purpose methods (i.e. allowing for institutional diversity). • Professional accreditation is a strongly homogenising force. • RAE quality assessment strongly contributes to institutions trying to emulate successful research universities.
Regional policies and influences Diversification Rate: **2**	• While regional influences could not be looked at closely in this study, institutional representatives point to strong regional support for new programmes, diverse research projects, bringing in a wide range of needs and interests, which diversify institutional offers if these choose to be responsive to these needs. • Regional funds have increased, depending on the region, through the Regional Development Agencies. In some regions, such as North-West/ Wider Manchester, substantial investments are made in HE, with regional knowledge and skills needs being taken into account and diversifying offers. In addition regional stakeholders promote diverse types of institutions, their complementarity and cooperation.
Stakeholder values Diversification Rate: **0,5**	• Employability is a major value associated with HE, resulting in greater emphasis of employer and business orientation and increasing attention to labour market skills needs, generally promoting diversification in terms of institutional offer and programmes. However, since curiosity-driven academic pursuit is not valued highly in its own right, but rather for its relevance to societal and economic progress, there is a certain exclusive pull toward more professionally oriented education, thus contributing to the "vocational drift" of Higher Education. • The high degree of public interest in reputation and rankings fuels isomorphism for as long as success in only one function, namely research of a particular kind, is made so visible and taken as the definite value.
Academic values Diversification Rate: **-1**	• Academic values are strongly oriented toward research performance even at institutions which have a more diverse set of driving values. • Nevertheless, some societal values such as the social inclusion ethic find a strongly committed support from many academics but these motivations are weakened by career patterns which reward research success above all other achievements.
International developments Diversification Rate: **-1**	• The greatest attention is paid to international research competition. International research position is strongly rewarded in the funding system, contributing to internationally oriented research being by far the most privileged HE function for institutional development and thus also to institutional isomorphism. • Given the financial incentives, institutions have an interest in attracting international students, contributing to their own internal diversity.

Table 2: Summary of Key Effects of Diversification or Convergence in French Higher Education

Key Aspects of the HE System	Key Forces of Diversification or Convergence in French Higher Education Regulatory Framework
Regulatory Framework Diversification Rate: **1**	• Until 2007 strong regulatory intervention in programme development and career structures, more freedom now to differentiate expected. There are different legal definitions of types of institutions (univ. and écoles) with different degrees of autonomy. Hence the regulatory framework creates an unusual type of dual system: selective professional education vs. largely non-selective universities. The separate law for "grands établissements" which allows greater autonomy, student selection, different staff and financial management,creates separate institutional types with considerable diversity. • New needs have often led to new regulated types of institutional units, rather than changing existing ones within given regulations. • Until 2007, restricted opportunities to diversify profiles for universities. More autonomy for universities with new law, i.e. possibility of diversifying profiles. • Until now regulatory framework did not make it possible for institutions to differentiate among staff of the same category, in terms of functions or salaries, now this possibility has been introduced through separate contracts, within certain limits, thus contributing to diversified staff functions. • Positive discrimination (ethnic, religious) constitutionally not allowed, so that diversity of student or staff profile cannot be actively pursued or tracked.
National HE Policies Diversification Rate: **1**	• New policies largely reflected in new regulation, of which increased autonomy is the biggest part, indirectly contributing to diversification since universities will now have the freedom to develop niches and diverse approaches to institutional development. • Pay scales and career patterns are nationally determined (with the exception of a small portion of contractual academic staff). As yet there are no salary or career rewards for successes other than research. • Diversity of student profile is helped through tuition-free access to universities and student loans. Otherwise, only the anti-drop-out programme will allow for some individualised attention which would take account of diverse needs.
Funding instruments Diversification Rate: **1**	• In general, few rewards for performance (apart from few competitive research grants, now being increased) but some possibilities to develop institutionally diverse development projects in the framework of quadrennial contracts. • Recently attempts to foster vertical differentiation through Campus initiative. • Increase of competitive grants through new Research Council contributes to vertical differentiation, also includes incentives for partnerships with industry. • The recent PRES attempts to encourage cooperation with complementary partners contributes to some horizontal differentiation and programme diversification, but may also lead to some mutual imitation of institutional policies. • Some extra money has been invested into anti-drop-out programmes for attention to didactic investments, contributing to functional differentiation.
Quality & Accreditation Diversification Rate: **-1**	• New agency will combine research with programme and institutional evaluation, incl. "marks" for research performance, i.e. on the basis of common standards, likely to resulting in vertical differentiation. • The close link of many research groups to the CNRS makes their evaluation relevant, especially the decision to align with university groups, which is seen and marketed as a quality label by the universities, contributing to vertical differentiation among them along one dimension.
Regional policies and influences Diversification Rate: **2**	• Regions may exert a strong influence on HE development, depending on regional engagement; especially in terms of infrastructural investments and support for LLL, but also as key supporters of regionally oriented universities or écoles, they become key contributors to institutional diversification. • At many regional institutions, programmes are designed in view of regional sectors and their needs.
Stakeholder values Diversification Rate: **0,5**	• While stakeholder values could only be taken account of through the experiences of HE representatives and other political associations, it did become evident that professional education occupies a higher social standing than purely academic training and that it defines the elite part of the system (unlike some other countries). • Business innovation is regarded as an important part of HE.
Academic values Diversification Rate: **-0,5**	• While research has not been a prominent vertically differentiating part of university performance until recently, it is becoming so with great speed, supported by the research dominance of career development criteria. • Quality teaching is a highly regarded value but largely associated with the selective sector. • Contribution to citizenship and academic culture are relatively strong values among French academics, motivating engagement in these areas.
International developments Diversification Rate: **-1**	• Recently there has been prioritised attention on international rankings and France's position therein. Competition, leading to a wide range of national and institutional responses to increase critical mass, visibility and competitive position, including mergers, PRES and increased autonomy, possibly leading to functional convergence. • Bologna reforms have brought new degree structures but these have not been adopted in the grandes écoles sector, with the exception of the attractive Master which serves to position research profiles internationally. • The growing importance of international research for global visibility and status has led the grandes écoles to strengthen this function, with effects on hiring, programme definition, infrastructural investments.

Table 3: Summary of Key Effects of Diversification or Convergence in Norwegian Higher Education

Key Aspects of the HE System	Key Effects of Diversification or Convergence in Norwegian Higher Education
Regulatory Framework Diversification Rate: **-1**	• Since 2002, the regulatory framework defines two types of HE institutions which allows change of status of institutional type under certain conditions (to be based on accreditation by NOKUT). • Leading to UC often positioning niches where research and research training is to be expanded. • Larger autonomy since 2002 (and a few new funding incentives like Centres of Excellence competition) make institutional policy development more necessary. • National salary scales but differentiation of tasks of professors allowed. • National student selection creates some competition among institutions for students = difficult for institutions in some regions.
National HE Policies Diversification Rate: **1**	• Push to intensify research performance given traditional dominance of teaching orientation in many inst. • Fragmentation and academic drift of university colleges. • Diversity of profiles is an issue of political debate, often linked to the perceived fragmentation of the HE landscape, mostly in the context of international visibility. • Cooperation arrangements and mergers have become important issues of policy debate, in view of increased international visibility. In 2002, the first 13 Centres of Excellence were established to provide critical mass and international visibility to the most competitive research consortia. After 5 years, the evaluation showed a tremendous success. Additional incentives to promote consortia are likely to be put in place. All of these measures are likely to increase internal institutional diversity, possibly also adding some external diversity through vertical differentiation between institutions, since most of these incentives are given to the best performers. • Recently, more attention has been dedicated to innovation. Three years ago 10 Centres of Innovation were established. Last year 10 research centres of environment-friendly technologies were established, mostly at universities. Technology transfer offices were set up at all universities. There is also an action plan for entrepreneurship, and a strategic plan from the Ministry for research and development in natural science. • Some attention to mature students and LLL at universities. At some of the UCs LLL students make up 50 % of student enrolment. But achievements in continuing education are not rewarded as strongly as the official rhetoric may suggest. • Gender balance has become more of an explicit policy of late, measures developed with a special committee (at UHR – funded by the Ministry) for all institutions to develop knowledge and support the development at each institution.
Funding instruments Diversification Rate: **0,5**	• Research funding rewards excellence more than in the past (new funding incentives such as Centres of Excellence competition). • No comparable funding for teaching excellence, teaching funding mainly via study points. • Innovation addressed in recent years through some new funding instruments.
Quality & Accreditation Diversification Rate: **-0,5**	• For UC, NOKUT is decisive, thus implementing the convergence between the two institutional types. • In other respects, as a quality audit agency, procedures are neutral to diverse orientations and missions, but the combination with accreditation procedures creates some mainstreaming effects through institutional expectations of accreditation attitudes.
Regional policies and influences Diversification Rate: **2**	• Regional role strongly espoused by many universities and university colleges. • Regional dimension also linked to question of equitable and democratic access to HE. • Links between HEIs and regional stakeholders are dense and well developed.
Stakeholder values Diversification Rate: **0**	• Regional links and regional spread with diverse orientations are highly valued and supported. • Strong anti-elite attitudes and egalitarian access are highly valued, sustaining institutional convergence in terms of profiles but welcoming increased diversity in the student body. However, differentiation through performance successes is increasingly accepted. • Major industry sectors increase push for innovation activities and, in the case of globally oriented sectors and businesses, international orientation.
Academic values Diversification Rate: **-1**	• Strong egalitarian and democratic values but with an increasing emphasis on performance assessments and rewards. Attitudes to decision-making and governance still strongly dominated by these values. • Increasing trend to value research most highly as academic activity, also at University Colleges, linked to institutional positioning and status, overshadowing strong teaching values at some of these institutions.
International developments Diversification Rate: **-0,5**	• International orientation is a homogenising force since it usually results in increasing emphasis on research, especially internationally visible publications. • International orientation also increases benchmarking with peers abroad, increasing the trend to establish or strengthen performance assessment as a basis for institutional reward structures, increasing the forces of internal vertical differentiation.

