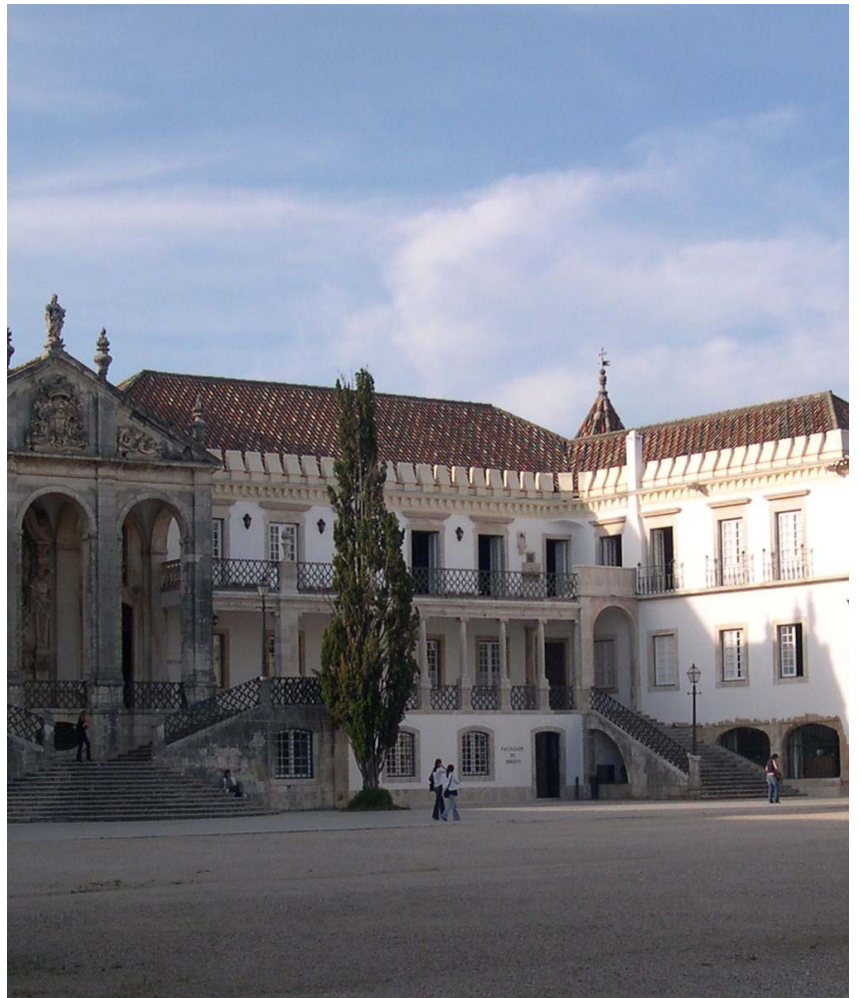




Center for
Higher Education
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Progress in higher education reform
across Europe

Governance Reform

Volume 1: Executive Summary main
report

Executive summary

Research questions and methodology

Higher education reforms reflect the growing recognition of the importance of higher education for economic, social and cultural prosperity and for increasing competitiveness. While it is well established that governance reforms have taken place at various levels and in various policy areas of higher education, what is less clear is how successful they have been in terms of increasing the performance of higher education systems as a whole. This study aims to answer the following questions:

- 1. What have been the policy changes in the governance of European higher education systems between 1995 and 2008? And what have been the policy changes in national higher education systems as regards governance reforms?*
- 2. To what extent does the current state of governance in European higher education reflect Europe's modernisation agenda for higher education?*
- 3. What are the possible links between governance reforms and the performance of higher education systems?*
- 4. What lessons can be learned and what might be the key governance policy themes in the further development of European higher education?*

In answering these questions a mixture of research methodologies has been used to collect and analyse data. The primary data sources to study governance reforms and their effects in thirty-three countries were a comprehensive country questionnaire completed by national experts, interviews with key stakeholders in each of the countries and two institutional case studies in fifteen countries (including interviews with key institutional decision makers). The secondary data sources included the literature on European governance reforms, previous comparative studies on governance reforms and EU and national policy reports.

Based on the terms of reference for this study eight performance dimensions were selected: access, educational attainment, mature learners, employability, mobility, research output, capacity to attract funds and cost effectiveness. With respect to these performance dimensions this study relied on readily available secondary (statistical) data from a number of international databases (OECD, EUROSTAT and UNESCO). To explore the relationships between governance reforms and system performance we used the outcomes of the questionnaires, the interviews with key stakeholders in each country and existing literature.

