European Commission

Structural Higher Education Reform – Design and Evaluation

Synthesis Report

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Education and Culture

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Structural Higher Education Reform – Design and Evaluation

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Front cover

A stylistic illustration of structural reformers contemplating an excellence initiative (the black draughts represent university research) and the development of a regionally-based professional higher education sector (the rectangular blocks). Both of these structural reforms are the subject of case studies described in this report.

Design: Jon File. Photo-collage: Don Westerheijden.

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Table of Contents

Executive summary

The objectives and structure of the study

This is the executive summary of the final synthesis report of the project *Structural Higher Education Reform—Design and Evaluation*. CHEPS and CHEGG were contracted by the European Commission (DG EAC) to analyse system-level (or 'landscape') structural reforms in higher education, in particular in relation to the policy process through which reforms were designed, implemented and evaluated and factors affecting success or failure. The overall objective is to provide policy makers at the European, national and institutional levels with policy relevant conclusions concerning the design, implementation and evaluation of structural reforms.

The project specifications supplied by the Commission *inter-alia* required the project team:

- On the basis of a thorough literature review, to develop a typology of structural reforms in higher education and to identify twelve case studies of structural reforms that cover these different types of reforms
- Based on the literature review and the case study analysis, to draw general lessons and formulate policy options that are relevant to policy makers working in the field of system-level/landscape structural reforms in higher education

In these specifications, structural reforms are defined as *government initiated or supported reforms aimed at affecting a significant part of the system and its structure*. It was further specified that the reforms studied needed to be explicitly concerned with structural aspects of higher education at the system level (the institutional landscape).

Public policy perspective

We have investigated structural reforms in higher education from an international comparative public policy analysis perspective. From a variety of different models for policy analyses, we have opted to use the policy stages model, in which policy processes are broken down into different stages: policy rationale and goals, policy design, policy implementation and policy evaluation. We have paid particular attention to the achievements and effects of the reform in relation to its goals and the extent to which this may be related to choices made in the various policy stages.

Policy instrument typology

Based on a literature review of policy instruments we adopted the following typology of policy instruments.

- *Information* (the use of information and communication)

- *Regulation* (laws, regulations etc.)
- *Funding* (positive and negative financial incentives)
- *Organisation* (the use of experts, networks, infrastructure, agencies etc.)

Achievements and effects

To assess the success or failure of a structural reform, we focused on goal achievement at two levels. Firstly, the effectiveness of the reform was evaluated against the operational goals of the reform, including whether the reform was implemented as intended and whether the operational goals were achieved as a result of the reform. Secondly, if (most of) the operational goals were achieved, then to what extent were the strategic goals of the structural reform met? The strategic goal of a structural reform is a change in the higher education landscape designed to improve particular aspects of system performance.

Our typology of structural reforms

Based on a large-scale inventory and an extensive literature review, we have distinguished three basic types of structural reforms:

- Structural reforms aiming at *horizontal differentiation*, i.e. transformations of the functions of different types of higher education institutions. Examples include the establishment of a new sector of higher education institutions or changing the functions of a sector of higher education institutions.
- Structural reforms aiming at *vertical differentiation*, i.e. increasing or decreasing positional or status differences between higher education institutions. Examples include reforms aimed at concentrating research in a limited number of universities.
- Structural reforms aiming at affecting *institutional interrelationships* between higher education institutions. Examples include university mergers or the formation of associations of institutions.