Table 4: Summary of Key Effects of Diversification or Convergence in Slovak Higher Education

Key Aspects of the HE System	Key Effects of Diversification or Convergence in Slovak Higher Education
Regulatory Framework Diversification Rate: **0,5**	• Until 2008, the Slovak HE system was essentially unified. In the Act of 2002 a first attempt was made, but not implemented, to define different institutional types in the law in order to cater for different needs and allocate resources more effectively. In 2008 the second attempt to define such categories was ratified and is now being implemented, resulting in a detailed regulatory definition of three institutional types, with categories being differentiated according to different degrees of research intensity and professional orientation, creating a formal vertical differentiation. • There is also detailed regulation of HEIs, and limited autonomy, in terms of programme development, detailed definition of university governance, and career structures, leaving a limited margin for manoeuvre for distinct institutional development.
National HE Policies Diversification Rate: **1**	• In order to address the adverse side effects of rapid expansion that had compromised quality and resulted in convergence toward the model of the comprehensive university, the government has opted for strong regulation of institutional types along research performance. • Overall there is a policy push to increase research performance at universities (historically dominated by academies of science), given its strong teaching dominance before. • There is a call for more innovation orientation, but this is still not reflected in many incentives. • CE is not promoted at national level, but well-developed at institutions nevertheless. • Student or staff diversity is not a national issue, with the exception of some attention to religious denomination at some HEIs and to Roma background at two institutions. Gender not an issue in spite a high gender imbalance.
Funding instruments Diversification Rate: **-0,5**	• In a university funding system where teaching volume determines the bulk of institutional means, there are recent attempts to increase attention to research performance: → Through the portion of competitive grants in research compared to the past. → Through the increased research part of the institutional grant. → Through the fact that an HEI will be awarded the "university" title on the basis of its research performance, which will result in higher institutional funding. • There are comparatively few or no incentives for engagement in innovation (apart from regional stakeholder support). • The new Structural Funds opportunities could give an incentive to network regionally and to look for regional policies of knowledge base development.
Quality & Accreditation Diversification Rate: **-1,5**	• Accreditation procedures and criteria, which serve to ensure minimum standards, act as a strong agent of convergence, both with respect to programme development and to career structures of academic staff. • Accreditation agencies and experts will also be responsible for the implementation of the legally defined institutional types, since they will evaluate which institutional category each institution falls into. In this function they thus become agents of diversification, although the key instrument is regulation.
Regional policies and influences Diversification Rate: **1,5**	• Regional diversity was promoted during the first decade of expansion (90s) in which new HEIs were established in most regions. However, the originally diverse profiles of HEI, strongly respondent to regional needs, have converged more toward a comprehensive university model and may suffer further in coming years with the new overall attention to research performance criteria in university title accreditation. • Attempts to cater for regional needs and industry are reflected in programme definition at many regional institutions.
Stakeholder values Diversification Rate: **1**	• Employability and attention to labour market skills needs is becoming a core value. While it was often linked to the idea of business or economics degrees in the 90s, resulting in substantial convergence of subject portfolio at HEIs, there are now more calls for science and technology degrees which are undersupplied, as well as for more attention to competence and interdisciplinarity, hence pushing for greater diversity of programmes
Academic values Diversification Rate: **-1**	• There is a strong dominance of egalitarian attitudes and unease vis-à-vis performance-based reallocation of resources. The idea of creating winners and losers in the imminent university title attribution clearly goes against the grain of such egalitarian core values. • With respect of HE functions, there is a traditional dominance of teaching being perceived as the core function, even though research has become the new focus area associated with higher institutional status.
International developments Diversification Rate: **-0,5**	• Considerable attention is being paid to international research competition and to the poor position Slovak HE holds in this respect. Policy and institutional attention to improving research conditions has largely resulted from these international comparisons and has resulted in gearing HE away from each its teaching dominance. But it has also led to the sole focus on research performance of HEIs, against functional differentiation. • The attention to the possible contribution HEIs could make to innovation has been fuelled by discussions of the place of Slovak HE and research environments compared with the rest of Europe but has not led to many policy incentives or institutional actions yet.

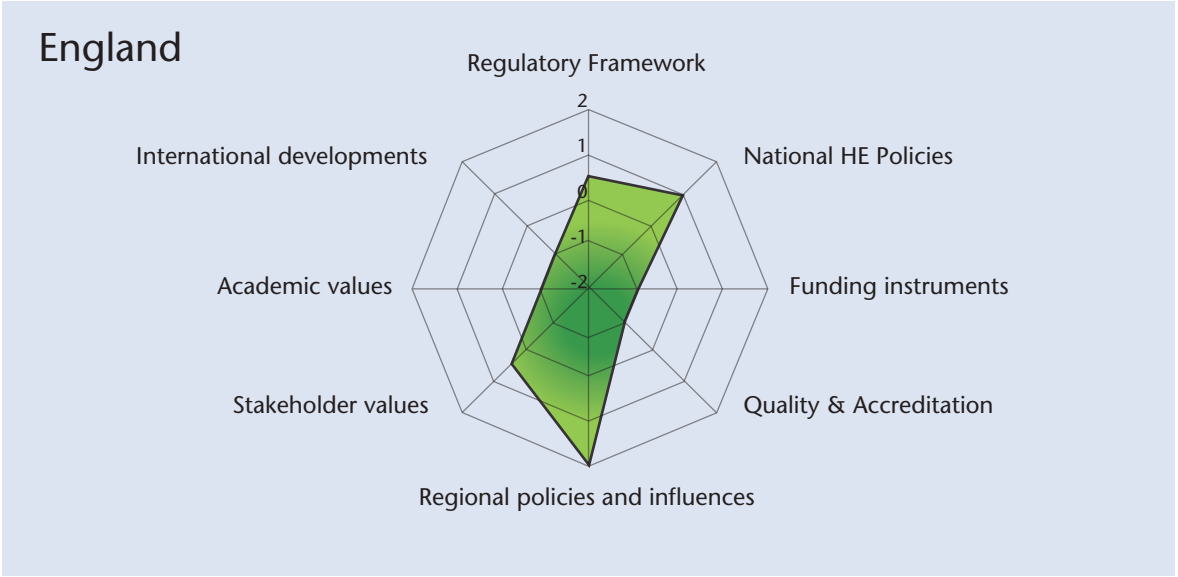
Table 5: Summary of Key Effects of Diversification or Convergence in Swiss Higher Education

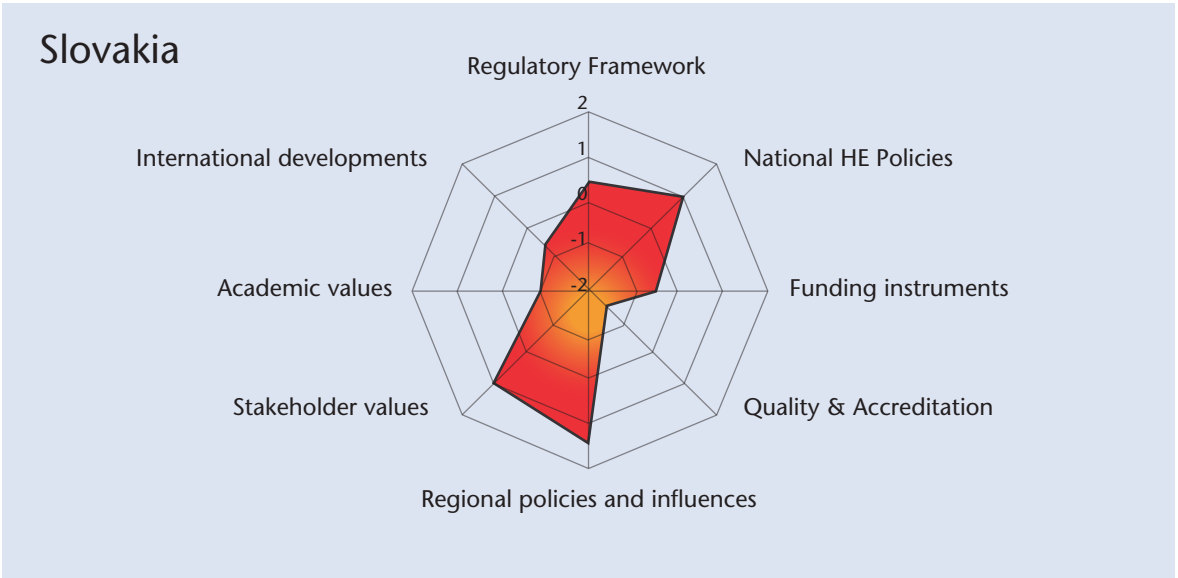
Key Aspects of the HE System	Key Effects of Diversification or Convergence in Swiss Higher Education
Regulatory Framework Diversification Rate: **1,5**	• Dual system firmly embedded through regulatory differentiation (and supporting value systems). Even though common structures of coordination and QA will be introduced in 2009/10, institutional differences are likely to be upheld through separate funding instruments, student entry conditions and profiles, as well as different staff profiles/ career patterns, all of which are laid down in law. Since vocational and professional education are highly regarded, they are not associated as much with inferiority of status as in some other European countries. • Diversity of institutional profiles strongly promoted (professional orientation) through distinct regulated institutional missions with diverging programme orientation, including governing boards which reflect stakeholder interests, and different accreditation criteria. Diversity of profiles among institutions of the same type is more easily possible in the university sector where there is greater institutional autonomy. The FH are still more strongly steered by the Federal authorities (through federal programme accreditation). • 11 different university laws (10 cantonal, one federal for the Federal Technological Universities), in addition to the law for the Fachhochschulen provide different governance and authorities for HEIs, leading to high degree of diversity.
National HE Policies Diversification Rate: **1**	• There are few policies at national level for HEIs, this being mainly a cantonal competence. National policies in HE concentrate on incentives for more coordination and cooperation between HEIs, and recently also on creating more transparent funding instruments. • Diversity policies concentrate on the differences between the regulated institutional types, rather than on any diversity of profiles within each type. The latter is supposed to be determined in part by the response to cantonal priorities and support. In the university sector, institutional autonomy helps to develop different profiles, but institutions do not compete as much since some of their funding sources are different. • A recent national policy has established and expanded applied research at Fachhochschulen, with supporting funding instruments, adding to the diversity of forms of research undertaken in the HE sector, but also moving the more applied and professional orientations at universities closer to the FH or vice versa. • The introduction of the Master level at FH is closely linked to the expansion of applied research there, required strict rules of critical mass, which forced institutions to offer programmes together, with concentration effects and leading to some profile convergence.
Funding instruments Diversification Rate: **1,5**	• Rather diverse funding instruments for basic and applied research incl. business innovation through different funding agencies, including separate incentives for FH profile. • Funding for research is largely based on competition, sometimes mingled with regional equity considerations. • Teaching performance is not rewarded (neither financially through institutional grant indicators or inst. internal allocation, nor through other awards), only supported through didactic services and taken account of at some institutions for promotion (tenure) if performance is not up to standard. • Funding structure and level differs between cantons and types of institutions, creating considerable diversity. • Funding follows students rule means HEIs compete for students but the latter are not that mobile so that the effect are mitigated.
Quality & Accreditation Diversification Rate: **0,5**	• In its quality audits OAQ is diversity-neutral or mission neutral as it takes the aims of the inst. as its reference points. • In its accreditation processes some definitions of minimal conditions for institutional types are used. • Diversity of HE functions and of teaching approaches is addressed during QAA audits. • Internal institutional QA measures are often addressing functional differentiation, and helping to put teaching, innovation and CE more in the centre of focus.
Regional policies and influences Diversification Rate: **1,5**	• The regional influence and authority is far-reaching, creating institutional diversity in regulatory, policy and financial terms, including different emphases of stakeholder interests. • Regional competences are stronger than federal ones in HE. While this results in some diversification it also preempts inter-institutional competition to some extent, since regional authorities won't necessarily watch their university miss out on an opportunity which would in other contexts only be given to most well-positioned institution. Hence new scientific initiatives may originate with few major players and often then be broadened to provide opportunities for most or all universities, counteracting diversification of profiles in this respect. • The small size of the country makes close cooperation between institutions of different regional authorities not only necessary but also easy and emerges without much intervention from the top (even though political actors often believe additional steering is needed). Such cooperation is not only promoted at national level but also encouraged by the regional actors who closely coordinate their initiatives.
Stakeholder values Diversification Rate: **1**	• Stakeholders are particularly influential in the Fachhochschul sector where their role on the boards is decisive. • Stakeholder values are strongly dominated by the interests of professional or vocational education (strongly supporting the separateness of the FH) and by the international position of Swiss science and innovation (strongly supporting the special role of the two Federal Institutes of Technology in ensuring international visibility and competitiveness). • There is a strong sense of implicit (understated) elite associated with HE, but necessarily the most purely academic part. Relevance to business innovation and competitiveness is highly valued.