Governance reforms in Europe

There have been significant changes in governance since 1995 in almost all countries. Many new national higher education acts have been passed. Quality assurance and accreditation systems have been one of the major reform themes – partly inspired by the Bologna process. A series of reforms have had the key objective of enhancing the autonomy of higher education institutions; in some countries this has entailed changing the legal status of the institutions. As part of the reshuffling of authority new policy instruments to steer higher education systems have been developed. Contracts and multi-year agreements between the state and universities are examples of such new instruments. In many countries funding mechanisms have been altered; line item budgeting systems have been replaced by lump sum systems for public funding; and historically-based allocation schemes are losing ground to funding mechanisms with more of an emphasis on outputs.

As a result of the continuing expansion of higher education, new higher education sectors have been established or have matured – the universities of applied sciences. Simultaneously binary divides between universities and universities of applied sciences are under pressure in other countries. To expand supply further private higher education has gained ground in some countries; there are discussions on blurring the boundaries between the public and private provision of higher education services. The higher education landscape has been restructured in several countries through mergers of institutions within and across higher education sectors. And we see many initiatives to encourage research collaboration between higher education institutions as well as between public universities and private companies (through networks, alliances and clusters).

One of the overarching trends in European higher education governance concerns the enhancement of institutional autonomy. In this study we distinguish between four dimensions of institutional autonomy: organizational, policy, interventional and financial autonomy. Across Europe, the **organisational autonomy** of public universities to decide on their own internal governance structures; on their internal authority, responsibility and accountability structures; as well as to select their institutional leadership is still restricted in many countries by national legislation, regulations and guidelines. Only a few countries have implemented reforms that have seriously transferred to the universities the power to decide on their internal governance structure.

A second major aspect concerns **policy autonomy**, the ability of universities to constitute themselves as academic communities in terms of student and staff selection and to determine their teaching and research programmes. In 2008, public universities in the vast majority of European countries have medium-high to high levels of policy autonomy in at least some aspects of staffing, student selection and academic affairs. Only a few countries have implemented reforms that granted universities fundamentally more autonomy in these matters.

Financial autonomy is generally perceived to be a very important characteristic of autonomous organisations; it includes the ability to decide on the internal allocation of public and private funds, to diversify sources of income (for example through tuition fees and other private contributions), to build up reserves, and to borrow funds on the capital market. Public universities in the vast majority of European countries have medium to high levels of financial autonomy. Many countries have implemented reforms that have significantly enhanced the autonomy of universities in financial matters, particularly through the introduction of lump sum budgeting.

Interventional autonomy refers to the extent to which organisations are free from accountability requirements. Public universities in the majority of European countries have medium levels of interventional autonomy as a result of increasing reporting and accountability requirements. In some countries this autonomy is low. Reforms have increasingly obliged public universities to demonstrate their performance and to account for their activities and spending. Only a few countries have not followed this trend.

While recognising that there are important differences between higher education systems, institutional autonomy has grown overall, creating opportunities for public universities to act as more integrated organisations and to determine their own profiles and strategies; this is not the case for all dimensions of autonomy; public universities in many countries face limitations on their managerial flexibility particularly in terms of internal governance arrangements, staff and student selection and formal accountability requirements.

Governance reforms and Europe's modernisation agenda for higher education

We see the modernisation agenda as a set of recommendations that offers countries and higher education institutions a variety of issues to consider and a range of options for reform that need to be tailored to national and institutional contexts and conditions. The picture that emerges from this study is a diverse one: the different governance aspects of the modernisation agenda have been addressed to varying degrees in different countries. Looking at the current position in thirty-three countries: in eleven countries universities have a high level of institutional autonomy in terms of selecting their academic staff; in fourteen countries universities have a high level of financial autonomy; in twenty countries universities have a high level of institutional autonomy in starting new teaching and research programmes; in sixteen countries universities have supervisory or governing boards with external stakeholder membership; the vast majority of European countries have internal and external evaluation systems in place for teaching and for research; and in five countries universities have a high level of institutional autonomy in determining their internal governance structures.

The timing and breadth of reforms differ across European higher education systems; there are early adopters as well as late reformers. In some parts of Europe radical political changes drastically changed the higher education landscape in a very short period of time in the early 1990s, whereas for other countries particular aspects of the modernisation agenda have been a reality for years.

