

Progress in Higher Education Reform across Europe: Governance and Funding

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“Was bringen eigentlich die Hochschulreformen?”

Progress in Higher Education Reform across Europe: Governance and Funding

3 HE Reform projects: Bologna, **Governance** and **Funding**

Large consortium
Many external project partners
18 months study

Einführung: Effects of Higher Education Reforms – Importance and Indicators

- Autonomy and accountability assume strategic priorities, professional management and funding that facilitates performance and private investment in HE
- EU interested in what reforms have been initiated in the fields of governance and funding, their implementation and their impact

European Policy Context

- Strengthen knowledge triangle: universities essential
- Globalisation, internationalisation, privatisation: profiling, consortia, fees, external research funds
- Towards state supervision, more management
- Useful knowledge, relevant teaching
- EU Modernisation Agenda

European Modernisation Agenda

Funding

Governance

Sufficient levels of funding	Effective and efficient internal organisation
Financial autonomy	New programmes (Bologna)
Student fees & support schemes	Selection of staff
Funding based on outputs	Financial autonomy
Balance of core, competitive and outcome-based funding	Entering partnerships

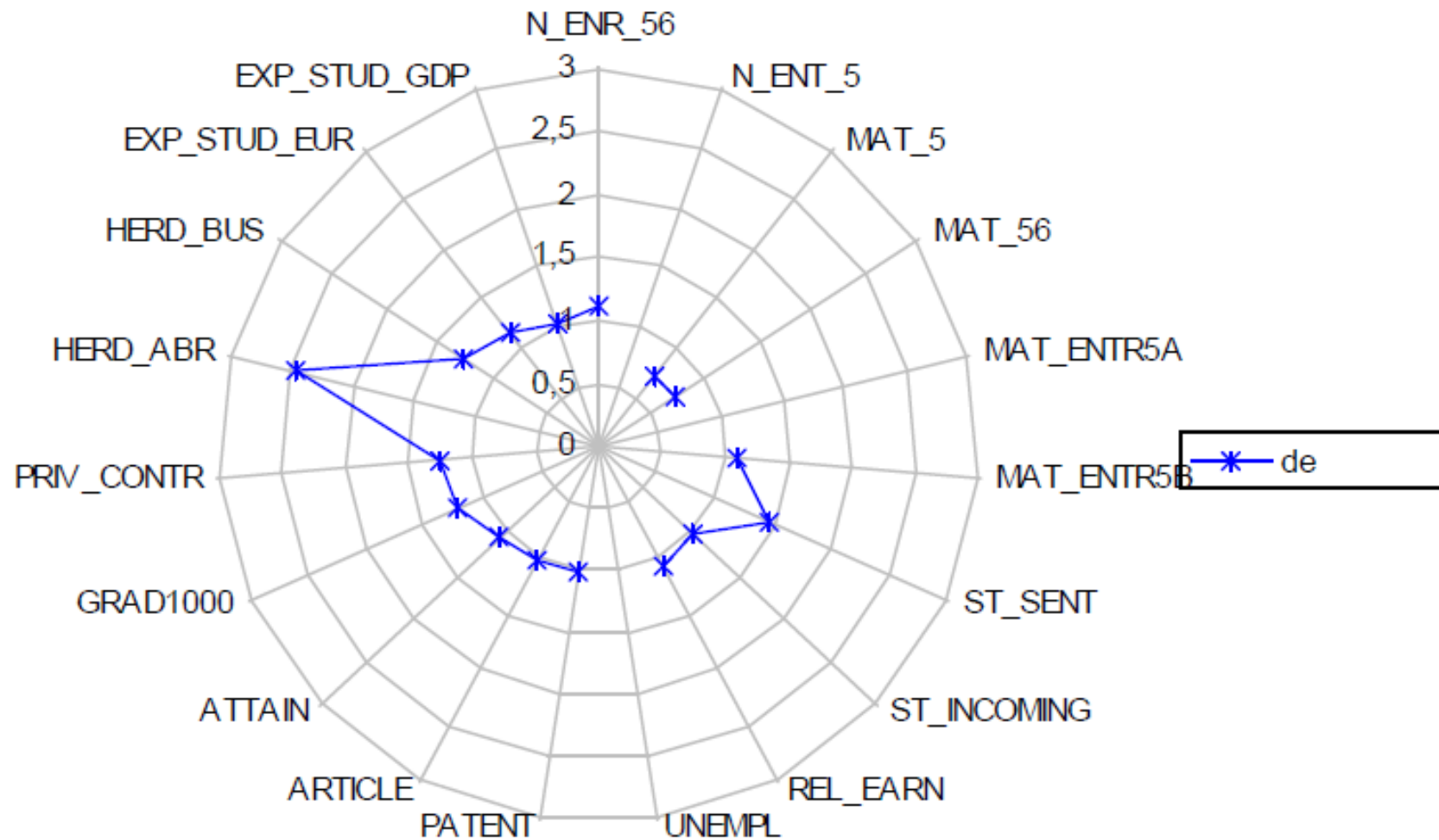
Main questions:

- What are the major governance and funding reforms that have taken place across Europe (1995-2008)?
- 33 countries in Europe
- Is there a relationship between governance and funding reforms and system performance? (eight parameters)

Effects of Higher Education Reforms

- All of these against eight parameters:
 - ◆ access (entry, participation)
 - ◆ graduation (attainment, p/1000 inhabitants)
 - ◆ employability (unemployment, earnings)
 - ◆ international mobility (inward / outward)
 - ◆ lifelong learning (entry rate, 30+ students)
 - ◆ research output (patents, articles/fte)
 - ◆ capacity to attract funding (private revenues)
 - ◆ cost effectiveness (expenditure/student)

System performance overview: Germany (index 2002-2006)



Elements of the study

Data collection method	How this will answer the research questions
Desk research	<ul style="list-style-type: none"> • Overview of relevant literature • Learn from earlier studies • Gain insight into current funding reforms in HE • Gain insight into national specific characteristics
National fiches	<ul style="list-style-type: none"> • Validate findings from desk research • Gain insight into the applicability of central concepts • Get an idea of data on rates of return (funding) • Gain insight into most recent developments in HE reform
System performance overviews	<ul style="list-style-type: none"> • Provide an overview of the systems based on existing information concerning the eight identified performance criteria
System funding / governance analyses	<ul style="list-style-type: none"> • Validate findings from national fiches and desk research • Gather data on impact of national HE reforms • Gather data on various stakeholder perspectives on HE reforms • Identify potential references of good performance • Gather data on recommendations for the future
15 Case studies (including national and institutional levels)	<ul style="list-style-type: none"> • Validate findings from in depth survey and desk research • Gather data on impact of national HE reforms on particular HE processes, such as access, quality, efficiency, employability, etc. • Gather data on recommendations for the future

External Governance Trends

- Governance: who decides on what? (authority lines, responsibilities, formal-informal)
- Since 1990s shift
“from government to governance”
- Authorities & powers redistributed
- Various actors at various system levels
“muliti-level multi-actor governance”

External Governance Trends

- State power dissipated in three directions
 - ◆ Upward shift: EU, OECD, World Bank, ...
 - ◆ Downward shift: provinces, local govmnt, HEIs
 - ◆ Outward shift: NGO's, privatisation
- State's new role: facilitator (market governance)

External Governance Trends

- New steering devices
 - ◆ Output funding / multi-year agreements
 - ◆ New organisations: research councils, funding councils, quality/accreditation agencies, buffers
 - ◆ New actors: other ministries
- Internationalisation: “*a game without frontiers*”
- Autonomy versus accountability

Internal Governance Trends

- European higher education: heterogeneity
- EU: preserve diversity in a coherent & compatible framework (U-MAP)
- Overarching trend: DEREGULATION
- No more over-regulation & micro-management
- But now: accountable to society at large for performances