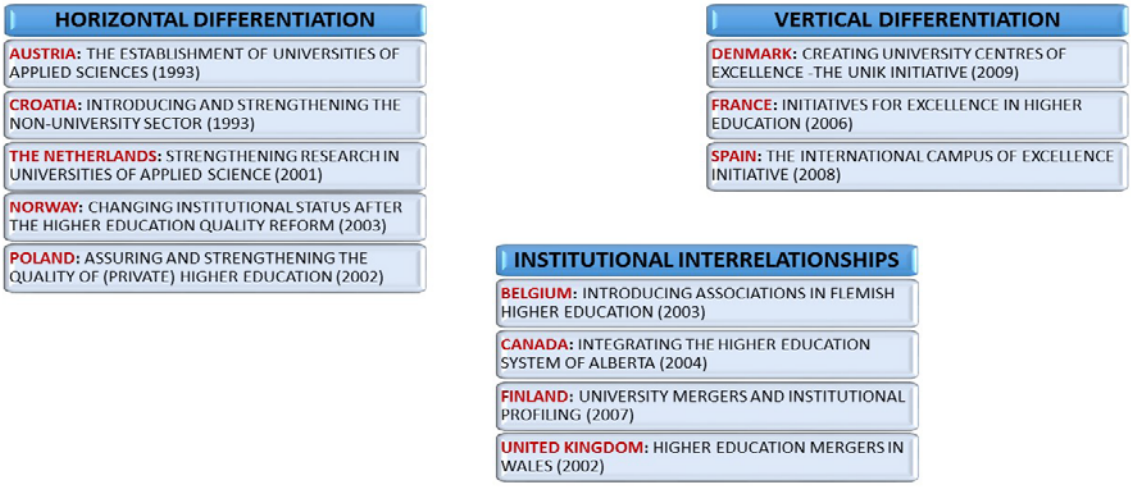
Context matters

Public policies are neither designed nor implemented context-free, but are affected by the social, cultural, economic and political environments in which they are embedded. As regards the *general context* we have taken into account a number of factors including the country's governance effectiveness and economic and innovative capacity. With respect to the *higher education context* we have considered the structure of the higher education system, higher education expenditure, state-university relationships and tertiary education attainment rates.

The twelve case studies

Our literature review and a 'quick scan' across our network of higher education researchers produced a large set of international examples of structural reforms. After a careful analysis the project team and the Commission selected the following twelve

case studies taking into account the need to have adequate coverage of structural reforms across the three categories of our typology, time frame (reforms between 1990 and 2010) and the importance of selecting a diverse set of higher education systems.



Case study analyses

Apart from the twelve individual case study analyses (these are published individually together with the synthesis report) we compared the cases across the different stages of the policy process and carried out four comparative cross-case analyses: reforms aiming at *horizontal differentiation* in the cases of Austria and Croatia; reforms aiming at *vertical differentiation* in the cases of Denmark, France and Spain; reforms concerning *institutional interrelationships* in the cases of Finland and Wales; and reforms to strengthen the research-teaching nexus in the *hogescholen* sectors in Flanders and the Netherlands. These focused comparisons enabled the identification of critical factors affecting the success of structural reform and a systematic consideration of key questions in the policy process.

Key findings

If we consider all twelve cases, both similarities and differences emerge concerning the ***policy rationale and goals*** of the selected structural reforms. Improving the quality and efficiency of higher education are the most prominent strategic goals. Some of the structural reforms aimed at improving the quality of teaching by introducing programme accreditation, others at strengthening the research function by creating critical mass and pooling resources or by developing distinct institutional profiles.

Concerning ***policy design***, governments were by and large the key actors in structural reforms, setting the agenda and developing specific solutions. Steering approaches vary in the extent of the consultation with other stakeholders; in particular in the more successful cases, considerable attention was paid to creating consensus in the design phase. Most of the selected structural reforms were not accompanied by an explicit ***policy implementation*** plan and time frames were rarely specified. In terms of ***policy instruments***, regulation was the most widely used, via system-level legislation or regulation related to institutional and programme accreditation. Funding instruments were very important in a number of the reforms. Formal ***policy evaluations*** of the reform impact (the achievement of strategic goals) were largely absent.

In terms of ***goal achievement***, in half of the cases, all (or almost all) of the operational goals were achieved, whereas for the other six cases the achievement of operational goals was more or less limited, either by strong side effects or by the fact that the instruments developed were not really conducive to the achievement of the chosen operational goals. As none of the selected structural reforms clearly specified the strategic goals in such a way that they could be measured, it is very difficult to assess to what extent they were achieved.