Governance and system performance in higher education

The terms of reference of our study highlighted eight dimensions of performance. We used international data sources to measure the performance of European higher education systems in 2002 and 2006 across these eight dimensions. In terms of these performance dimensions, there is no doubt that in the vast majority of European countries system performance improved over this period.

Our findings suggest that under the right conditions, particularly sufficient funding and smart financial incentives, institutional autonomy does matter in terms of performance in the primary processes of universities. There appears to be a link between the output of the primary processes (numbers of graduates and articles published) and the level of institutional autonomy. This conclusion is supported by other research.

Therefore, we conclude that within the right conditions (such as sufficient levels of public expenditure, financial incentives and sufficient capacity to attract and retain productive staff and sufficient capacity to meet demand) autonomous universities can contribute to educational attainment and improved research productivity in their countries.

For the other performance dimensions the links are conditional, less visible or non-existent. Institutional autonomy as a means of increasing the private household contributions to higher education only comes into play when universities have the freedom to charge tuition fees and set tuition levels themselves.

We do not find a systematic link between business and industry contributions to higher education R&D and the level of institutional autonomy of public universities. There are indications, however, that institutional, and particularly financial autonomy is a facilitating factor for universities in responding to increasing business and industry demand for and investment in R&D.

For the other performance dimensions, which are not related or less directly related to the primary processes of universities, the findings of our study do not reveal clear links between governance and performance. In these dimensions performance is explained more by a combination of other factors such as societal developments, economic conditions and political cultures. This means that on dimensions other than educational attainment and research output links between governance and performance can exist in specific contexts. Our study shows many interesting country-specific examples of a positive interaction between governance reform and

performance, but more detailed insights are needed to draw firm conclusions. Future research should also include a focus on national policies on issues in addition to governance and funding (for example, on access, lifelong learning and internationalisation), country characteristics and actual university behaviour in relation to governance reforms and institutional and system performance.

Policy recommendations

Based on the outcomes of our analyses, we offer the following recommendations.

- **European universities should be granted more institutional autonomy overall** providing the space and thrust to develop their own strategies and structures. In particular, this concerns more leeway for determining their own internal governance structures; their budgets, financial priorities and human resource policies; and the profiles of their academic communities in terms of staff and student selection, and education and research programmes.
- **The balance between autonomy and accountability needs to be re-visited.** What seems to have been gained in terms of autonomy might too easily be lost to excessive accountability requirements. Traditional means of state regulation and state micro-management tend to be replaced by new methods of accountability and reporting to other authorities. It is timely to assess the means and ends of accountability in European higher education.
- Without **increasing investment into higher education and research** across Europe it is unlikely that universities will be enabled to completely fulfil the growing expectations of their role within the European knowledge society and their overall contribution to European competitiveness. Governance reforms in combination with sufficient levels of funding are likely to contribute to enhanced system performance. This requires the issue of the balance of public and private investment into higher education and research to be re-visited.
- Governance reforms are enablers for system level performance improvements within an overall regime of steering and funding. They are a means to multiple ends that are only partly under control of more autonomous universities and do not automatically lead to improvements at the system level. Institutional autonomy in combination with funding reforms is most likely to contribute to system performance in higher education's primary processes and products. We urge **more realism when it comes to expectations that governance reforms will result in multiple and rapid effects.** This realism should also apply in the assessment of the reforms.

- **A European monitoring system** should be established to address important aspects of reform and performance in higher education systems in constant flux. A European scoreboard for higher education could integrate and further develop important indicators for performance and for the characteristics of higher education systems and their reform. Such a monitoring system would also provide a valuable foundation for the analysis of national systems and the development of tailor-made recommendations for further reform.

Conclusions and recommendations

Governance reforms in Europe

In this concluding chapter of the report we return to the main research questions that guided this study, we summarise the main findings of the study and outline a number of recommendations related to these findings. In summarising the main findings we highlight general trends and patterns across European higher education thus neglecting some of the diversity that reigns across these systems; for every trend there is at least one outlier.

The first research question concerns governance reforms:

What have been the policy changes in the governance of European higher education systems between 1995 and 2008? And what have been the policy changes in national higher education systems as regards governance reforms?