Internal Governance Trends

- **Autonomy:**
 - ◆ Policy belief that autonomy will improve performance of HEIs
→ Framework laws allow more autonomy
- **Greater autonomy over:**
 - ◆ Finances
 - ◆ Physical capital
 - ◆ Personnel
 - ◆ Student selection (area for further development)
- **Strategic behaviour & partnerships: associations, networks, alliances, consortia, public-private partnerships**

Internal Governance Trends

- Accountability:
 - ◆ More stringent & detailed quality assurance
 - ◆ Overkill of monitoring & reporting
 - “rise of the evaluative state”*
- Redefine ways to inform stakeholders on performances
 - ◆ New modes of communication (CHE-Ranking)
- Rationalisation of institutional decision-making structures
 - ◆ New hierarchies
 - ◆ More mid-level positions

Internal Governance Trends

- Devolution of state authority → centralisation in HEIs
- Deregulation has become re-regulation at lower level
- Strengthening of HEIs as organisations
 - ◆ Many powers now have settled at the top level
 - ◆ Whereas university top-levels used to be weak
- New trend: institutional leaders selected (appointed) instead of elected (even from outside)
- Supervisory boards (external (and internal) stakeholders)
- More business-like management / professionalisation

Internal Governance Trends

BUT ...

- Institution-wide policies difficult:
 - ◆ Fragmented universities
 - ◆ Stronger executive heads at central levels and deans at decentral level

(at expense of students & academics)



- ◆ Strategic planning at many levels
- ◆ Identity building at many levels

Degree to which the governance-related aspects of the Modernisation Agenda are met in 33 European countries: 1995 versus 2008

	INTERNAL ORGANISATION	START NEW PROGRAMMES	SELECTION STAFF	FINANCIAL AUTONOMY	ENTERING PARTNERSHIPS	INTERNAL ORGANISATION	START NEW PROGRAMMES	SELECTION STAFF	FINANCIAL AUTONOMY	ENTERING PARTNERSHIPS
	1995					2008				
AT	○	○	○	○	○	●	●	●	●	●
BE	●		●	●	●	●	●	●	●	●
BG	●	●	●	●	●	○	○	●	●	●
CH	○	●	●	○	●	●	●	●	●	●
CY	○	○	○	○	●	○	○	○	○	●
CZ	○	●	●	●	●	○	●	●	●	●
DE	●	●		○	●	●	●	●	●	●
DK	●	○	●	●	●	●	●	●	●	●
EE	●	●	●	●	●	●	●	●	●	●
ES	○	○	○	●	●	●	○	○	●	●
FI	●	○	●	●	●	●	○	●	●	●
FR	○	●	○	○		●	●	○	○	
GR	●	○	○	○	○	●	○	○	○	○
HR	●	○		●	●	●	●		●	●
HU	○	○	○	○	●	●	○	○	●	●
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IS	●	○	●	●	●	●	●	●	●	●
IT	●	●	●	●	●	●	○	●	●	●
LT	●	●	●	○	●	●	●	●	○	●
LU						○	●	●	●	●
LV	●	●	●	●	●	●	●	●	●	●
MT	○	●	●	●	●	○	●	●	●	●
NL	●	●	●	●	●	●	●	●	●	●
NO	●	○	●	○	●	●	●	●	●	●
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PT	●	○	○	●	●	●	○	○	●	●
RO	○	○	○	○	●	○	○	○	●	●
SE	●	●	●	●	●	●	●	●	●	●
SI	●	○	●	●	●	●	○	●	●	●
SK	○	●	●	○	●	○	●	●	●	●
TR	○	○	○	○	○	○	○	○	○	●
UK	●	●	●	●	●	●	●	●	●	●

● = meeting the modernisation agenda

● = meeting the modernisation agenda to some degree

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Blank = (complete) information not available

Funding

Recent research on reforming universities in Europe (Aghion *et al.*, 2009)

- Spending on higher education correlates with the incidence of top ranking universities.
- More funding: beyond size
 - ◆ More performance based public funding
 - ◆ More concentration of funding on excellence
 - ◆ More private funding
 - ◆ Better fee and subsidy structure
 - ◆ Addressing “access” through income-contingent loans
- Better governance of universities: finding the right mix of autonomy and accountability