The case studies and cross-case analyses enabled the identification of five ***critical factors affecting the success of structural reform processes*** that appear to have a *potentially* crucial influence on the final achievement and effects of the reform. We stress that these factors are neither necessary conditions for success (they do not all apply to all structural reforms) nor sufficient conditions (reforms can fail for other reasons).

1. **Stakeholders' involvement and consensus**. The implementation of the reform was smoother and its operational goals were achieved in cases in which key stakeholders were involved in the design of the reform and/or consensus was built between the stakeholders about policy problems and solutions (the latter may not always be realistic.)
2. **Adequate funding and funding instruments**. Reforms tend to work more effectively when there is adequate financial support given the scope of the reform and which allows a sustained effort over a realistic time frame.
3. **Construction, to the extent possible, of a 'win-win' reform design**. In an ideal situation, all higher education institutions should have something to gain from the reform or at least believe that they will not be disadvantaged.
4. It is necessary to set a **timeframe for the implementation and evaluation** of the structural reform that is commensurate with its scope and complexity.
5. **Systematic monitoring and evaluation** are valuable in supporting adaptation of the reform design and ensuring that it is in tune with the context of implementation.

We now reflect on a number of ***key questions for 'structural reformers'*** - derived from our case study analysis - that need to be considered in each of the three phases of the policy process (design, implementation and evaluation) and in the use of different policy instruments. The questions are presented as considerations for governments and policy makers contemplating embarking on a structural reform process. We stress that our reflections and suggestions should not be interpreted as policy recipes or 'best practices'. (*These and other key questions are discussed more extensively in chapter 4 of the synthesis report*.)

Policy design

Should the structural reform be framed against the background of external or internal drivers or both?

Governments can frame their structural reforms against the background of external challenges from outside the system or internally-oriented challenges originating within the system, or a combination of these. External drivers carry the risk of being seen as 'alien' forces, but at the same time allow for the policy challenge to be seen in a broader perspective.

Should the structural reform clearly specify the intended solution to the identified problem or should higher education institutions or other bodies (committees or agencies) be given the flexibility to explore a number of potential solutions?

Well-defined solutions offer more clarity and may lead to an efficient implementation of the reform. Creating the space for the exploration of alternative solutions offers an opportunity to arrive at the 'best' solution, to increase legitimacy and to create 'buy-in' from key stakeholders (and hence reduces the potential for conflict in the implementation phase).

Policy instruments

Which policy instruments should be utilised to implement the structural reform?

Governments combined regulatory, funding, information and organization instruments to change a system's structure. In most cases, new policy instruments were established. *Regulation* instruments have been the most commonly used, by adapting national legislation, as well as introducing soft regulation mechanisms, such as the use of covenants and agreements. Additional and recurrent *funding* is a powerful instrument to change institutional behaviour, whereas redistributed funding can lead to zero-sum game situations and temporary funding creates uncertainty.

Policy implementation

Where should responsibility for managing/monitoring the implementation of the structural reform be located?

Most ministries had a reasonable degree of control – albeit sometimes at some distance – of the implementation process. In many cases, the most important actors in the implementation of the structural reform were the higher education institutions themselves and agencies, such as accreditation agencies, that supervised the process and/or evaluated the outcomes. The feedback provided by such agencies, informing not only the government but also the institutions involved (in the form of advice) has in most cases positively influenced the implementation and achievements of the reform. Leaving leeway to the higher education institutions allows for tailor-made solutions, while on the other hand creates the risk of unwanted deviations from the reform intentions.

Policy evaluation

How should monitoring and evaluation be built into the structural reform process?

Monitoring, feedback and evaluation were not well developed, although they should be integrated into reform processes. There was much more scope for monitoring and reporting progress and mid-term reviews than was actually utilised in many of the reform processes. The cases showed that there is considerable potential for using a broader set of evaluation tools than were utilised. The advantage is that regular stocktaking may help solve implementation problems as they arise and may stimulate learning from the experiences of other parties involved in implementation. Care should evidently be taken to ensure that such assessments do not lead to an excessive burden on those involved in the reform process.