There have been significant changes in governance since 1995 in almost all countries. Many new national higher education acts have been passed. Quality assurance and accreditation systems have been one of the major reform themes – partly inspired by the Bologna process. A series of reforms have had the key objective of enhancing the autonomy of higher education institutions; in some countries this has entailed changing the legal status of the institutions. As part of the reshuffling of authority new policy instruments to steer higher education systems have been developed. Contracts and multi-year agreements between the state and universities are examples of such new instruments. In many countries funding mechanisms have been altered; line item budgeting systems have been replaced by lump sum systems for public funding; and historically-based allocation schemes are losing ground to funding mechanisms with more of an emphasis on outputs.¹ As a result of the continuing expansion of higher education, new higher education sectors have been established or have matured – the universities of applied sciences. Simultaneously binary divides between universities and universities of applied sciences are under pressure in other countries. To expand supply further private higher education has gained ground in some countries; there are discussions on blurring the boundaries between the public and private provision of higher education services. The higher education landscape has been restructured in several countries through mergers of institutions within and across higher education sectors. And we see many initiatives to encourage research collaboration between higher education institutions as well as between public universities and private companies (through networks, alliances and clusters).

¹ For a detailed analysis of funding reforms please see the parallel study *Progress in funding reforms across Europe*.

One of the overarching trends in European higher education concerns the enlargement of institutional autonomy. The general assumption is that higher education systems will benefit if institutions are freed from detailed state regulation and control and have substantial discretion to take decisions independently and strategically.

The **organisational autonomy** of universities to decide on their own internal governance structures; on their internal authority, responsibility and accountability structures; as well as to select their institutional leadership is one of the major aspects of greater institutional autonomy.

The organisational autonomy of European public universities is still restricted in many countries by national legislation, regulations and guidelines. Only a few countries have implemented reforms that have seriously transferred to the universities the power to decide on their internal governance structure.

There have been reforms that have changed the level of detail of regulation or that have replaced state regulation with guidelines but organisational autonomy remains restricted in many countries. Where changes have taken place we see the extension of the powers of executive leadership within institutions in an attempt to create more professionally led and managed organisations with greater managerial flexibility within the existing space for manoeuvre. Within this context, it is apparent that representative bodies have lost some of their authority. New top-level governing bodies, frequently with majority external representation, are another trend which has also altered the responsibility and accountability mechanisms in the institutions. Their role is controversial as while external stakeholders might serve the purposes of accountability and external networking some see increasing external influence in internal governance as a reduction of organisational autonomy.

A second major aspect of institutional autonomy is **policy autonomy**, the ability of universities to constitute themselves as academic communities in terms of student and staff selection and to determine their teaching and research programmes.

In 2008, public universities in the vast majority of European countries have medium-high to high levels of policy autonomy in at least some aspects of staffing, student selection and academic affairs. Only a few countries have implemented reforms that granted universities fundamentally more autonomy in these matters.

Across Europe, a scattered picture emerges with respect to staff appointments and the determination of salaries. In 2008, public universities in some countries have significant flexibility in selecting their academic staff and in setting their salaries. In many countries flexibility in setting salaries is restricted by government regulations or national agreements. There are also countries where staffing matters (the number of posts, appointments, salaries) are not at all under the control of the universities. In the majority of countries no major changes have occurred in the last decade.

In 2008, universities in one third of European countries have substantial freedom to select their own Bachelors students and to decide on the number of study places. In six countries this institutional freedom is severely limited, universities have to accept all qualified students unconditionally and/or the number of study places is determined by external authorities. In twelve higher education systems public universities have some room to take their own decisions as regards Bachelor student selection and the number of study places. Some of these countries have open access policies; universities have to accept all qualified students but they have the freedom to decide on the number of study places.

In eleven countries universities have almost full autonomy in programming their teaching and research activities while universities face serious restrictions in four countries. Overall, formal autonomy in research programming is less restricted than autonomy in programming teaching. In some countries traditional modes of governmental approval persist while accreditation procedures have created new interdependencies in the programming of teaching.

Financial autonomy is generally perceived to be a very important characteristic of autonomous organisations; it includes the ability to decide on the internal allocation of public and private funds, to diversify sources of income (for example through tuition fees and other private contributions), to build up reserves, and to borrow funds on the capital market.

Public universities in the vast majority of European countries have medium to high levels of financial autonomy. Many countries have implemented reforms that have significantly enhanced the autonomy of universities in financial matters, particularly through the introduction of lump sum budgeting.

The financial autonomy of universities has increased across European higher education in general since 1995. Lump sum funding systems have replaced earmarked funding in many countries, which has substantially increased the institutions' room to maneuver. However, in about three-quarters of European countries universities can not decide for themselves to borrow money from the capital market.