General observations from EU Reform project : trends

- Funding reforms often go hand in hand with governance reforms
- Level, composition and method of funding matters:
 - ◆ how has public funding per student changed?
 - ◆ who pays for higher education (cost-sharing; external funding)?
 - ◆ how is public funding allocated to HEIs (what incentives)?
 - ◆ how much autonomy do HEIs have for their internal resource allocation?
- Public-private funding mix under review in many countries

General observations from EU Reform project: trends

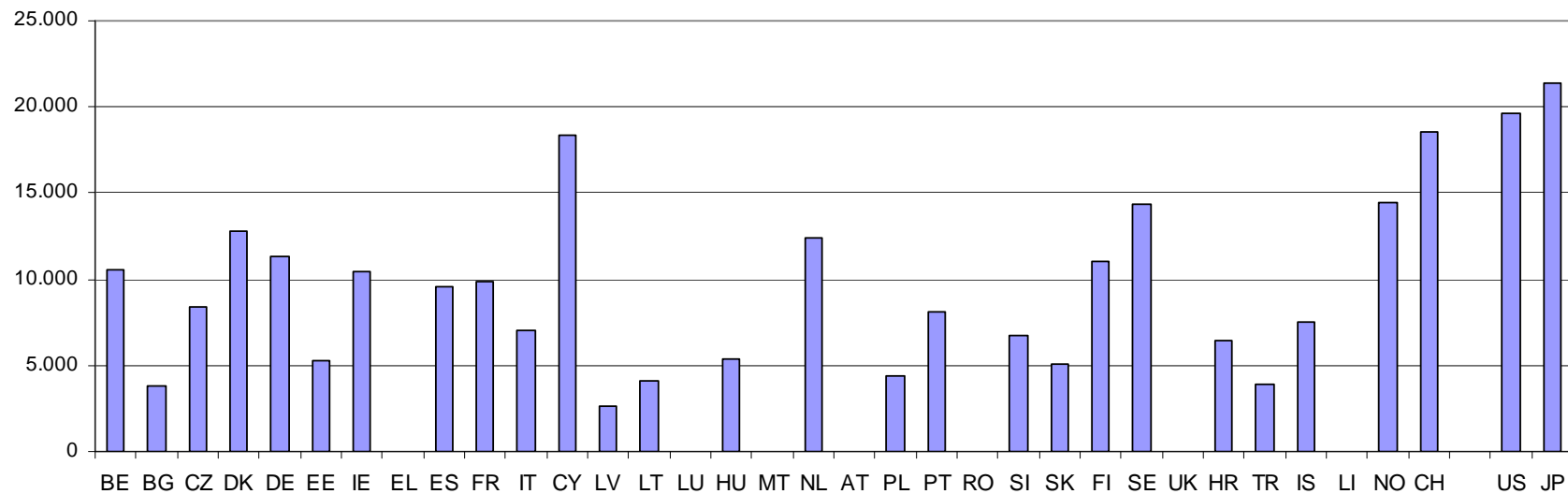
- Diversification of funding sources and creation of partnerships with business, research institutes and regional authorities are major reform themes
- So more autonomy for managing financial resources
- Parallel to governance reforms: more performance orientation and more competition in funding of HE
- Review of student finance => tuition fees and student grants & loans

“Government versus market”

- The argument for autonomy and market forces does not rule out a continuing important role for government
 - ◆ Continuing taxpayer subsidies justified by externalities (spill-overs)
 - ◆ Promoting access
 - ◆ Ensuring quality assurance
 - ◆ Setting incentives
 - ◆ Organising student support
 - ◆ Regulating extent of competition More private funding

The Funding gap: EU versus US and Japan

Expenditure on public HEIs per student in EUR PPS (2006)



Direction of change in public funding per student, 1995-2008

	decreased	stable	Increased
Number of countries (n= 33)	8	9	16
%	24%	27%	48%

Rates of return

- Debate on appropriate levels of spending is informed partly by social and private returns to investment in HE
- Summary evidence on ROR for 31 out of the 33 countries in our project (latest year available; Psacharopoulos):
 - ◆ average private rate of return: 10.2%
 - ◆ average social rate of return is 7.9%
- Returns are highest in “new countries” such as the Czech Republic, Poland, Hungary and Turkey
- Lowest in Scandinavian countries such as Denmark and Sweden