1 Introduction to the study

1.1 The objectives and structure of the study

This is the final synthesis report of the project *Structural Higher Education Reform – Design and Evaluation*. CHEPS and CHEGG were contracted by the European Commission (DG EAC) after an open call for tenders to analyse system-level (or 'landscape') structural reforms in higher education, in particular in relation to the policy process and factors relevant for success or failure. The overall objective is to provide policy makers at the European, national and institutional levels with policy relevant conclusions concerning the design, implementation and evaluation of structural reforms.

The project specifications supplied by the Commission required the project team:

- To undertake a thorough review of relevant academic and policy literature on structural reforms in higher education
- On the basis of this literature review, to develop a typology of structural reforms in higher education and to identify twelve case studies of structural reforms that cover these different types of reforms
- To develop a methodology for the case study research, to carry out the studies and to perform a comparative analysis of the twelve case studies
- Based on the literature review and the case study analysis, to draw general lessons and formulate policy options that are relevant to policy makers working in the field of system-level/landscape structural reforms in higher education
- To provide a concise and accessible policy report concerning policy options for the design, implementation and evaluation of structural reforms in higher education (the twelve case studies are published individually together with this report)

In the course of its work the project team produced, in addition to the requirements listed above: an overall analytical framework for the study; 30 brief outlines of structural reforms that were considered as potential case studies; a common template and guidelines for the case study researchers covering the issues to be investigated and including a typology of policy instruments, a check list for assessing the effects of the reform and a structure for the case study report; and a second literature review on public policy analysis as an input into the development of the analytical framework and the case study template. [1]

[1] Given the requirement to produce a concise and accessible policy report primarily aimed at policy makers these documents do not form part of this report. Higher education researchers who are interested in obtaining these internal project documents should contact one of the project leaders: Jeroen Huisman, CHEGG (Jeroen.Huisman@ugent.be) or Jon File, CHEPS (j.m.file@utwente.nl). As indicated above the twelve case study reports are published individually together with this report.

1.2 The project's definition of structural reforms in higher education and the typology of reforms developed

In the project specifications, structural reforms are defined as *government initiated or supported reforms aimed at affecting a significant part of the system and its structure*. In this definition, *structure* refers to the number of elements in the system (i.e. higher education institutions/providers) and their relative positions and functions. Firstly, this definition implies that reforms that were studied were initiated by government. Changes initiated by other actors were not included, even if they brought about structural change. This however does not exclude the actions of other actors in the initial stages of the reform process—they may for example have 'persuaded' the government to take action. Secondly, reforms needed to be explicitly concerned with *structural* aspects of higher education at the system level (the institutional landscape). Reforms targeting other aspects or levels were not the focus of our study. Finally, the intention of the reform needs to be substantial change, so incremental reforms were also excluded.

To date there have been few systematic investigations of different types of structural reforms in higher education, their goals and achievements, and the factors explaining their success or failure. We have investigated structural reforms in higher education from an international comparative public policy analysis perspective. Reform policies, as 'a set of interrelated decisions taken by (political) actors concerning the selection of goals and the means of achieving them' (Jenkins 1978), are the result of multiple decisions taken by multiple decision-makers, often scattered throughout a complex system (Howlett and Ramesh 1995). The different elements of such a perspective (decisions, actors, goals and means) constitute the core of the analytical framework developed for this study. In a nutshell, we have addressed the following questions in our analysis:

- What is the nature of the problem? (rationale and goals of the reform)
- Which courses of action have been taken to solve the problem? (policy design and policy instrument selection)
- What have been the outcomes of choosing this course of action? (policy implementation, evaluation and feedback)
- Has achieving the outcomes contributed to solving the problem? (effectiveness of the reform) (Dunn, 2004)

Higher education systems have changed dramatically in recent decades. Despite these changes, governments retain prime responsibility for their higher education systems. Higher education reforms are driven by or supported by governments, many of which face comparable external pressures for change and are exposed to similar, often international, policy ideas and models. At the same time policy-makers need to take into account domestic specificities and existing policies. The national context matters for reform policies, hence variety in reform plans and outcomes abounds, both as a result of structural differences as well as differences in cultures and politico-administrative regimes. The nature of the higher education sector and its institutions, being 'bottom heavy', loosely coupled, fragmented and dominated by professionals, also requires careful consideration. Thus, reform processes in higher education are context-bound, sector-specific and complex given the diversity of actors, interests, policy initiatives and targeted levels of change. These basic insights from public

administration, organisational studies and higher education studies are particularly relevant to one specific type of change in higher education: structural reforms.