Academic values Diversification Rate: **0,5**	• Research is the dominating driver of success among university academics, undermining recognition of other functions with similar force. • But FH academics show different value systems which reflect the different mix of functional emphases of the FH, recognising achievements in teaching and professional training, contribution to business innovation, applied research and continuing education more highly than is done in university academia. However, this is not the case in all subject areas.
International developments Diversification Rate: **-0,5**	• International competitiveness is highly valued and is regarded as a necessary orientation for all universities, making them all aspire to be internationally and nationally oriented research universities, though with different portfolios, in that respect a convergence effect. • But international orientation at universities, and often also at individual departments of Fachhochschulen, is also reflected in the highly international recruitment patterns (of academic staff and Doctoral students, in the case of universities, usually exceeding 40%, sometimes more than 50% of the relevant group, hence contributing to diversity of staff and student profile). • The Bologna reforms introducing Bachelor and Master degrees for all HEIs have resulted in more transparent mobility arrangements between different types of institutions (FH and Univ.) but has also created some fears of losing distinct status and blurring profiles at least on the side of the universities who fear they may be losing out on academic orientation for the sake of relevance and employability, becoming more like FH with FH simultaneously expanding their research, becoming more like universities. In spite of the very different research emphases at FH, some convergence in mission and student profile may indeed occur. This in turn has resulted in universities strengthening their emphasis on academic orientation, also in bridging requirements between FH and university programmes.

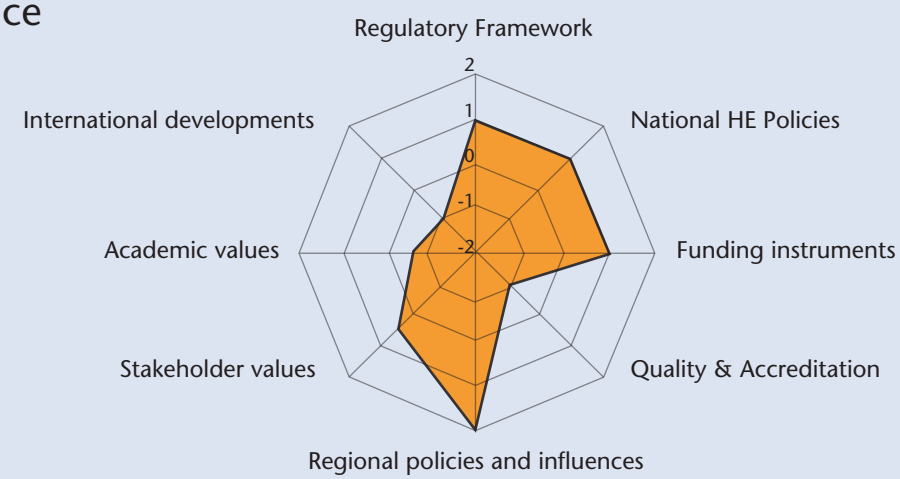
Figure 1: Relative strengths of diversification and convergence forces shaping institutional profiles in the five national systems

The spider webs below visualise the summary judgements based on the findings regarding diversification forces in the previous chapters and tables. The first two webs are placed together because they represent two unitary systems (Slovakia having introduced formal institutional types only this year). The other webs represent the three formally differentiated systems.

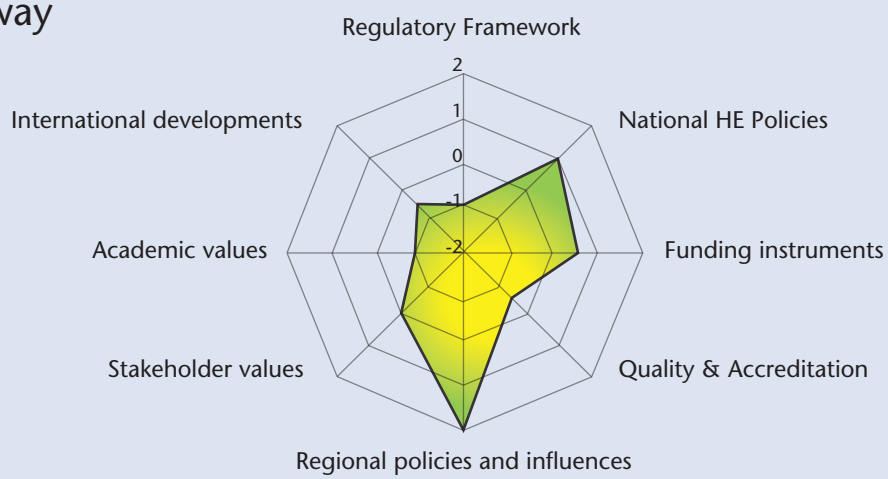




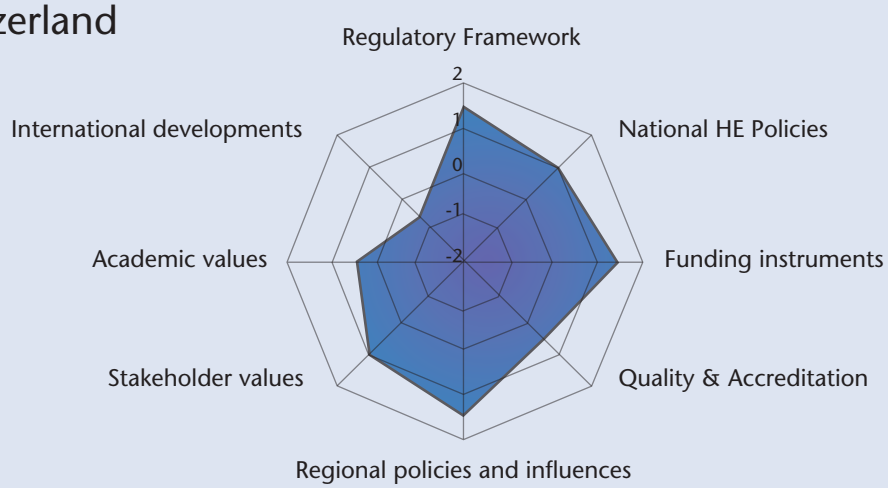
France



Norway



Switzerland



Chapter 8:

Institutional Diversity in European Higher Education – Conclusions

In the previous chapters, we have examined the multiple values attributed to different aspects of institutional diversity in five different national contexts, as well as the forces which drive institutional diversification or convergence in these countries. On the basis of these findings we now return to the issues raised in the introduction, in an attempt to reach more general conclusions beyond the specificity of each case, and to refine the concepts which the studies or policy pursuits of institutional diversity suggest. Our conclusions will focus on five key issues:

1. Given the multiple values which legislators, policy makers, funding agencies, institutional leaders, academics and stakeholders attribute to different aspects of diversity, are there some diversity values which all systems share and some conditions which all would want to associate with the idea of institutional diversity? How do these multiple values influence the political or institutional choices or cause unintended effects with respect to institutional diversification or convergence?

2. This study has charted the basic tension between the horizontal differentiation approach, which posits a parity of esteem between different dimensions of higher education activities and their associated mission types, and the vertical differentiation approach, which usually values internationally competitive research as the function which should receive priority support. Under what conditions would each approach be preferable?

3. Considering the forces of diversification and convergence and their interplay, are there typical conflicts or effects of mutual reinforcement between these forces, beyond the specificity of each case?

4. Taking both external (i.e., system level) and internal (i.e., within an institution) diversity into account, is it the case that some aspects of diversity are better dealt with through external diversity and some through internal diversity? Does it matter whether the systems respond to different needs by more emphasis on external or on internal diversity? Is the latter approach necessarily less efficient or effective? What advantages are there in choosing either approach? Is there a limit to how much internal diversity an institution can deal with effectively?

5. The survey data also puts into question the firm dividing line which is usually drawn between formal and informal approaches to institutional differentiation. Do formal approaches, laying down institutional types in law, thereby restrain the diversity which institutions could develop if such constraints did not exist? Do maximum autonomy and unrestrained competition lead the way to maximum institutional diversity? Does informal differentiation encourage institutions to emulate the type of institution that seems to be highest in public recognition and prestige?

1. Diversity Values

1.1 The Importance of Functional Diversity

Having demonstrated the range of values which are associated with different aspects of diversity in the five national contexts, we can see that some areas of consensus do emerge.

In all five countries, functional diversity within higher education is promoted in some form or other. Functional diversity is always associated with different mission mixes. In contrast, judgements and choices diverge considerably as to how big the mission overlap between the different institutional profiles should be, and what hierarchy of values should be attached to the

various functions. Teaching and applied research are seen as an integral part of the mission of all institutions, even though their relative intensity is supposed to vary between different institutional types and profiles. With respect to all other functions, national and institutional policies allow for greater divergence across the range of institutions. In the formally differentiated systems, basic research is seen to be primarily the realm of the universities (whose research intensity is supposed to be well above that of the other types of institution), whereas the institutional ascriptions of research training, continuing education and innovation to different institutional types diverge considerably.

Expanding research output and the performance of higher education institutions is a central concern in all five countries. Moreover, the urgency with which it is pursued as a central policy or institutional priority seems to be increasing, under the pressures of international competition. In England and Slovakia, research has become the key criterion for vertical differentiation among institutional types – formally, through legislative definitions and accreditation criteria in Slovakia, and informally or implicitly through the weight of the funding instruments in England. In Norway and Switzerland, it is associated with increasing the applied research capacity of the university colleges or *Fachhochschulen*. In France and Norway it is also promoted through an increase in the competitive portion of research expenditures. In all four continental countries, the increase of research performance at higher education institutions is also associated with their expansion beyond the traditional dominance of research at one particular type of institution, namely the Academy of Sciences in Slovakia, the CNRS and other national research bodies in France, or the universities in Switzerland or Norway. The link between research and increased innovation activities at higher education institutions is an important concern in England, Norway and Switzerland, and to a lesser extent in France and Slovakia.

Since functional diversity is closely aligned with staff diversity, there is a growing concern with the latter in all countries. However, to what extent such concerns are able to guide national regulations, which tend to favour more homogeneous work and salary definitions, or to counterbalance national or international career patterns and customs, is still unclear in most countries.

1.2 Institutional Diversity: Positively Valued but with Conditions Attached

In addition to revealing the wide range of values attached to the various aspects of diversity, the interviews conducted in the context of this study revealed that institutional diversity is not valued positively without exception or without conditions attached. The high level of diversity of institutional types in France, for example, is felt by many policy makers and institutional representatives to produce a lack of transparency for users as well as a degree of fragmentation that is now perceived as a liability. In most countries, diversity of institutional types or profiles seems to be valued positively only if it goes hand in hand with sufficient transparency as regards the definition of access criteria to different institutional types or profiles, as well as with sufficient flexibility to allow cooperation and exchange between the different types of institution.