Funding mechanisms: findings from our EU project

■ Mechanisms for determining operational grant to HEIs

Number of countries (N= 33) that attach a moderate to high importance to respective types of funding: 1995 vs. 2008

	negotiated		incremental		formula funding		contract	
	1995	2008	1995	2008	1995	2008	1995	2008
(very) important	9	12	24	15	14	27	3	10

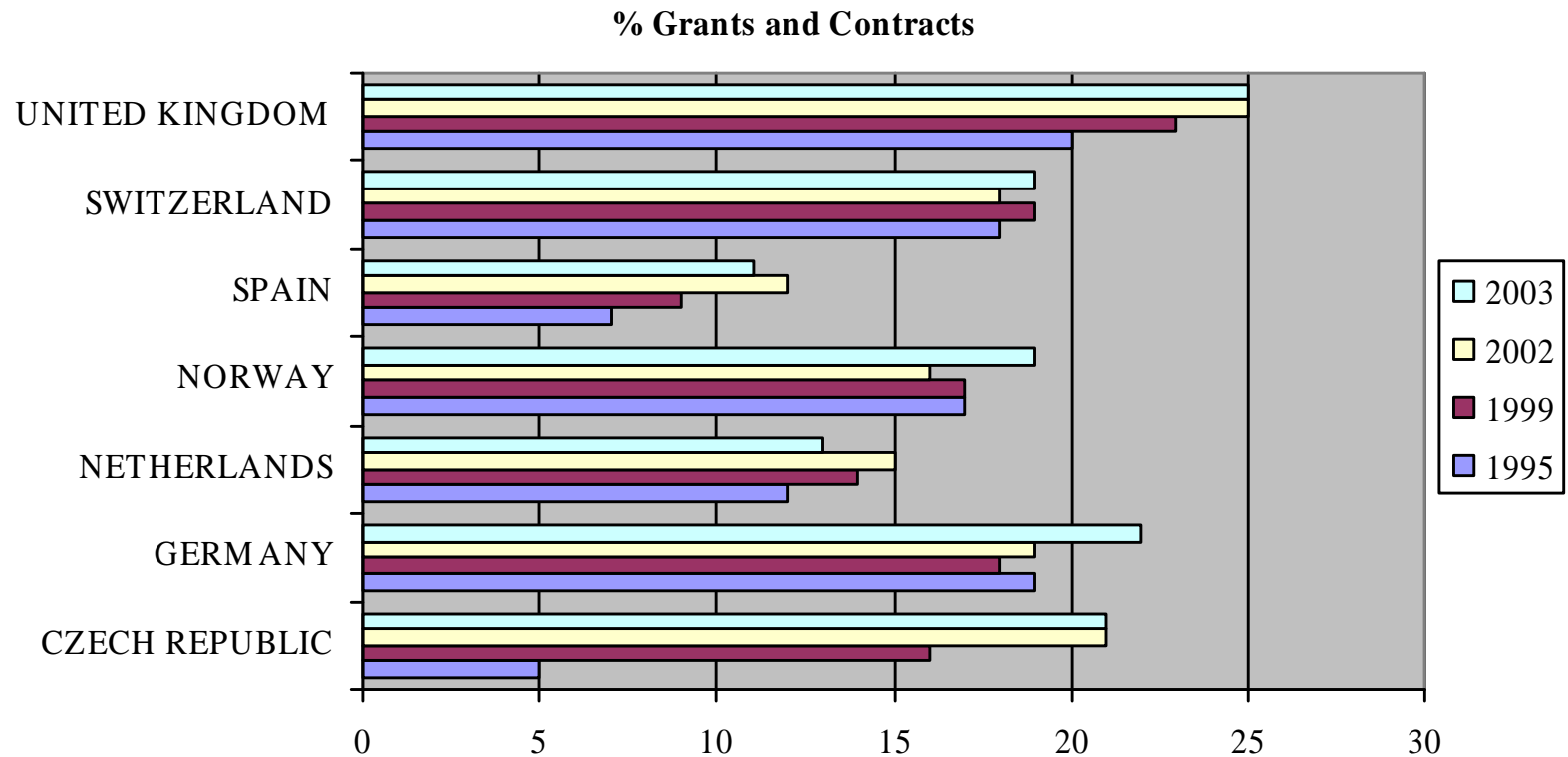
Funding of teaching in HEIs in Europe

	Core funding based on:
Sweden	Students; credits (within agreed upon capacity limits)
Denmark	Credits accumulated by students ('taximeter' principle)
Flanders	New entrants (no selection); credits; diplomas
Germany	Previous year's budget; number of students (loosely based on number of chairs awarded by state to each individual institution)
England	Number of students (agreed upon with university)
Netherlands	New entrants (no selection of students); diplomas
Finland	Number of diplomas (agreed upon with institution)
France	Input criteria (staff, m², students – but: staff on contract with ministry)
Spain	Students and (in Valencia region) a contract-based part driven by selected indicators chosen by institution

Research funding: main trends

- Often 'dual mode' (institutional/direct + research council)
- New research funds often attached to specific priorities (e.g. centres of excellence).
- The proportion of funds through competitive grants schemes is increasing (e.g. research councils)
- The use of institutional funds evaluated with measurable performance indicators
- Business funding of public research is increasing: new relationships between funding sources and research performers

Research funding



Source: CHINC project (Lepori et al., 2005)

Sources of revenue (2006)

	UK	ESP	GER	ITA	NL	SWE	DK	BEL	SWI
Tuition and fees	23	16	1	12	7	0	0	5	3