Based on a large scale inventory and an extensive literature review, we have distinguished three basic types of government initiated or supported reforms aimed at affecting a significant part of the higher education system and its structure (structural reforms):

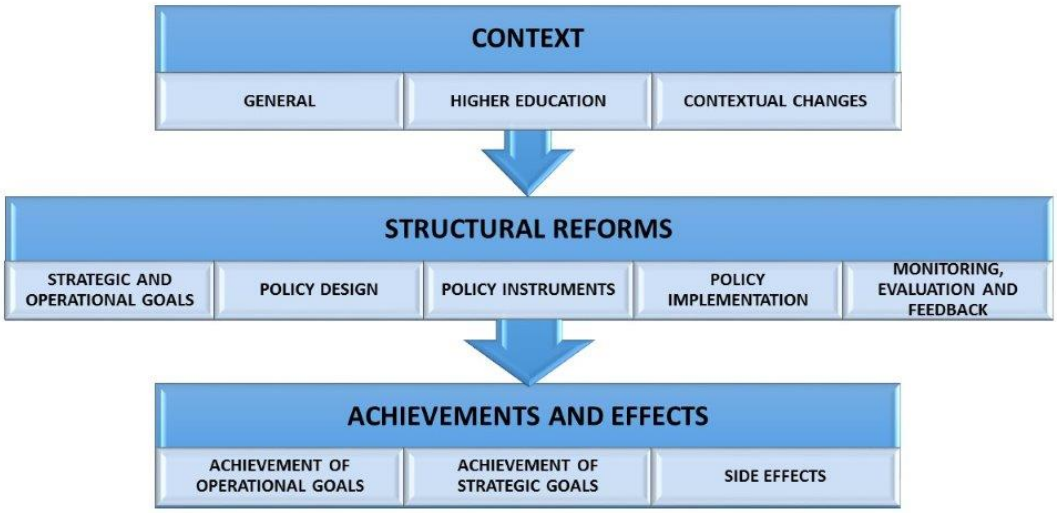
- Structural reforms aiming at *horizontal differentiation*, i.e. transformations of the functions of different types of higher education institutions. Structural reforms aiming at horizontal (or functional) differentiation within a given higher education system include reforms focusing on the strengthening or weakening of binary divides or the reconfiguration of mandates between different types of institutions or different institutions of a particular type
- Structural reforms aiming at *vertical differentiation*, i.e. increasing or decreasing positional or status differences between higher education institutions. Governments aim to bring about positional or status differences between institutions, for instance, in response to concerns about the low positions of national institutions in international rankings or to the heterogeneity of student demand in mass higher education systems. Excellence initiatives are examples of reforms aimed at increasing vertical differentiation
- Structural reforms aiming at affecting *institutional interrelationships* between higher education institutions. This third type of landscape reform involves supporting cooperation, forming alliances and initiating mergers. The intention is not to create new types of institutions, although this could be a second-order aim or side-effect, but to create synergies among higher education institutions in the areas of teaching and learning, research or outreach activities

The distinction between horizontal differentiation, vertical differentiation and institutional interrelationships is important, given that these reform types often entail different policy processes and outcomes. However, particular structural reforms may focus on more than one dimension. For instance, merger processes fall within the institutional interrelationships type, but if the merger process intends to affect the position or status balance in the higher education system as well, the reform also concerns vertical differentiation. Another example would be a structural reform that zooms in on horizontal differentiation but results in changed institutional interrelationships as a side-effect. Therefore, in our detailed case analyses (see the separate country case studies) we have included both primary and secondary aims, but we have used the primary aims for classifying the structural reforms in terms of our typology (see chapter 2).