Indeed, three of the five countries (England, Norway and Switzerland) have paid considerable attention in recent years to improving flexibility and mobility between institutional types. In England such attention has meant that Foundation degree graduates from further education colleges can continue to higher level HE degrees; in Norway, the mobility from university colleges to the Master and Doctoral levels of universities (or the establishment of such courses within the UCs) has been an important HE policy concern; in Switzerland, the mobility between all three institutional types has been a key ingredient of the Bologna reforms.

In spite of this shared value, however, approaches differ with respect to the modalities which allow or limit exchange between the institutional types or profiles. In Norway, recent laws and policies have promoted some uni-directional crossing of the boundaries between institutional types by enabling the university colleges to apply for accreditation of Doctoral degrees, and even to change to university status if certain criteria are fulfilled. In contrast, Swiss laws and policies reflect a strong belief in the desirability of keeping separate orientations for the different institutional types, especially the universities and *Fachhochschulen*; and so promote these separate orientations through distinct career paths, reward structures, funding instruments and admission criteria. In Slovakia, accreditation will establish the category to which each institution belongs, and differentiated financial instruments are currently being designed to implement the resulting hierarchical typology. Nevertheless, some dynamics remain possible, since a change of institutional status can be applied for. In England, the formal institutional types do not run along dual sector lines. Only higher education colleges and higher education degrees offered within further education colleges are formally differentiated as distinct institutional types. The dissolution of the polytechnic sector in 1992 was associated with increasing the dynamics within higher education. After 1992 when the former polytechnics gained university status, institutions were supposed to orient their

profile dynamically according to the strategic priorities they autonomously set. While, indeed, many former polytechnics have changed profiles significantly and many have intensified their research output, observers have noted an academic drift among many of these traditionally professionally oriented institutions. But whatever the change of orientation, the increased dynamism of institutional profiling since the 1990's is undisputed. Recently, however, HE representatives and observers have noted an increasing segmentation between different mission groups. These have developed around institutions which share a similar sense of what their mission emphases should be. Some have even formed their own lobby groups to defend their specific interests. Funding instruments, marketing and reputations are increasingly creating distinct market segments and path dependencies which are difficult to circumvent. Moving from one group to the other is not perceived as being easily achievable.

Another condition which is often regarded by national agencies and policy makers as a necessary complement to institutional diversity relates to the cooperative arrangements between different HEIs. To prevent institutional diversity from leading to fragmentation, wasteful duplication and unexploited synergies, and to support economies of scale, most national systems have introduced incentives to promote cooperation between HEIs. The sharing of costly infrastructures and the shared development of cost-intensive research areas is becoming a key concern not only of national funding agencies, but sometimes also of regional ministries or development agencies. A very prominent example of such concern can be observed in the French introduction of the PRES (*Pôles de recherche et d'enseignement supérieur*), in which institutions of different profiles are grouped together at regional level to exploit complementary expertises, invest in common research structures (such as Doctoral schools or research infrastructure), create critical mass and increase international visibility. Likewise, the encouragement of mergers is expected to promote the density of links between units.

Cooperation is also a key concern of policy makers and funding agencies in Switzerland. Substantial research funds have been made available to encourage inner-Swiss cooperation in areas with high scientific or innovative potential. Support for Doctoral schools is made available on the condition that cooperation between several universities would create sufficient complementarity and critical mass. A wide range of other smaller funding instruments encourages inter-institutional cooperation. Larger cooperative clusters of institutions with different but complementary profiles have also been promoted at regional level. Recently parliament and the government have urged the rectors' conferences to analyse and propose new paths of inter-institutional cooperation. Some institutions have formed closer alliances, offering common courses, Doctoral schools, competence centres and common institutes. Furthermore, with the new Bachelor-Master structure, cooperation between different institutional types to ensure flexible progression from one to the other has also become a central concern, with new agreements reached in 2008. In Slovakia, inter-institutional cooperation has become a concern with respect to the relations between universities and the institutes of the Academy of Sciences, with new funding instruments being developed to promote closer links. Only in England does inter-institutional cooperation not seem to be an issue for the national political agenda. At some research councils, however, recent efforts, e.g. around support for medical infrastructures, have promoted cooperative structures by using these as selection criteria for grants. Moreover, in a more explicit policy-oriented manner, industry has called for more efforts to complement institutional diversity through closer inter-institutional cooperation.[1]

One may thus conclude that the value of institutional diversity is increasingly being linked to the value of inter-institutional cooperation, creating structures that soften the rigidity of inter-institutional boundaries and making HE system internally more osmotic and synergistic.

1.3 The Importance of Academic, Political and Stakeholder Values

In the research literature on institutional differentiation, values are often seen as a homogenising force which undermines political or institutional attempts to promote institutional differentiation, in particular homogenising academic values which undermine the differentiation of institutional missions. In this study, we have seen some such effects, e.g. in England, but we have also witnessed more diverse value systems exerting more varied and often conflicting influences on institutional diversity, or providing helpful possible support structures for future diversification. Indeed, the influence of values is itself much more varied than is often assumed.

If we take the case of Norway, for example, we see that academic values vary with respect to the importance attributed to the teaching function, with higher priorities ascribed to teaching and continuing education at many of the university colleges, and

[1] CIHE (The Council for Industry and Higher Education) 2003, Diversity and Co-operation in Higher Education – a contribution to the debate, London.

higher priority attributed to basic research at the larger universities, supporting the different priority settings typical of these types of institution. At the same time, institutional performance differentiation within institutions, more far-reaching vertical differentiation between institutions, and concentration of resources among the most highly performing research-intensive universities would not be a viable option in Norway because of the dominance of its egalitarian values and the high value attributed to the responsiveness of higher education to the regions. In Switzerland, we have seen that different values firmly support the two sectors, with only a few exceptions in individual subject areas overriding the boundaries between the two regulated types of institutions. Moreover, the high value attributed to the needs and development of regional authorities not only contributes to sustaining the two institutional types but also maintains the differences between institutions of each type which cater to different regional target groups, stakeholders and their needs. In France the parallel high values attributed to egalitarian access and to elite education help to explain the clear separation of the university and grande école sectors as well as the internal differentiation which universities have been developing over the years to respond to these two values. In England, where value-driven academic drift has been observed widely during the decade following the 1992 abolition of the binary divide, our survey has revealed more diverse values among academics. Some of these would favour alternative career structures in which rewards are given on the basis of excellence in innovative and inclusive teaching practices, responsiveness to employer and other societal needs, or of contributions to business innovation, rather than the currently dominating research criteria. This would amount to a social foundation on which more diverse reward structures could be introduced. At the same time, the elite values which are so often publicly denigrated are still deeply ingrained in social and political choices and networks, and still sustain many institutional practices. Although social mobility and widened access are publicly, politically and even financially promoted, they encounter glass ceilings of value-sustained social practices not easily undone through mere political will.[2]

As influences, value systems are too decisive and internally diverse to be ignored in the study of institutional differentiation processes. Moreover, they are themselves subject to influence and can evolve through sustained forms of recognition or financial rewards. The high value of innovation in the English university practices is a good case in point.

2. The Hierarchy of Values: Vertical versus Horizontal Differentiation

The examination of the wide variety of attention and values attributed to different aspects of diversity leads on to the hierarchy of values which these systems may be said to establish or realise. In the research literature, the terms "vertical diversity" and "vertical differentiation" have been coined to describe those systems which clearly favour one type of institution over others, implying a hierarchical set of diversity values associated with the different institutional types or profiles. Conversely, "horizontal differentiation" would describe systems in which equal value is attributed to different types of institutional profiles. Of course, even on the basis of the substantial set of data accumulated in this study, such judgements will remain highly subjective or inter-subjective at best. Nevertheless, with this caveat in mind, it may still be useful to consider to what extent the five national contexts examined in this study could be described as vertically or horizontally differentiated.

The clearest case of vertical differentiation to be found in this study may be said to be the Slovak higher education system. The Slovak system has been expanding rapidly over the last two decades and had developed a high degree of horizontal differentiation in the first phase of expansion in the 1990s, with different institutional profiles emerging in different parts of the country, largely in support of regional needs. While some of these portfolio differences have subsisted, institutions have expanded further, often moving toward a model which was found to be more advantageous in the competition for students, namely that of the comprehensive university. In the process, given that resources were not sufficient to support the expansion, quality problems emerged. Moreover, in the legally unified system, the "university" title began to be used indiscriminately for any institution, regardless of size, portfolio, or the presence of any research activities. At the same time, the pressures of research competitiveness increased, pushed by the Lisbon agenda and its national ramifications. These pressures soon resulted in calls for a system which would apply quality standards more rigorously, would differentiate funding accordingly, and which would strengthen the research capacity of its universities. Ultimately, the national policy solution became a blending of these calls into a new form of institutional differentiation which would use the volume and quality of research as its sole differentiating criterion. This policy took several years to be implemented, but it was conceived from the beginning, and is now being implemented,

[2] David Turner, "Universities' social equality drive falters", Financial Times, June 4 2009.

as a model of vertical differentiation which introduces a formal method of differentiating institutional types while clearly setting one type (that of the research-based university) above the others.

A more complicated, internally conflicted case of vertical differentiation can be found in the English system. Here, values and national as well as institutional policies seem to make a strong case for horizontal differentiation, with equal values being attributed to different mission types of institutions. The dividing lines are mostly soft and self-organised, rather than regulated, and follow criteria of research intensity and attention to diverse student clienteles. At the same time, however, the dominance of funding for research and the strong and rising visibility of research performance for the reputation of institutions creates a strong vertically differentiating force within the system. It is still unclear whether the more diverse values of excellence which have emerged among academics in England and which could sustain differing institutional orientations if supported by the national reward structures, will be supported by changes to the unevenly distributed funding channels so as to allow the HE landscape to diversify more horizontally rather than vertically.

France is an interesting case in that one can currently observe the succession of one model of vertical differentiation with another, although a more horizontal broadening of values attached to HE adds further complexity to the picture. Traditionally, the French system is highly vertically differentiated, with clear lines drawn between a selective elite sector (the professionally oriented *grandes écoles*) and the inclusive universities. In neither did research play a very prominent role, since research capacity and its most highly performing functions were largely associated with the CNRS, which was profoundly linked to the universities, but still separately run. However, with the growing importance of research for national competitiveness and reputation, research is increasingly becoming a key vertical differentiating criterion for institutional position. Universities mention the number of CNRS units with which they are associated to demonstrate their success, and most institutions are expanding their research strengths in their most promising areas to attract public recognition, funds, students and regional support. Interestingly, the professionally oriented elite *grandes écoles* are increasingly interested in expanding their research capacity, viewing this as a necessary ingredient of their own profile. Given the accompanying promotion of cooperation (e.g., PRES, etc.), a new landscape is emerging in which new forms of vertical differentiation are combining with new forms of horizontal differentiation (e.g. again through the PRES). From the point of view of institutional differentiation, France may be the most exciting case to follow in the next years.