It is usually argued that more institutional autonomy should go hand in hand with more accountability requirements. There is no doubt that universities need to account for the use of their enhanced abilities to take decisions themselves. At the same time, growing accountability measures are a major tool for external (usually governmental) control and intervention into university matters. In speaking about **interventional autonomy** we refer to the extent to which organisations are free from accountability requirements.

Public universities in the majority of European countries have medium levels of interventional autonomy as a result of increasing reporting and accountability requirements. In some countries this autonomy is

low. Reforms have increasingly obliged public universities to demonstrate their performance and to account for their activities and spending. Only a few countries have not followed this trend.

Accountability requirements oblige universities to submit various documents to external authorities. These may include strategic plans, annual reports, audited financial statements, documents demonstrating compliance with national policies, the outcomes of teaching and research evaluations, and the provision of information for national data bases. In 1995, in about two-thirds of European countries these requirements were low. In some countries it was completely up to the university to decide how to account for its activities or whether to produce strategic plans. In other countries, accountability requirements were in place, but in retrospect these requirements were far less extensive than they are today. Today there are only a small number of countries where formal accountability requirements are low.

Universities do need to be accountable to the public and their stakeholders. However, a significant increase in accountability requirements may also curtail institutional autonomy and flexibility. In some cases increased accountability requirements have not been the hand in hand accompaniment of increased institutional autonomy but have been introduced without granting universities substantial institutional autonomy.

In the period between 1995 and 2008, for 'Europe as a whole' institutional autonomy has increased although this varies across the different dimensions of autonomy and there are still countries where universities face serious constraints on their decision-making freedom.

While recognising that there are important differences between higher education systems, institutional autonomy has grown overall, creating opportunities for public universities to act as more integrated organisations and to determine their own profiles and strategies; this is not the case for all dimensions of autonomy; public universities in many countries face limitations on their managerial flexibility particularly in terms of internal governance arrangements, staff and student selection and formal accountability requirements.

Governance reforms and Europe's modernisation agenda for higher education

The second and related research question deals with governance reform in relation to the European Commission's modernisation agenda for higher education:

To what extent does the current state of governance in European higher education reflect Europe's modernisation agenda for higher education?

We see the modernisation agenda as a set of recommendations that offers countries and higher education institutions a variety of issues to consider and a range of options for reform that need to be tailored to national and institutional contexts and

conditions. The following aspects of the modernisation agenda relate to issues of governance: the introduction of quality assurance systems, less state micro-management and enhanced institutional autonomy, new internal governance structures, more emphasis on institutional strategy development and multi-year agreements with government, clear accountability relationships, strengthened partnerships with business and industry, sufficient levels of funding and increased financial autonomy for higher education institutions.

The picture that emerges from this study is a diverse one: the different governance aspects of the modernisation agenda have been addressed to varying degrees in different countries. Looking at the current position in thirty-three countries:

- in eleven countries universities have a high level of institutional autonomy in terms of selecting their academic staff;
- in fourteen countries universities have a high level of financial autonomy;
- in twenty countries universities have a high level of institutional autonomy in starting new teaching and research programmes;
- in sixteen countries universities have supervisory or governing boards with external stakeholder membership;
- the vast majority of European countries have internal and external evaluation systems in place for teaching and for research;
- in five countries universities have a high level of institutional autonomy in determining their internal governance structures.

The timing and breadth of reforms differ across European higher education systems; there are early adopters as well as late reformers. In some parts of Europe radical political changes drastically changed the higher education landscape in a very short period of time in the early 1990s, whereas for other countries particular aspects of the modernisation agenda have been a reality for years.

If the different governance related aspects of the modernisation agenda are considered as a whole, nine countries can be characterised as having moved in the direction of many aspects of the modernisation agenda, eight countries have addressed some aspects, nine countries have tackled a few aspects, and seven countries have hardly addressed any aspects of the modernisation agenda.

We do not adopt a normative position here; there is not a single recipe for successfully modernising European higher education. The proof of the pudding is in the eating; the value of governance reforms overall as well as of those addressing the modernisation agenda must be demonstrated by the positive effects they have on the core functions of higher education.

Governance and system performance in higher education

The third research question of this study concerns the relationship between the governance reforms and the performance of higher education systems:

What are the possible links between governance reforms and the performance of higher education systems?