1.3 Analytical framework

The analytical framework for our study, focusing on context, structural reforms (process and actors) and achievements and effects, is depicted in Figure 1.

Figure 1: The analytical framework for the structural reform study



From a variety of different models for policy analyses we have opted to use the policy stages model, in which policy processes are decomposed into different stages: policy design, policy instrument selection, policy implementation, and policy evaluation and feedback. Each policy stage has its own logic, and different actors can be involved in different stages or the same actors in different roles in different stages. Although the policy stage model in its neat separation of the different stages does not reflect the complexities of policy processes in reality, it is a widely used and helpful way to study policy processes analytically.

For the analysis of the different reform policy stages we consider each policy stage as a policy arena with its own logics and participants. Policy design, implementation, and evaluation and the outcomes of the policies are dependent on actors' positions, interests, norms and values and the way they interact.

Context

Public policies are neither designed nor implemented context-free, but are affected by the social, cultural, economic and political environments in which they are embedded. Additionally, unforeseen events such as economic, social or political crises can provoke or block change. As regards the *general context* we have taken into account the following indicators:

- Governance quality (source: Governance Effectiveness and Regulatory Quality from the World Bank's Worldwide Governance Indicators - WGI)
- Level of economic and innovative capacity (source: Global Competitiveness Index of the World Economic Forum)
- Economic growth (development of GDP, mainly based on Eurostat statistics)
- Demographic situation: the size, growth and median age of the population (mainly based on Eurostat statistics)

With respect to the *higher education context* we have considered the higher education sectoral structure, higher education expenditures, state-university relationships and tertiary education attainment rates in our analyses.

Structural reforms

Strategic and operational goals (rationale for the reform)

Governments introduce structural reforms in (a part of) the higher education system for performance improvement, for instance, to increase efficiency, accessibility, quality, productivity or the supply of services delivered to different stakeholders. Such reform issues may arise outside the government and reach the formal policy agenda via public pressure (outside initiation). Alternatively, policy-makers may try to mobilise the (higher education) sector themselves by putting issues on the public agenda, or interest groups that have access to policy-makers may initiate a policy process (Cobb, Ross and Ross, 1976). This is a critical policy stage as it may have a decisive impact on the entire policy process. Therefore, a first set of questions in our study related to the exploration of the rationale for the structural reform and the extent to which this rationale was supported by other stakeholders. What exactly was the perceived problem and for whom? What did the government want to achieve in the short, medium and long term by structurally reforming its higher education system?

Policy Design

The design or policy formation phase concerns the processes of choice to decide on the courses of action to solve the problem. Forester (1984) has pointed to five dimensions that need to be taken into account in this policy phase: the number of actors involved in decision making (single versus multiple), the organisational setting (closed versus open), the definition of the problem (well-defined versus vague), the type of available information (perfect versus contested), and the time available (infinite versus limited). Our analysis of the determination of the course of action - the policy design - focused on the identification of the actors involved, their preferences and resources, and the characterisation of the interaction patterns among these actors, largely based on Forester's dimensions.

Policy Instruments

Policy instruments are a salient issue in the design stage. Governing means using policy instruments, without them public policies would be no more than abstract ideals. Based on a literature review of policy instruments we adopted a typology based on the work of Hood (1983, 2007) and Howlett (2009) as the basis for describing the policy instruments selected in the structural reforms studied.

- *Information* (the use of information and communication)
- *Regulation* (laws, regulations etc.)
- *Funding* (positive and negative financial incentives)
- *Organisation* (the use of experts, networks, infrastructure, agencies etc.)

Within these four broad categories more fine-grained distinctions can be made: for example, within the regulation type are a range of instruments such as inspection, certification, licensing and codes of conduct.