Norway has so far had a largely horizontally differentiated system, with formally differentiated types performing different functions; but this is transforming into a more vertically differentiated one, with research and research training intensity again the differentiator. The traditional emphasis on regional diversity is increasingly overshadowed by concern with international positioning. Some higher education researchers would traditionally have called such a shift "academic drift", but it should be noted that the research which plays the differentiating role is no longer just academic basic research, but contains a wider range of different types of research, including research which is not only applied, but also often explicitly geared to the needs of the businesses. The term "research" has become more inclusive in its scope while its practice has become more exclusive through its differentiating function. Instead of "academic drift", the label "research drift" would be more fitting. While the result seems to be a convergence of institutional types (and the formal boundaries have been redefined to enable them to be more easily crossed), it is not clear whether this convergence is positively valued (for the increased and more differentiated research capacity) or negatively valued (since the new university-like institutions are regarded as less responsive to the needs addressed by the original more regionally oriented colleges).

Finally, Switzerland could perhaps be seen as the most horizontally and least vertically differentiated system of the five. While research also plays a high role on the national agenda, the distinction between more internationally oriented research, and more regionally responsive research and innovation, which serves to support the dividing line between the two sectors, is not associated with a strong difference of social status or public recognition. The two types of research are catered for through separate funding channels, as are the institutional types in which they are conducted, thus allowing for the comparatively horizontal form of differentiation noted above. The high esteem in which the *Fachhochschulen* are held is embedded in a tradition which attributes comparatively high social status to high-level vocational education and which confronts academic education with a comparatively high degree of scepticism unless it is seen to serve as a foundation for innovation in the long run. As a result, the binary line seems relatively stable and rooted in the national value system, although boundaries are significantly more blurred in some subject areas (such as engineering and pedagogical training) than others. In addition, within each institutional type an increasing

internal differentiation can be observed, with respect to expanding missions and functional emphases.

To conclude, there are two conditions upon which horizontal differentiation and parity of esteem must be built: first, it needs visible, strong and different reward structures which help to sustain the differing orientations and value systems on which they feed. Second, and as a consequence of the first, horizontal differentiation needs relatively high levels of expenditure in order to provide sufficient incentive to support the diversity sought. Without considerable funding, any parity of esteem will dissolve in the face of limited resources and prioritised activities.

3. The Interplay of Forces Driving Diversification or Convergence

This study raises the question whether there are sets of forces influencing the overall movement to institutional diversification or convergence; and whether, when looked at across the cross-national sample, these are found to be aligned and mutually reinforcing or largely in conflict with one another.

The most obvious recurrent conflict of forces found is the inconsistency between national attempts to diversify HE missions (through regulated institutional definitions or funding instruments) and the homogenising effect of national career frameworks, which tend to be more conservative and hierarchical and favour research as the main hiring and promotion criterion. The exception is found in the two binary systems, which allow for more diverse academic career tracks. This is particularly true in Switzerland where public values help to support the comparatively high status of professional education and professionally oriented academics in the *Fachhochschulen*. The homogenising effects of traditional academic career patterns dominated by research performance are often exacerbated by the growing internationalisation of academic careers. By contrast, strong regional orientation helps to raise the importance of other criteria of academic success, e.g. in research that is relevant for business innovation, or continuing education achievements.

In general, international developments tend to be in tension with regional interests and orientations, although areas of overlapping interest do exist. Usually international influences tend to increase convergent tendencies, while regional influences support functional and staff diversification. Only where international higher education practices introduce a new dimension (such as the increasing orientation toward innovation activities) to a comparatively traditional academic system, can they be said to act as a diversifying force.

In all countries, national and institutional policies were in conflict with one another with respect to programme or subject diversity. In general, institutions have an interest in expanding their portfolios to meet new student and scientific demands. Some institutions also have policies to exploit existing subject diversity through new ways of organising programmes, e.g. through interdisciplinary Master or Doctoral programmes which explore new interfaces between subject areas. In contrast, national policies are more interested in cost-saving concentration effects.

Of course, the combination of different forces does not necessarily imply that they are in conflict with one another. This study also reveals mutually reinforcing effects, for example, between research funding instruments, international developments and career development criteria, all of which reinforce the emphasis on internationally oriented basic research. Other examples of such mutual reinforcement exist between career structures and existing academic values or vice versa. Furthermore, it is not surprising that stakeholder values and regional influences are frequently in alignment, since the one is part of the other, and both contribute to the diversifying forces in higher education. Finally, it might be expected that national higher education policies and national public funding instruments would be aligned. However, surprisingly often, they are not. Inconsistencies between explicit policies and the array of existing funding instruments are due partly to the independence of the funding agencies (which offers advantages in other respects); and partly to the implicit hierarchy of values, which is not necessarily explicit in public declarations but is necessarily revealed in the priorities set for higher education expenditure.

Institutional diversity results from a complex interplay of different forces which may be in conflict with each other. These not only include explicit national regulations, policies and funding instruments but also other rewards and incentives, quality assurance standards, career advancement practices, academic and stakeholder values, regional policies and support as well as international and scientific developments. Policy makers and institutional leaders who wish to develop proactive institutional policies with respect to any aspect of institutional diversity should take into account the whole array of such forces if they wish to be effective.

4. The Importance of Combining External and Internal Diversity in Institutional Diversity Studies and Policies

This study has ventured beyond the usual focus on external diversity as a response to diverse needs. It has shown that the diversity within institutions may often be as great as the diversity between different institutions and their types or profiles. As a response to new demands, internal diversity seems to be an option just as often as external diversity. So it may be asked whether there are limits to the internal diversity that institutions would seek. What would define those limits: efficiency, effectiveness, institutional visibility? Are there some aspects of internal diversity that benefit institutional innovativeness while others hamper it? Are there some aspects of diversity that are better dealt with externally, while others are better addressed internally?

Obviously opinions differ with respect to the relative advantages of external and internal diversity. In some areas, external diversity is clearly seen as the answer, in others, internal diversity seems preferable. With regard to institutional visibility, for example, external diversity is undoubtedly seen to be preferable to internal diversity, at least in so far as mission, student and staff diversity are concerned. Institutional marketing becomes a great deal more coherent if it addresses a more homogeneous range of students and staff in terms of qualifications and expectations. In light of the increasing pressures to promote institutional reputation internationally, it may thus be unsurprising that calls for increased external diversity are supported by those who want to position their institutions or systems in international markets. In all other respects, however, it is less clear whether external or internal diversity provides the better answer to the challenge of diversifying demands and achieving maximum institutional responsiveness.

Internal diversity is favoured or promoted indirectly through the many new close institutional alliances and mergers which are being pursued all over Europe to exploit the benefits of new disciplinary combinations, and to increase critical mass and international visibility. We have seen that these questions are widely debated in France and Norway and have been instrumental in the formation of the FH sector in Switzerland, which has been created through institutional mergers. Often, wherever mergers are welcomed, a major increase of internal diversity is also accepted implicitly or at least not seen as a major impediment to institutional effectiveness. This diversity is sometimes even welcomed explicitly, in that new combinations of disciplines and programmes become possible. Indeed, with respect to disciplinary and programme portfolio, internal diversity is most often seen as an institutional asset.

In contrast, other aspects of internal diversity are more often seen to pose problems to institutional coherence and development, suggesting that external diversity may be the more viable option. Most prominently, mission diversity has most often been discussed as a potential threat to institutional effectiveness. However, this study shows that internal mission diversity, which is widespread among the institutional sample of this study, may not be always as problematic as is often assumed. Whether mission mixes are perceived as mission stretches or worthwhile functional variety, i.e. viewed negatively or positively, seems to depend on the combination of functional emphases pursued. For example, the combination of applied research, innovative teaching, active continuing education, frequent contribution to business or societal innovation are mission priorities that are frequently found to combine well, and attract a slightly different mix of priorities among academics. However, we have also seen that academics at institutions with high priority attributed to basic research seem to be just as ready to contribute to innovation (though less often ready to use this involvement as a reward criterion), though often averse to engaging in continuing education. Also, innovative teaching is less often rewarded at these institutions, although more so in recent years. So internal institutional diversity with respect to missions may work well, but this will depend on the mission involved and on the value system espoused. While more data may be needed to trace such mission combinations and to corroborate patterns of institutional mission across Europe, it may already be concluded that expanding higher education missions is not problematic per se, but may work well depending if the mission alliances and the staff profile available to support them are appropriate.

Of course, these choices and combinations may change over time. In England, for example, the positive attitudes to engagement in research or other services for business innovation, which are more positive than the cross-national average, reflect a more recent heritage, namely two decades of financial diversification and special incentives. The conditions under which mission spread becomes mission stretch are themselves re-determined over time. As Burton Clark has proposed, mission diversity may be perceived as difficult if the internal negotiation needed to defend the less traditional orientations and groups becomes too cumbersome and hinders innovative capacity. At the moment, beyond the normal territorial bickering between institutional sub-turfs, institutional war zones most often emerge where those who seek a purely science-driven institutional

development negotiate with those who seek more demand-driven institutional programmes and priorities. Hence the most strongly demand-driven activities (such as continuing professional development) would be eschewed by those who fear a general decline of pure research in the face of utilitarian demands on higher education. But wherever the dividing lines run, they are likely to shift over time, with acceptable degrees of internal mission diversity changing accordingly. Ultimately, such shifts of mission possibilities are matters of long term institutional choice, at least wherever institutions are free to hire their staff and decide on the hiring criteria, since they may choose to prioritise different inclinations and functional orientations in their staff, and thereby help to promote different attitudes toward mission mixes.

With respect to the student body, the choice between greater internal or external diversity to cater for the increasingly diverse student body is also complex. Internal diversity is seen less as an asset and more as a challenge for institutions. While most European institutions, with a few exceptions (most often in England), are relatively indifferent to the ethnic, social or religious diversity of their student bodies, attitudes to diversity of student qualifications are ambivalent. Whereas diversity of qualifications in terms of disciplinary background is welcomed as unleashing innovative potential (especially in the context of new Master programmes), diversity of qualifications with respect to levels of performance is seen to pose a problem, since it drives away the better qualified students, renders teaching more difficult and time-consuming, makes counselling more costly, and may even harm institutional reputation. In this tension between elite and mass education, institutions which would expect to attract the better qualified students are likely to favour external diversity, while others accept internal diversity as offering better chances of upward social mobility and performance pull for students from less educationally privileged backgrounds, and provide the special support services required. In both cases, institutions seek recognition for the excellent environment they provide. However, while there is public recognition for institutions in which excellent students are concentrated, there are hardly any rewards or public recognition for institutions which have pursued excellence in teaching and supporting diverse student bodies. As the English case showed, such excellence may even cause reputational damage by drawing attention to the inclusion of socially disadvantaged (and by implication often less qualified students), potentially alienating the better qualified ones who are seeking high status environments. Likewise in France, where a strong notion of elite continues to determine the contours of the higher education system, excellence is associated with reputation in so far as selection of excellent students is concerned, whereas excellence achieved in teaching diversely qualified students and helping them succeed does not add to institutional reputation but, if anything, undermines it.

The English option for greater external diversity with respect to student qualifications is contrasted by the Norwegian preference for greater internal diversity by leaving the choice to the students who tend to choose institutions in their regions unless their choice of subject area forces them to go further away. The idea of greater quality stratification in terms of student qualifications is limited to the distinction between the two institutional types.

Given the lack of reliable comparative competence assessments, it is unclear which option would provide greater educational benefits. What is clear, however, is that choosing external diversity over internal diversity or vice versa may both be viable options, depending on the underpinning value system and the availability of adequate funding.