Government core funding	35	62	73	63	68	60	70	65	72
Competitive research grants	21	10	22	12	15	34	19	21	18
Other sources	20	13	4	9	10	6	2	9	7
Total	100	100	100	100	100	100	100	100	100

Source: Bruegel (2008)

Research funding: findings from our project

- Shares of public funds for research from operational grant versus from competitive, research council sources: 1995 - 2008

Operational grant for research		Competitive public research grants	
1995	2008	1995	2008
56%	54%	44%	47%

- Wide variety of developments across countries
- In 11 out of 33 HE systems a rise in the share of RC funds
- Also: more targeted research funds (project funds, ministry contracts, subsidies, program funding) made available

The composition of HE revenues

Average share of main revenues (public universities), 1995 and 2008

	2008 (n=32)	1995 (n=26)
Operational grant	67%	78%
Tuition fees	12%	8%
Third party funds	21%	15%

- Move towards higher shares of tuition fees and 3rd party funds explained by:
 - ◆ raising (or introduction) of tuition fees
 - ◆ introduction (or rise) of project funds
 - ◆ less regulations about entrepreneurial activities of HEIs

Funding mechanisms: funding drivers

Underlying criteria of operational grant (for publicly funded universities and Univ. of Applied Sciences): 1995 vs. 2008

(N=45, i.e. 34 university systems and 11 UAS systems)

	Input-related (e.g. students, study places, staff, past costs, etc.)		Output-related (e.g. degrees, credits, assessments, publications, grants, etc.)	
	1995	2008	1995	2008
Extremely important	38	24	3	8
Important	4	18	3	16
Total	42	42	6	24

- Trend: More countries use output drivers determining HEI budget

Degree to which the funding-related aspects of the Modernisation Agenda are met in 33 European countries: 1995 versus 2008