The terms of reference of our study highlighted eight dimensions of performance. We used international data sources to measure the performance of European higher education systems in 2002 and 2006 across these eight dimensions. In terms of these performance dimensions, there is no doubt that in the vast majority of European countries system performance improved over this period.²

- In nearly all twenty-three countries (for which data was available³), there was an increase in educational attainment (percentage of the population aged 25-34 with a tertiary education qualification).
- In twenty-two of twenty-four countries net enrolments in higher education (ISCED levels 5 and 6) increased.
- Nineteen of twenty-eight countries increased their enrolment of mature students (as a percentage of total enrolments).
- Private household contributions to higher education (most importantly tuition fees) increased in fifteen of twenty countries.
- In twelve of twenty-five countries expenditure on R&D from business and industry (as a percentage of total R&D expenditure) increased.
- Twenty-two of twenty-eight countries increased the proportion of incoming European students (as a percentage of the total number of students).
- Twenty-three of thirty countries increased the proportion of outgoing European students.
- The number of published articles (per million inhabitants) increased in twelve out of twenty countries.
- In five of nineteen countries the relative employment position of graduates improved (rate of unemployment compared to secondary school leavers).
- The relative earnings of graduates (compared to secondary school leavers) improved in six of thirteen countries.

² We use the term 'improved performance' in a neutral way recognising that some would contest whether all of these improvements are desirable.

³ The number of countries for which data are available varies for each indicator hence the differing sample sizes per indicator.

Our study explored the possible relationship between governance reforms and these improvements in system performance. In doing so we controlled for the level of public investment in higher education (public expenditure on tertiary level education as a percentage of GDP) as well as for the economic standing of the countries (on the Global Competitive Index, GCI).

For some of the performance dimensions we find that governance reforms aiming to enhance the institutional autonomy of universities are likely to contribute to increased system performance under certain conditions.

The top ten countries in terms of **educational attainment** levels nearly all come from the north-western part of Europe. Most of these countries are high public investors in higher education; score well on the GCI and have public universities with high or medium-high levels of autonomy. Funding reforms have contributed to an increased number of graduates in some countries by providing incentives for institutions to grow and better financial support to students, while governance reforms have contributed through paving the way for private higher education providers and by extending the number of potential students by changing (minimum) admission requirements.

Within the right conditions (such as sufficient levels of public expenditure, financial incentives and sufficient capacity to meet demand) autonomous universities can contribute to higher educational attainment levels in their countries.

The top ten countries in **research productivity** nearly all come from the north-western part of Europe. Most of these countries are high public investors in higher education, score well on the GCI and have public universities with high or medium-high levels of institutional autonomy. Institutional autonomy in academic staffing and related salary matters plays an important role. Funding reforms (stronger emphasis on performance, more funding for research and the introduction of targeted research funding) have contributed to an increase in research productivity in some countries but not in others (most of these were already high performers in research).

Within the right conditions (such as sufficient levels of public expenditure, financial incentives and sufficient capacity to attract and retain productive staff) autonomous universities can contribute to improved research productivity in their countries.

For the other performance dimensions we do not find systematic links between governance reforms aiming to enhance the institutional autonomy of universities and system performance. We do find, however, examples that highlight the facilitating potential of such reforms under specific conditions.

The level of private household financial contributions to higher education strongly depends on government policy on the issue of tuition fees and also on the level of public investments in higher education (low public investments - high private

contributions). While tuition fees remain one of the most controversial issues in European higher education, one way to increase the level of private contributions to higher education is government reforms to introduce or increase tuition fees, to grant universities the authority to set tuition levels, or to open up higher education systems to private providers.

Institutional autonomy as a means of increasing the private household contributions to higher education only comes into play when universities have the freedom to charge tuition fees and set tuition levels themselves.

Many countries with low public expenditures on higher education as well as countries ranked lower in the GCI have relatively high percentages of **R&D investments in higher education from business and industry**. A number of countries that are high public investors have low or modest contributions to R&D from business and industry. Factors that seem to have contributed to growing private investments in R&D in higher education in some countries include economic growth, growing industry demand for R&D, and EU programmes that stimulate public-private collaboration in R&D.

We do not find a systematic link between business and industry contributions to higher education R&D and the level of institutional autonomy of public universities. There are indications, however, that institutional, and particularly financial autonomy is a facilitating factor for universities in responding to increasing business and industry demand for and investment in R&D.

Finally, **for five performance dimensions we do not find systematic links between governance reforms and system performance**. There are indications that other factors and drivers play a dominant role in performance improvements on these dimensions.