External and internal diversity have to be looked at jointly for another reason, namely the increasingly fuzzy boundaries between institutions. This study has shown how often diversity is valued and approached in conjunction with different kinds of cooperative arrangements. Often these may affect institutional development profoundly, as an integral part of portfolio development, of outreach to new target groups, or of going beyond familiar mission emphases. Examples of such arrangements may be the alliance of a *Fachhochschule* with a university in its Master programmes and research training in Switzerland, the common Doctoral schools between universities, research institutes and other higher education institutions in France, Norway, and Switzerland, the mixed labs between universities and the national research institutes in France or Slovakia, the regional alliances between higher education institutions sharing programmes, infrastructures and even professors, in France, Norway, Slovakia or Switzerland, or the campus consortia in France. For these institutions, dealing with the demands of diversity often goes beyond the boundaries of the institutions. But these choices are an integral part of institutional planning and development. The distinction between external diversity and internal diversity is difficult to maintain in these contexts.

Hence, the understanding and measurement of institutional diversity in any higher education system only in terms of external diversity – that is, by looking

at the number of units, programmes and institutions of different profiles, target groups and orientations – falls short of recording the complexity of real institutional responses.

Finally, internal diversity should be an important part of institutional diversity accounts and deliberations, because it implies a considerable range of institutional challenges to be addressed. To hire and develop staff of different orientations, to cater to varied student bodies, to develop differing missions within the same institution, demands considerable professionalism on the part of institutional leadership and management. Leadership should not just be attuned to the traditional workings of science, scholarship and research, but should also address a wide variety of development goals; and this requires interest and skills in all these functions. The leadership itself must be more diverse in orientation and competence, but still able to communicate and agree on common institutional agendas. Hence opting for internal over external diversity, in order to respond to the expanding demands on higher education, implies new approaches to management and leadership. Only the more homogeneous institutions can afford to be run by individuals or groups who share a homogeneous training background.

5. Formal versus Informal Diversity – The Role of Regulation, Autonomy and Competition

This study shows that the differentiation usually made between formally defined institutional types and informally defined ones, and the rigidity associated with the former or flexibility associated with the latter, may not be as clear-cut as is often suggested in policy debates. With respect to the dynamics of institutional development and shifting mission mixes, an informally differentiated system such as the English may not be more flexible than a formally differentiated one such as the Norwegian. Dynamic transition between different types of institutions and the differentiation of different institutional profiles as defined by different mission mixes are not only determined by regulations (or their absence) but also by funding instruments, reward structures and historically developed path dependencies. If diversification of institutional profiles is to occur within or between the legal or other boundaries between different institutional types, incentives and values also have to be diverse enough to sustain such diversification. The dynamics of diversification are not necessarily hindered by formal boundaries and not necessarily helped by their absence. Rather, they are defined by the interplay between regulatory factors and a whole array of other forces.

Linked to the distinction between the formally differentiated and the informally differentiated systems is the question of institutional autonomy, which is usually associated with the absence of regulated types. In policy debates as well as in some of the research literature, the assumption is often made that the degree of institutional diversity is linked to the degree of institutional autonomy in the system. It is supposed that greater institutional autonomy would allow institutions to adapt to varying needs more flexibly and thus to explore and occupy varying institutional niches. This assumption cannot be confirmed by the findings of this study, at least not in this unconditional formulation. The reality is clearly more complex and less linear.

First, while it may appear that institutional autonomy in a given area opens a wider field of choice in institutional orientation, the choice may be restricted by many other factors, such as the values or prestige associated with different options, or the opportunity costs connected with one line of action compared to another. These restrictions are not just set by academic values, though these may indeed act as a counterforce as some have observed (e.g. Meek, Morphew), but may be a more subtle combination of contextual and institutional forces such as career structures, financial instruments and conflicting market opportunities.

The English system serves as illustration. Given their high degree of autonomy, why do institutions not occupy that segment of the market concerned with widening participation more actively, given that this orientation would appear strongly supported by public policy, including with some earmarked funds? Academic values cannot be responsible, as academics at many institutions are reported to be strongly committed to providing excellent teaching, counselling and services to a wider clientele of students from less privileged socio-economic and educational backgrounds thereby offering opportunities and upward social mobility to those who may not traditionally have entered and succeeded in higher education. Three factors prevent these supportive values from dominating institutional choices. Most importantly, while financial incentives have been put into place to support the national policy of widening participation, these are undermined by the national funding formula which HEFCE applies to all institutions (regardless of missions) and which weighs the retention rate as an important indicator for the level of the institutional teaching grant. In addition, academics are mobile members of a wider national career market which, as our questionnaire data have confirmed, only recognises research performance as a decisive factor in hiring and promotion. Hence, if they want to maximise career prospects, academics may have to refrain from investing too much time in supporting non-traditional

student clienteles, even though their own value systems might have led them to do so. Finally and perhaps most decisively, an academic's overall success in teaching also depends on attracting qualified students from all backgrounds. These student choices are based, at least in part, on the prestige of the institution which is determined by RAE results and retention rate rankings. A strong widening participation agenda may deter students with a wider range of choices, since these will want to maximise their status and future prospects by going to an institution with a better qualified student profile. Hence, in the current context where financial instruments, career structures and reputational dynamics all affect student choices, a widening participation agenda is only a workable orientation if it remains low key and is combined with other strengths that sustain institutional prestige. Institutional autonomy and open competition for students should not be equated with maximum diversity of institutional choices, as long as some options are so clearly vertically differentiated through funding and status values.

Secondly, the relationship between institutional autonomy and diversification is not linear because systems which are formally differentiated, i.e. which regulate institutional types, do not necessarily prohibit institutional autonomy altogether, but rather set limits to developments, while other forms of differentiation may still be allowed, foreseen and even promoted through incentives. The Swiss case illustrates this. In this formally regulated system, universities enjoy a wide degree of autonomy (although for some this has only been the case for a few years), are subject to different regional authorities and influences and cater for different student and stakeholder groups, while competing in the nationally organised realm of research funds. The result is a relatively high degree of differentiation among the different universities. The more recent *Fachhochschulen* sector has not enjoyed such a high degree of autonomy, or research competition, and has even been subject to some government intervention with respect to programme development and choice of institutional partners. Their possibilities to develop varying orientations as to student and stakeholder target groups or programme portfolio are clearly more limited and apparently not promoted as strongly, since they are seen to develop in separate regional niches. The survey showed, however, that their regional markets are not neatly divided, and that they do see each other as competitors. Their quest for more autonomy and thus for more opportunities to differentiate among themselves is thus likely to grow considerably in the years to come.

With respect to the effects of autonomy on institutional diversity, the French case will be perhaps the most interesting to follow in the years to come, provided the options which the law allows are actually implemented. In some respects, French institutions are now confronting for the first time the wide range of options opened up by increased autonomy since 2008. These options comprise, at least in theory (full implementation pending), the possibility of deciding autonomously on their budgets, including internal allocation; creating foundations and using their income freely; establishing contracts with academic staff with working conditions that can be set freely and may thus be internationally more competitive; and attaching different weights to the various dimensions of their mission, with performance contracts which would reflect these emphases. A number of questions remain: will institutional choices again be limited to a narrow range, as homogenising national career structures and the rising pressures of international visibility push institutions most strongly in the direction of strengthening their internationally visible research, to the detriment of other dimensions of their missions? Will the system simply change the logic of its vertical differentiation and replace the old professional elite with a new mix of research-based academic and professional elites? Or will we see a wider set of horizontally differentiated institutional profiles, supported by a wider range of national and regional incentives, under the combined influences of considerably increased autonomy and new cooperation structures?

In summary, institutional autonomy and inter-institutional competition only promote differentiation if values and rewards (symbolic and financial) are supportive. The choice to define some institutional types through regulation is one way of creating a framework which supports alternative reward structures. While it defines limits to institutional development, it may still allow institutional autonomy and inter-institutional competition within those limits. The choice should not be misrepresented as an either/or decision between de-regulation of institutional mission and institutional autonomy on the one hand, and regulated missions and no institutional autonomy on the other. Rather, each choice imposes different limits and offers different opportunities for institutional development, depending on regulatory and reward definitions. Formal and informal methods of promoting diversity are not diametrically opposed choices, but part of an overall set of factors which together define the degree of support available for institutional choices, and in which institutional autonomy is not present or absent absolutely but by degrees. If alone and unsupported by other factors, institutional autonomy will have little effect on differentiation; but supported by other factors, it allows for more possibilities. Where institutional

autonomy is very restricted, institutional development will not be able to adapt to changing conditions and new challenges. But where institutional autonomy is permitted, institutions will adapt in those directions for which the greatest symbolic and financial rewards are granted.

6. Institutional Diversity – Concluding Propositions

As always more questions remain than are answered. Having made existing approaches and conceptual distinctions appear simplistic, we should offer our own set of simple concluding propositions, in the hope that they may lead to further differentiation and debate.

1. The concept of institutional diversity should not be approached as a value in itself, a normative term, but should be used with as much awareness as possible of the underlying values associated with the different aspects of such diversity. These clearly diverge considerably with respect to different aspects of diversity and in different national and institutional contexts, or even in sub-groups within institutions. Only where there is clarity about these values and the hierarchy which may exist between them, may consistent policies be pursued. The effectiveness of diversity approaches should be judged in relation to these values.

2. In Europe, discussions on institutional diversity in higher education tend to be associated with the diversity of institutional profiles. While the latter include a variety of aspects across the five countries, institutional diversity in higher education was valued most strongly and consensually with respect to functional differentiation. Such functional diversity is sought in institutional mission mixes as well as in staff profiles, while national and international career patterns tend to exert a homogenising influence. However, while the need for functional differentiation in higher education is widely acknowledged, national or institutional reward structures normally offer only very tepid support. Moreover, if such functional differentiation is really sought, higher education leadership and management will have themselves to be professionalised in various ways, with respect to professional backgrounds as well as career paths and orientations.

3. Diversity of institutional profiles may be pursued through processes of vertical or horizontal differentiation. The latter would seek to create parity of esteem between different types or profiles, whereas the former would prioritise some types more highly than others, or define them through differences of quality standards. While vertical differentiation implies a hierarchy of values attributed to different higher education functions, supporting a redefined form of elite in the context of a massified higher education system, horizontal differentiation would call for a more equal investment in the different functions. Horizontal differentiation approaches require a varying set of incentives to be effective, which implies an increase in funding to support the expanded functions (as well as the traditional functions which are still needed as they were before). Vertical differentiation is more often chosen when limited funds force policy makers to concentrate expenditure on those functions and institutions from which they expect the highest value added. In the national case studies included in this study, vertical differentiation forces have grown in recent years and have been most strongly determined by research performance and international visibility.

4. In any higher education system, understanding, assessing and measuring institutional diversity only in terms of external diversity, by looking at the number of institutions of different profiles and orientations, falls short of the complexity of real institutional responses. Internal diversity may not only offer legitimate alternatives to the challenge of varying demands but may also hold innovative potential for institutional development. Moreover, concentrating only on external diversity fails to take account of the complex cooperative arrangements between institutions which may be effective and efficient responses to varying needs but which blur the boundaries between institutions. Externally more diverse systems are not necessarily more effective than internally more diverse ones. The effectiveness of both options, which are usually pursued in parallel, will depend on the values which the system aims to uphold and the array of factors which define the system. Only with respect to the maintenance of a social elite can it be argued that external diversity has proven to be clearly more effective.