	FINANCIAL AUTONOMY	SHARE OF THIRD PARTY FUNDS	SHARE OF TUITION FEES	PERFORMANCE ORIENTATION	COMPETITIVE RESEARCH FUNDING	PORTABILITY OF STUDENT SUPPORT	FINANCIAL AUTONOMY	SHARE OF THIRD PARTY FUNDS	SHARE OF TUITION FEES	PERFORMANCE ORIENTATION	COMPETITIVE RESEARCH FUNDING	PORTABILITY OF STUDENT SUPPORT
	1995						2008					
AT	○	○	○	○	○	◐	●	◐	◐	●	○	●
BE	●	●	○	○		●	●	●	○	◐		●
BG	●	○	●	○		○	●	●	●	◐	●	○
CH	○	◐	○	○	○	●	◐	◐	○	◐	◐	●
CY	○	○	○	◐	◐	○	○	○	○	◐	◐	●
CZ	●	○	○	○	●	○	●	◐	○	○	●	○
DE	○			◐		●	◐			●	◐	
DK	◐	◐	○	●	◐	●	◐	●	○	●	◐	●
EE	●			○	◐	◐	●	●	◐	●	●	◐
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FI	◐	●	○	◐		●	◐	●	○	●		●
FR	○	○	◐	◐		●	○	○	◐	●		●
GR	○			◐		◐	○			●		◐
HR	◐			○		○	●		●	○		○
HU	○	○	◐	○	○	○	◐	○	●	○	○	●
IE	●			○		●	●	●	●	◐	◐	●
IS	●	●	○	◐		○	●	●	○	●	◐	●
IT	●	◐	◐	◐	○	◐	●	◐	◐	●	○	◐
LI		○	●	○		●		○	●	○		●
LT	○	○	●	◐	○	○	○	○	●	◐	○	○
LU				○		◐	◐	○	○	○		◐
LV	●	○	●	○	●	○	◐	●	●	◐	●	○
MT	◐	○	○	○	●	○	◐	○	○	○	●	●
NL	●	◐	●	●	○	○	●	●	●	●	○	●
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PT	◐	●	○	○		○	◐	●	◐	◐		○
RO	○	○	○	○	●	○	◐	○	●	●	●	●
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UK	●	●	●	●	●	◐	●	●	●	●	●	●

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Meeting Europe's Modernisation agenda on funding?

Sufficient levels of funding	In three quarters of the countries public funds per student have increased or remained stable. In about a quarter: decline
Financial autonomy	Most countries: HEIs enjoy lump sum funding. (in about three-quarters HEIs cannot take out loans)
Student fees & support schemes	Tuition fees: relatively low. MA fees are higher. Support schemes: means-tested grants and often students depending on parents. Student loans are not yet in place in all countries
Funding based on outputs	Input-based factors remain important, but increasingly are complemented with performance-based funding and (in some countries) performance contracts
Balance of core, competitive and outcome-based funding	Move towards higher share of tuition fees and third party funds. Small increase in competitive research funds. Rise in project funds

Linking funding reforms to system performance

Using interviews with 10-15 respondents per country and Questionnaires / Funding fiches to explore links

- 7 performance dimensions:
 - Educational Attainment (graduation)
 - Access
 - Mature enrolments (lifelong learning)
 - Private contributions to HE
 - Business contributions to HE R&D
 - International student mobility
 - Research output (articles/patents)
- } Capacity to attract funds

Linking funding reforms to system performance: graduation

- **Funding reforms and educational attainment (% of 25-34 years olds holding tertiary qualifications)**
 - ◆ Funding formulas stress enrolments, leading to higher graduation (3 countries)
 - ◆ Improved student finance – improving access
 - ◆ Performance-based funding stresses attainment
 - ◆ Funding reforms have biggest impact in countries with still ample room for improvement ('catching up effect')
 - ◆ Other explanatory factors: overall student demand; labour market pull; governance; increased HE system capacity

Linking funding reforms to system performance: attainment

- **Funding reforms and access (net enrolment rates 17-29 years)**
 - ◆ Introduction of fees → HEIs admit more students
 - ◆ Financial autonomy created incentive
 - ◆ Improved student support
 - ◆ Other factors, not related to funding reforms:
 - increased student and labour market demand; economic growth
 - increase in the number of study places (e.g. UAS sector)
 - private HE sector
 - ◆ Again: the starting position matters