In terms of **net enrolments** in higher education, the primary drivers appear to be growth in the number of study places and student and labour market demand. There are links to governance reforms (the introduction of new sectors in higher education) and funding reforms (greater incentives for students to enrol and for institutions to grow). Our analysis does, however, not support the assumption that the existence of financial incentives in combination with autonomous public universities systematically leads to high or increasing net enrolments.

Our analysis concludes that there is not a link between governance reforms and the percentage of **mature students**. There are several governance issues that have played a positive role in several countries (such as system expansion), but there are also examples of the opposite effect. There is no evidence that the level of institutional autonomy is linked to high levels or growth of mature enrolments. In fact, it appears as if countries that have universities with limited autonomy have been catching up in terms of mature enrolments.

Intra-European student mobility has been driven by many factors (such as regional proximity, common languages, the attractiveness of a country and the reputation of its higher education system, programmes offered in English, and entrance to the EU). For **incoming student mobility** we could not find significant links to governance reform. The provision of targeted funding for this purpose is an important factor in some countries while in other countries there are financial incentives such as tuition fees and funding per student/graduate for public universities to use their autonomy to increase their enrolments including by operating in the European student market. Governance reforms have no obvious effects on **outgoing student mobility**. The most important factors are related to tuition fees and student support arrangements.

Our analysis did not find any relationship between governance reforms or the level of institutional autonomy and the relative employment position of graduates or their relative earnings. The most important drivers of improvements on the **employability** dimension appear to be labour market conditions and the proportion of higher education graduates in the labour force.

Our findings suggest that under the right conditions, particularly sufficient funding and smart financial incentives, institutional autonomy does matter in terms of performance in the primary processes of universities. There appears to be a link between the output of the primary processes (numbers of graduates and articles published) and the level of institutional autonomy. This conclusion is supported by other research. Aghion et al. (2007, 2008 and 2009) argue that university research performance is positively correlated with university autonomy and the level of funding. For the other performance dimensions, which are not related or less directly related to the primary processes of universities, the findings of our study do not reveal clear links between governance and performance. In these dimensions performance is explained more by a combination of other factors such as societal developments, economic conditions and political cultures. This means that on dimensions other than educational attainment and research output links between governance and performance can exist in specific contexts. Our study shows many interesting country-specific examples of a positive interaction between governance reform and performance, but more detailed insights are needed to draw firm conclusions. Future research should also include a focus on national policies on issues in addition to governance and funding (for example, on access, lifelong learning and internationalisation), country characteristics and actual university behaviour in relation to governance reforms and institutional and system performance. We would agree with Knott and Payne's conclusion that governance (reform) is important, but differences in political cultures and economic conditions "can play a more important role in determining the features of university performance than governance structures" (2004:27).

Policy recommendations

The final research question of our study asks for a summative reflection on our findings as well as for recommendations for future policies. *What lessons can be learned and what might be the key governance policy themes in the further development of European higher education?*

Our study shows that European higher education systems are living in interesting times. They are experiencing substantial reform, in terms of autonomy, accountability, funding and external relations to the state and other stakeholders. Many governance reforms across Europe reflect the governance aspects of the European modernisation agenda. In a way, this is surprising as education in general and higher education in particular have traditionally been driven by well-protected national agendas, national particularities and different developmental paths. It is also obvious and less surprising that the timing, breadth and depth of reforms differ considerably across the more than thirty European countries included in this study. The “European project” is work in progress; some countries are front-runners while others are followers. National contexts and conditions clearly influence the processes of policy formation, formulation and implementation.

Across Europe, institutional autonomy has grown in many but not all respects, and to different degrees in different countries, but this has created increased opportunities for public universities to act as more integrated organisations and to determine their own profiles and strategies. Their level of financial autonomy has increased and more universities now have considerable leeway to run their own financial affairs, although they remain very dependent on public funding. Levels of policy autonomy – the possibility for universities to decide themselves on processes, procedures and policy instruments – have increased, although the pattern is uneven. The level of organisational autonomy has increased but remains rather low as state regulations and guidelines continue to set the organisational frameworks of most European universities. Finally, the level of interventional autonomy has decreased as the accountability requirements for public universities have increased

Our exploration of various performance dimensions in European higher education and research points in the direction of increased performance in times of substantial governance reform. There is no doubt as well that universities need to act within frames set and controlled by public authorities; but the current state of affairs places European universities in a state of limbo: there are great expectations as regards increased system performance yet institutional autonomy, although enhanced, remains constrained. Therefore, based on the outcomes of our study, we offer the following recommendations:

European universities should be granted more institutional autonomy overall providing the space and thrust to develop their own strategies and structures. In particular, this concerns more leeway for determining their own internal governance structures; their budgets, financial priorities and human resource policies; and the

profiles of their academic communities in terms of staff and student selection, and education and research programmes.