5. Diversity of the student body, which is the paramount diversity issue in the USA, is only rarely prioritised in the five European higher education systems studied. The idea of optimising innovative potential through successful orchestration of varying student backgrounds was only pursued in a targeted manner at a few institutions.

   Student diversity is primarily addressed as diversity of students' socio-economic backgrounds, in pursuit of increased social justice and widened access.

However, few resources have been made available to realise massification without harming the quality of traditional provision and the demands which it aims to meet, including the need for social elites. Moreover, all the systems explored in this study have displayed a particular difficulty with the idea, definition and support of their elites, caught as they are in the tension between the need to expand higher education to larger parts of society and the continuing need to develop some elite forms of provision. They have thus missed the opportunity to redefine and sustain effectively the need for an elite. Even Norway, which is most explicitly and consistently anti-elite in its academic and stakeholder values, shows an increased need for a high-performing elite that can meet the most stringent demands of international competitiveness. While the idea of hereditary privilege offends dominant notions of equal opportunity and equal rights, the need to maintain elites in some form or another seems to persist and is usually met, obliquely rather than explicitly, with differentiated, often separate higher education provision (institutions or programmes). Since the notion of elite is associated with undeserved or merely hereditary privilege, rather than being openly studied in its practices and acquired social capital, opportunities are missed not just to redefine the elite in more socially just and acceptable ways, but to develop effective compensatory measures that take account of the competences needed to access and succeed as part of such an elite. Genuine meritocracy in higher education would need considerable investment in support measures for the less privileged, not only within higher education but more particularly in secondary education.

6. The assumption that increased autonomy and inter-institutional competition will ensure increased institutional diversity has not been verified by this study, at least not in this unconditional formulation. Only if autonomy goes hand in hand with a varying system of rewards will institutions be able to look for the different niches best suited to their mission, heritage and long-term goals. Moreover, under-funded institutions will tend to scrounge for funds no matter where they find them, and will ignore their historical institutional identity and proclaimed mission.

7. Systems in which institutional types and their mission diversity are regulated by law should not be superficially perceived as lacking institutional autonomy. In this study we have studied three systems in which different institutional missions are laid down by law but which differed considerably in the degree of autonomy offered to institutions within the limits of these missions and in the availability of different incentives to reward different institutional developments.

8. While the description of higher education systems as evolving from elite to mass higher education through a process of increasing differentiation can be verified cross-nationally in Europe, the notion that differentiation proceeds towards growing maturity by first introducing and then abandoning binary systems, to make way for systems in which autonomous institutions will differentiate around diverse market niches, is grossly oversimplified and therefore misleading. Rather, different mixes of regulatory, financial and reward instruments, as well as the norms which underpin or undermine them, make binary systems appear less rigid and "post-binary" integrated systems less integrated and flexible than they are often portrayed. Neither the one nor the other seems necessarily more mature in terms of widened opportunities for a larger proportion of the population, or of a more adapted response to the needs of diversity.

9. Institutional diversity results from the complex interplay of different forces which may be in conflict with each other. These not only include explicit national regulations, policies and funding instruments but also other rewards and incentives, quality assurance standards, career advancement practices, academic and stakeholder values, regional policies and support as well as international and scientific developments. Policy makers and institutional leaders seeking to develop proactive institutional policies with respect to any aspect of institutional diversity should take into account the whole array of such forces if their policies are to be effective.

10. All of the systems included in this study can be described as being in a state of transition with respect to their approaches to institutional diversity. The fate of these approaches will not be decided by the contents of the explicit diversity policies which they may include, but rather by the confluence of the implicit forces exerted by regulations, financial incentives, rewards, quality standards, as well as academic, public and professional values. To succeed, the quest for flexible and diverse institutional HE systems and institutions will have to confront the whole complexity of these forces. Institutional diversity cannot be addressed as a separate policy but will have to emerge as the aggregate result of balancing out the different needs which HE needs to address. As long as restricted resources for HE result in the prioritisation of some policy aims and institutional dimensions over others, policy declarations in favour of institutional diversity will never be more than love's labours lost.

References:

Becher, T and Trowler, P. A. (2001), *Academic Tribes and Territories: Intellectual Enquiry and the Culture of Disciplines, Buckingham:* SRHE and Open University Press.

Birnbaum, R. (1983), *Maintaining Diversity in Higher Education.* San Francisco: Josseys-Bass.

Bleiklie, I. (2001), Towards European Convergence of higher education policy? *Higher Education Management,* 13 (3) 9-29.

Clark, B. (1983), *The Higher Education System*. Berkeley and Los Angeles: Univ. of California Press.

Clark, B. R. (1993), The problem of complexity in modern higher education, in S. Rothblatt, & B. Wittrock (eds.), *The European and American University since 1800*. Cambridge: Cambridge University Press.

Clark, B. (1998), *Creating Entrepreneurial Universities: Organizational Pathways of Transformation.* Oxford, England: Pergamon Press.

Codling, A.P. and V.L. Meek (2003), The impact of the state on institutional differentiation in New Zealand, *Higher Education Management and Policy,* Vol. 15, No. 2, 83-98.

Codling, A. and Meek, V.L. (2006), Twelve Propositions on Diversity in Higher Education, *Higher Education Management and Policy*, 1-24.

Dill, D. and Teixeira, P. (2000), Program diversity in higher education: an economic perspective, *Higher Education Policy,* vol.13, 99-118.

Douglass, J.A. (2004), The dynamics of massification and differentiation: A comparative look at higher education systems in the United Kingdom and California", *Higher Education Management and Policy.* Vol 16, No 3, 9-35.

Fairweather, J. (2000), Diversification or homogenization: how markets and governments combine to shape American higher education, *Higher Education Policy,* vol.13, 79-98.

Geiger, R.L. (1996), Diversification in US higher education: Historical patterns and current trends, in V.L. Meek, L. Goedegebuure, O. Kivinen and R. Rinne (eds.), *The Mockers and Mocked. Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education,* Oxford: Permagon.

Goedegebuure, L., Meek, L. (1997), On change and diversity: The role of governmental policy and environmental influences, *Higher Education in Europe,* Volume 22, Issue 3 1997, 309-319.

Guri-Rosenblit, S., Sebková, Teichler, T. (2007), Massification and diversity of higher education systems: Interplay of complex dimensions, *Higher Education Policy* 2007, 20, 373-389.

Hazelkorn, E. (2008), Learning to live with league tables and ranking: The Experience of institutional leaders, *Higher Education Policy,* 21, 193-215.

Huisman, J. (1995), *Differentiation, Diversity and Dependency in Higher Education.* Utrecht: Lemma.

Huisman, J. (1996), Diversity in the Netherlands, in Meek, V.L., L. Goedegebuure, O. Kivinen & R. Rinne (eds.), *The Mockers and Mocked. Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education,* Oxford: Permagon.

Huisman, J. (1998), Differentiation and diversity in higher education systems, in J.C. Smart (ed.), *Higher Education: Handbook of Theory and Research vol. XIII.* New York: Agathon Press, 75-110.

Huisman, J. (2000), Higher education institutions: as different as chalk and cheese? in *Higher Education Policy* vol.13, pp.41-54.

Huisman, J. and Kaiser, F. (eds.) (2001), *Fixed and Fuzzy Boundaries in Higher Education. A Comparative Study of (Binary) Structures in Nine Countries.* Den Haag: Adviesraad voor Wetenschaps- en Technologiebeleid.

Huisman, J., Meek, L. and Wood, F. (2007), Institutional diversity in higher education: A cross-national and longitudinal analysis. *Higher Education Quarterly* 61 (4), 563-577.

Huisman, J. and Morphew, C. C. (1998). Centralization and diversity: Evaluating the effects of government policies in US and Dutch higher education. *Higher Education Policy,* 11(1), 3-13.

Huisman, J. and van der Wende, M. (2004), The EU and Bologna: Are supra- and international initiatives threatening domestic agendas? *European Journal of Education* 39 (3), 349-357.

Huisman, J., and van Vught, F. (2009), Diversity in European higher education, *Mapping the Higher Education Landscape. Towards a European Classification of Higher Education.* Springer.

Jenniskens, I. (1997), *Governmental Steering and Curriculum Innovations: A Comparative Study of the Relation between Governmental Steering Instruments and Innovations in Higher Education Curricula*. Maarssen: Elsevier.

Kivinen, O. and R. Rinne (1996), The problem of diversification in higher education: Countertendencies between divergence and convergence in the Finnish higher education system since the 1950s, in Meek, V.L., L. Goedegebuure, O. Kivinen & R. Rinne (eds.), *The Mockers and Mocked. Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education,* Oxford: Permagon.

Kyvik, S. (2004), Structural changes in higher education systems in Western Europe. *Higher Education in Europe*, 29, 393-409.

Lepori, B. (2008), Research in non-university higher education institutions. The case of the Swiss universities of applied sciences, *Higher Education* 56, 45-58.

Larédo, Ph. (2003), University research activities: On-going transformations and new challenges. *Higher Education Management and Policy*, 15 (1),105-123.

Lepori, B., and Attar, L. (2006), *Research Strategies and Framework Conditions for Research in Swiss Universities of Applied Sciences.* Report to the Federal Office of Professional Education and Technology.

Meek, V.L., L. Goedegebuure, O. Kivinen & R. Rinne (eds.) (1996), *The Mockers and Mocked. Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education. Oxford: Pergamon.*

Meek, V.L. (1991), The transformation of Australian higher education: From binary to unitary system, Higher Education, 21, 461–494.

Meek, L. (2000), Diversity and marketisation of higher education: incompatible concepts?" pp.23-39.

Meek, V.L. , Goedegebuure, L. and Huisman, J. (eds.) (2000), Diversity, differentiation and markets, *Higher Education Policy,* Special issue, Vol. 13, no. 1.

Morphew, C. (2000), Institutional diversity, program acquisition and faculty members: examining academic drift at a new level, *Higher Education Policy,* vol.13, 55-78

Neave, G. (1996), Homogenization, integration and convergence: The Cheshire cats of higher education analysis," in V.L. Meek, L. Goedegebuure, O. Kivinen and R. Rinne (eds.), *The Mockers and Mocked. Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education,* pp. 26-41, Oxford: Permagon.

Neave, G. (2000), Diversity, differentiation and the market: the debate we never had but which we ought to have done, *Higher Education Policy* vol.13, 7-22.

OECD (2003), *Polytechnic Education in Finland.* Paris: OECD

Ouaja, S. E (2006), How to meet the challenge of diversity in the French system of education, in: W. Allen, M. Bonous-Hammarth, R. Teranishi (eds.) *Higher Education in a Global Society: Achieving Diversity, Equity and Excellence,* 33-50, Elsevier.

Rhoades, G. (1990), Political competition and differentiation in higher education, in J.C. Alexander and P. Colony (eds.) *Differentiation Theory and Social Change,* pp.187-221, New York: Columbia University Press.

Skolnik, M.L. (1986), Diversity in higher education: The Canadian case, *Higher Education in Europe* 11, pp. 19-32.