Linking funding reforms to system performance: LLL

- **Funding reforms and mature student enrolment (% of students aged 30 years and older)**
 - ◆ Formula funding and/or introduction of tuition fees: incentives to admit more mature students
 - ◆ Financial autonomy (allowing more fee-paying students) provides incentives for growth (many countries)
 - ◆ Other factors, not related to funding reforms:
 - increased variety in programs & study modes
 - introduction of UAS sector; Private sector
 - demographic changes (decline in traditional age cohort encourages HEIs to recruit more mature students)
 - ◆ But: sometimes reforms go along with no improvements (4 countries)

Linking funding reforms to system performance: private contributions

- **Funding reforms and private contributions to higher education (% private household contributions)**
 - ◆ Introduction of tuition fees or fees from non-regular students: (5 countries)
 - ◆ But: needs to be seen against backdrop of low levels of private income in the past
 - ◆ Other factors mentioned: establishment of private HE and subsequent growth of this sector

Linking funding reforms to system performance: business income

- **Funding reforms and business contribution to R&D (% business contributions to HERD)**
 - ◆ More financial autonomy → more interaction with business
 - ◆ Targeted funding for joint research (3 countries)
 - ◆ Lump sum and performance-based funding have provided incentives for generating third party funds
 - ◆ Other factors:
 - Strengthened institutional leadership
 - Economic growth
 - Growing industry demand for research projects
 - EU structural funds

Linking funding reforms to system performance: mobility

- **Funding reforms and incoming and outgoing student mobility (incoming/outgoing European students as % of total students)**
 - ◆ Student support (e.g. portability: 3 countries)
 - ◆ Targeted funding for increasing mobility (2 countries)
 - ◆ Potential extra fee revenues → international recruitment
 - ◆ Lack of student funding reform or free HE elsewhere may have led to outward mobility
 - ◆ Other factors:
 - European accession; Expansion EU mobility programmes
 - Increasing number of programmes taught in English
 - Growing interest of students in studying abroad
 - Internationalization strategies of individual institutions

Linking funding reforms to system performance: research output

- **Funding reforms and research output (academic articles per million of population)**
 - ◆ Performance-based funding (emphasizing research quality, 9 countries)
 - ◆ Targeted research funds
 - ◆ Increased research funds overall (5 countries)
 - ◆ But: in 4 countries such reforms no effect on research output
 - ◆ Other factors:
 - Universities used increased autonomy to profile themselves by demonstrating research-intensiveness
 - Well-developed, mature science systems
 - Strongly competitive economies

Concluding remarks

- Compared to governance reforms, funding reforms seem to have more direct effects on system performance
- This holds in particular for introduction/effect of:
 - ◆ Performance-based funding (emphasizing research quality and graduation/enrolment)
 - ◆ Tuition fees (new revenues/ incentives for HEIs)
 - ◆ Competitive funding and Targeted/project funds (similar effect)

Concluding remarks

However:

- What works in one country may not work in another
- Some countries are already at relatively high levels of performance: hard to further increase performance
- Some reforms only work in indirect way (e.g. financial autonomy)
- Causality of link is problematic (push versus pull)
- Time lags, history, and context of country/system affect relationship

Relationships between the reforms and higher education systems' performance?

- There are indications for relationships between funding reforms and some selected areas of system performance
- No direct relationships between governance reforms and selected areas of system performance
- Governance reforms as prerequisites for funding reforms and performance improvement
- Effects of reforms on system performance are context-specific

Danke für Ihre Aufmerksamkeit



Main Building, University of Debrecen, Hungary

Effekte der Reformen aus Sicht der Teilnehmer/-innen

- Group discussions
(6 groups of 15-20 people; 3 rooms)
- Report main points on flip charts
- Bring flip charts to foyer for “Bisichtigung” over coffee/tea
- First lunch

Effekte der Reformen aus Sicht der Teilnehmer/-innen: questions

- Do you experience in your organisation (Uni, FH, Fakultät or other) performance increases?
(how and what type of performances?)
- Do you experience in your organisation (Uni, FH, Fakultät or other) governance and/or funding reforms?
(how and what type of reforms?)
- Do the performance changes relate to governance and funding reforms?