There are however, also potential dark sides to enhancing institutional autonomy. More institutional autonomy can create the conditions for replacing micro-management by the state with micro-management by empowered institutional management. Such re-regulation could jeopardise the increased performance, flexibility and responsiveness offered by enhanced autonomy.

The balance between autonomy and accountability needs to be re-visited. *What seems to have been gained in terms of autonomy might too easily be lost to excessive accountability requirements. Traditional means of state regulation and state micro-management tend to be replaced by new methods of accountability and reporting to other authorities. It is timely to assess the means and ends of accountability in European higher education.*

Extensive reform agendas, such as the European modernisation agenda for higher education, are often overloaded with great (and partly diffuse and sometimes conflicting) expectations about the effects of the reforms of structures and processes on the primary functions of education, research and innovation. Such high expectations may be needed to mobilise reform processes and to stimulate the dynamics of change, but they raise the stakes high when it comes to the assessment of what has been achieved. The higher education governance reforms across Europe and the changes in system level performance reported in this study are substantial (and often impressive), but need to be assessed with a sense of realism. Reforms in governance (and funding) have been implemented within financial constraints on the investment in higher education and research across Europe. Various performance indicators are obviously – and not surprisingly – sensitive to the amount of public and private funding for higher education and research.

Governance reforms granting greater institutional autonomy seem to have most visible and direct effects on key performance dimensions when combined with funding reforms; these key dimensions are those that concern the primary processes and products of higher education and research: research productivity and educational attainment. More institutional autonomy combined with performance-based funding for research and a more competition-based research system are likely to have positive effects on research productivity. More institutional autonomy combined with financial incentives for higher education institutions to improve graduation rates is also likely to have a positive impact on educational attainment.

Without increasing investment into higher education and research across Europe it is unlikely that universities will be enabled to completely fulfil the growing expectations of their role within the European knowledge society and their overall contribution to European competitiveness. Governance reforms in combination with sufficient levels of funding are likely to contribute to enhanced system

performance. This requires the issue of the balance of public and private investment into higher education and research to be re-visited.

In terms of other performance dimensions (intra-European student mobility, private income from families/students or business/industry, employability of graduates etc.), links to governance reforms seem to be weaker, and are more diverse, less visible and highly context-specific. Some reforms have been successful triggering performance improvements only in some countries. The higher education systems of thirty-three countries (with their myriad and diverse links to other sectors in society) are too complex a research arena to expect the discovery of simple, straightforward and causal relationships. More institutional autonomy may, for example, enable individual institutions to strategically enhance their attractiveness on the intra-European student market. Their success will, however, be partly dependent on important external factors that institutions cannot control. The success of some institutions in attracting international students may increase their market share within a given country while other institutions may lose international students. The effect at the level of the system may thus be further institutional stratification and not an overall increase in incoming students.

*Governance reforms are enablers for system level performance improvements within an overall regime of steering and funding. They are a means to multiple ends that are only partly under control of more autonomous universities and do not automatically lead to improvements at the system level. Institutional autonomy in combination with funding reforms is most likely to contribute to system performance in higher education's primary processes and products. We urge **more realism when it comes to expectations that governance reforms will result in multiple and rapid effects.** This realism should also apply in the assessment of the reforms.*

Finally, reforms need time to sink into systems and to reveal their potential. The 1995 to 2008 period of reform and the 2002 to 2006 period for assessing changes in performance have limited our capacity to fully understand the implementation of reforms and their effects. Short term effects can be seen, but long term impacts, arguably those that really change systems, are more difficult to observe. In reform processes the transaction costs for higher education systems and institutions are significant; the effects of reforms on performance need to be developed over time. The progress made thus far is only an intermediate step; the modernisation agenda calls for further implementation and ongoing assessment.

*A **European monitoring system** should be established to address important aspects of reform and performance in higher education systems in constant flux. A European scoreboard for higher education could integrate and further develop important indicators for performance and for the characteristics of higher education systems and their reform. Such a monitoring system would also provide a*

valuable foundation for the analysis of national systems and the development of tailor-made recommendations for further reform.