Scott, P. (2001), Conclusion: triumph and retreat, In: D. Warner & D. Palfreyman (eds.), *The state of UK Higher Education. Managing Change and Diversity.* 186-204, Buckingham: SRHE & Open University Press.

Scott, P. (2004), *Hierarchy or Diversity? Dilemmas for 21st-century Higher Education.* Key note, CHE conference 29-30 April 2004, Berlin. See: www.che.de/news.php?id=183

Scott, P. (2007), Back to the future? *The evolution of higher education systems, in B. Kehm (ed.) Looking Back to Look Forward. Analyses of Higher Education after the Turn of the Millenium.* Werkstattberichte 67, Kassel.

Siegel, D. (2003), *The Call for Diversity, Pressure, Expectation, and Organizational Response.* New York: Routledge.

Sörlin, S. (2007), Funding diversity: Performance-based funding regimes as drivers of differentiation in higher education systems, *Higher Education Policy* 2007, 20, 413-440.

Skolnik, M.L. (1986), Diversity in higher education: The Canadian case, *Higher Education in Europe* 11, pp. 19-32.

Teichler, U. (2003), The future of higher education and the future of higher education research, *Tertiary Education and Management*, 9, 171-185.

Teichler, U. (2008), Diversification? Trends and explanations of the shape and size of higher education, *Higher Education*, 56 (3), 349-379.

Teixeira, P., Jongbloed, B., Amaral, A. and Dill, D. (eds.) (2004), *Markets in Higher Education. Rhetoric or Reality?* Dordrecht: Kluwer.

Trow, M. (1970), Reflections on the transition from mass to universal higher education. *Daedalus* 99, No. 1 (Winter 1970): 1-42.

Trow, M. (1979), Elite and mass higher education: American models and European realities, *Research into Higher Education: Process and Structures.* Stockholm: National Board of Universities and Colleges.

Trow, M. (2005), Reflections on the transition from elite to mass to universal access: Forms and phases of higher education in modern societies since WWII, in Philip Altbach (ed.) *International Handbook of Higher Education,* Kluwer

Van Vught, F. (1996), Isomorphism in higher education? Towards a theory of differentiation and diversity in higher education systems, In: V.L. Meek, et al. (eds.), *The Mockers and Mocked: Comparative Perspectives on Differentiation Convergence and Diversity in Higher Education.* Oxford: Pergamon.

Van Vught, F. (2008), Mission diversity and reputation in higher education, *Higher Education Policy* 21, 151-174. (For another version of this article available on the web see "Diversity and differentiation in higher education systems", at CHET anniversary conference, Cape Town, 16 November 2007, see http://www.universityworldnews.com/article.php?story=20080129100927386&mode=print)

Van Vught, F. (ed.) (2009), Mapping the Higher Education Landscape. *Towards a European Classification of Higher Education.* Springer: Higher Education Dynamics Series.

Warner, D. & D. Palfreyman (eds. 2001), *The state of UK higher education. Managing change and diversity.* Buckingham: SRHE & Open University press.

Witte, J. (2006), *Change of degrees and degrees of change. Comparing adaptations of European higher education systems in the context of the Bologna Process. Promotionsschrift.* CHEPS/Universität Twente: Enschede. www.utwente.nl/cheps/documenten/2006witte dissertation.pdf

Country Case Study Background Documents:

England

CIHE (Council of Industry and Higher Education) (2006), *Diversity and Cooperation.*

Committee of University Chairmen (2004): *Guide for Members of Higher Education Governing Bodies in the UK.*

Department for Education and Skills (UK) (2003), *The Future of Higher Education.* Presented to Parliament by the Secretary of State for Education and Skills by Command of Her Majesty January 2003
http://www.dfes.gov.uk/hegateway/uploads/White%20Pape.pdf

HEFCE (2008) "Widening Participation"
[www.hefce.ac.uk/widen]

Report of the National Committee of Inquiry into Higher Education, headed by Sir Robert Dearing, known as the "Dearing Report",
https://bei.leeds.ac.uk/Partners/NCIHE/

Higher Education 2020 debate:
http://www.dius.gov.uk/higher_education/shape_and_structure/he_debate
for these contributions to the policy debate and commentaries

France

2006 Law about research: Loi de programme n° 2006-450 du 18 avril 2006 pour la recherche.
http://www.droit.org/jo/20060419/MENX0500251L.html.
also:
http://www.education.gouv.fr/cid5690/mise-en-place-des-poles-de-recherche-et-d-enseignement-superieur-pres.html.

2007 Law on Universities:
www.nouvelleuniversite.gouv.fr
IFOP (Institut français d'opinion publique) (2003), survey of business employers,
http://www.ifop.com/europe/docs/iut.pdf.
CGE (Conseil des Grandes Ecoles) Diversity Commission: l'Ouverture sociale
www.cge.asso.fr/cadre_societe.html

Norway

Norwegian Higher Education Law: "Act No. 15 of 1 April 2005 relating to Universities and University Colleges" can be found at:
http://www.regjeringen.no/upload/kilde/kd/reg/2006/0031/ddd/pdfv/273037-loven_higher_education_act_norway_010405.pdf

Stjernö report (NOU 2008:3).

Comments by the Norwegian Association of Higher Education Institutions on the Stjernö report, 2008-05-29.

For all documents pertaining to NOKUT, see www.nokut.no. The Evaluation of NOKUT/Reports 1 and 2 (2008) can be found at:
http://www.regjeringen.no/upload/KD/Vedlegg/UH/Rapporter_og_planer/NOKUTEvaluation2.pdf

Slovakia

Law No. 131 of 21 February 2002 on Higher Education and on Changes and Supplements to Some Laws.
http://www.cepes.ro/hed/policy/legislation/pdf/Slovak.pdf
This Act has been already supplemented by the Acts Nos. 209/2002, 401/2002, 442/2003, 465/2003, 528/2003, 553/2004, 365/2004, 455/2004, 523/2004, 578/2004, 5/2005 of the Law Code,332/2005 and No. 363/2007 of the Law Code.

ARRA (2005), Assessment of Public Universities and their Faculties. Bratislava. See:
www.arra.sk.

Jensen, H., Kralj, A., McQuillan, D., Reichert, S. (2008) *The Slovak Higher Education System and its Research Capacity. An EUA Sectoral Report.* Brussels.
http://www.eua.be/fileadmin/user_upload/files/newsletter/Slovakia_SectorEvaluationReport_080208.pdf

European Commission, Directorate General for Research (2005) Key Figures. Towards a European Research Area. Science, Technology and Innovation. (EUR 21264). The Key Figures are only published every two to three years.

Ministry of Education of the Slovak Republic. Annual Report on the state of higher education for 2004. Bratislava 2005.

M. Bruncko (Ministry of Finance) et al., for I. Mikloš (then Deputy Prime Minister and Minister of Finance of the Slovak Republic) (2005), *Competitiveness Strategy for the Slovak Republic until 2010*. National Lisbon Strategy. Bratislava.

OECD Education Figures:
http://www.oecd.org/topic/0,3373,en_2649_37455_1_1_1_1_37455,00.html

Slovak Government (2007): Návrh Inova?nej stratégie SR na roky 2007 a? 2013 - upravené nové znenie (Proposal for the Slvoak Innovation Strategy for period 2004-2013 – amended text), Bratislava, 14th March 2007. Reported on the European Commission's Website:
http://www.proinnoeurope.eu/index.cfm?fuseaction=nwev.NewsReader&news=72&lang=EN&ParentID=52&topicID=117

Switzerland

Bundesamt für Statistik (2008) *Befragung der Hochschulabsolvent/innen (Absolventenstudien),*
http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen__quellen/blank/blank/bha/00.html

Bundesamt für Statistik (2007) *Studierende und Abschlüsse BFS – Statistik des jährlichen Bevölkerungsstandes – Bildungsperspektiven.*

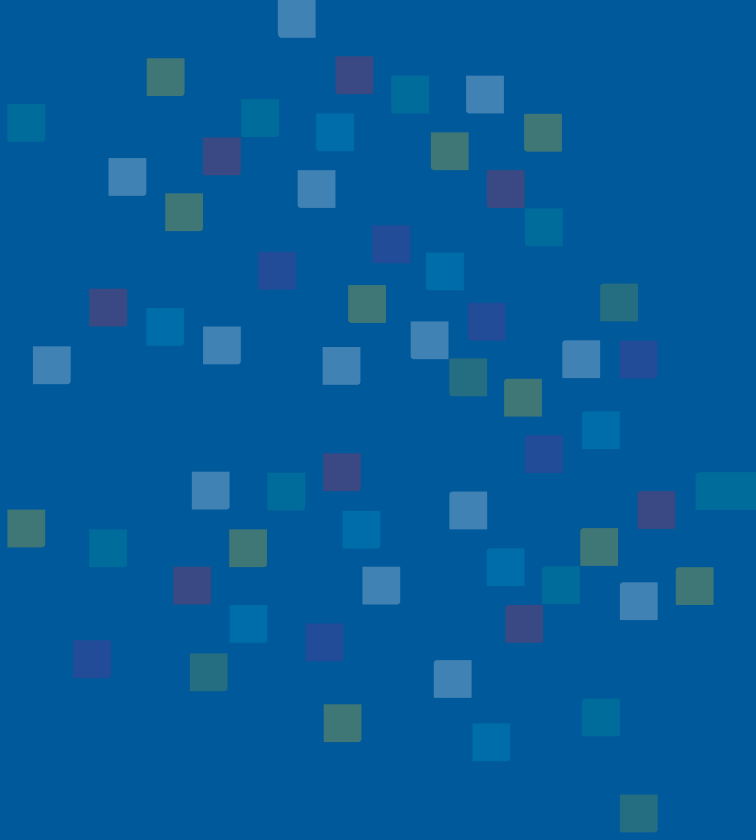
Bundesamt für Statistik (2007) *Studien- und Lebensbedingungen an den Schweizer Hochschulen. Hauptbericht der Studie zur sozialen Lage der Studierenden 2005.*

Kostenrechnung Universitäten und Fachhochschulen (2004) cited in *Bericht über die finanziellen Grundsätze und Auswirkungen des neuen HFKG"* (2007).
http://www.admin.ch/ch/d/gg/pc/documents/1504/Finanzbericht.pdf
Schweizerische Koordinationsstelle für Bildungsforschung (2007), Bildungsbericht 2006
www.bildungsbericht.ch; p.151.

Sybille Reichert (2007), *Universitäre Weiterbildung in der Schweiz. Bestandsaufnahme und Perspektiven im europäsichen Vergleich. Commissioned and published by the Staatssekretariats für Bildung und Forschung.*

The European University Association (EUA) is the representative organisation of universities and national rectors' conferences in 46 European countries. EUA plays a crucial role in the Bologna process and in influencing EU policies on higher education, research and innovation. Thanks to its interaction with its members and a range of other European and international organisations EUA ensures that the independent voice of European universities is heard wherever decisions are being taken that will impact on their activities.

The Association provides a unique expertise in higher education and research as well as a forum for exchange of ideas and good practice among universities. The results of EUA's work are made available to members and stakeholders through conferences, seminars, website and publications.



EUA
European University Association

European University Association asbl
Rue d'Egmont 13 · 1000 Brussels, Belgium · Tel +32 - 2 230 55 44 · Fax +32 - 2 230 57 51 · www.eua.be