Policy Implementation

How are the selected policy instruments applied to achieve the formulated goals of the reform? Over the years public policy implementation studies have convincingly demonstrated that implementation of decisions is not straightforward and that not everything is necessarily carried out 'according to plan'. During implementation, reform plans can take their own course because those implementing the reform always have some discretionary power. Higher education implementation studies - perhaps more than studies in other policy sectors - point to the distance between the policy plan and those at the shop-floor level who are expected to make the reforms work. Higher education institutions are autonomous institutions usually with considerable discretionary powers rather than hierarchically subordinated bureaucracies.

Moreover, the particular nature of higher education institutions, generally known for their fragmented decision-making authority and loosely coupled structures, is likely to affect the implementation of structural policy reform (and also earlier stages of the policy process if governments have taken into account the nature of academic organisations in developing the policy). Many higher education studies on policy implementation offer important insights concerning which characteristics of the policy process will affect reform outcomes (e.g. Cerych and Sabatier, 1986). The compatibility of the reform with the institution's aims, the relative advantage (profitability) of the reform for the institution and organisational capacity are factors facilitating the adoption of a reform. Other factors are ownership and leadership, securing support from those affected and a clear identification of risks and how to manage these.

Based on the insights from the literature study on policy implementation, our focus in studying the implementation phase has been on the actors involved (their position, interests, resources and strategies), the interaction among these actors as well as the characteristics of the implementation process itself.

Policy monitoring, evaluation and feedback

Reform policy evaluation concerns the assessments of the content, process and particularly the effects of the reform policy. While different criteria can be used to monitor and evaluate policies, goal achievement is usually the key focus of attention in the evaluation process (e.g. Fischer 1995). The aims of evaluation can vary and may relate to the different policy stages. Monitoring and evaluation can be carried out to take stock (summative) or they may serve to draw lessons from and to improve the policy process (formative). Based on feedback (information on content, process and effects) parts of the reform can be re-adjusted, resulting in a more effective structural reform.

With respect to this policy stage, we first investigated if and how monitoring, evaluation and feedback took place during the reform period. Were monitoring,

evaluation and feedback part of the reform trajectory; who was 'in control' of these processes; and have policies been adapted as the result of this monitoring and evaluation (process evaluation)? Secondly, we were interested in whether there had been evaluations of the reform in terms of the achievement of its operational and strategic goals (outcome evaluation).

Achievements and effects

To assess the success or failure of a structural reform, we focused on goal achievement at two levels. Firstly, the effectiveness of the reform was evaluated against the operational goals of the reform, including questions such as whether the reform was implemented *as intended* and whether the operational goals were achieved *as a result of* the reform. Was the identified problem solved by the reform? Secondly, if (most of) the operational goals were achieved, then to what extent were the strategic goals of the structural reform met? The strategic goal - as we have defined it - of a structural reform is a change in the higher education landscape designed to improve particular aspects of system performance.

Figure 2: Achievements and effects

To assist our case study researchers in assessing the achievement of operational and strategic goals we compiled a check list of potential factors that might have an impact on success and failure, based on our literature review. Contextual changes are one of those factors. Further examples are the existence of other harmonious or conflicting policies and policy instruments; the level of ambition of the reform; the expectations of key stakeholders; the level of resources; the quality of the policy design; political intervention or the lack of it; and the extent of commitment and ownership.

Finally, we took into account in our assessment the 'time' factor and side effects. Structural reforms in higher education are complex and typically require time before

their effects are felt, particularly with respect to their strategic goals, even when operational goals have been reached. Side effects, initially not foreseen, almost invariably occur whenever the assumptions about cause and effect that underpinned the reform turn out to be incorrect. This could be a result of insufficient social-scientific insight into the complexities of the higher education sector and the behaviour of higher education institutions, as a result of errors of judgment by policy makers or implementers, or of unforeseen external events.

2 A brief overview of the twelve case studies

In this chapter we explain the criteria used to select the twelve case studies before providing thumbnail sketches of each of the cases. These indicate the type and goals of the reform, the policy instruments utilised, design and implementation characteristics and the achievement of the goals of the reform. The twelve case study reports (ca. 20 pages each) are published individually along with this synthesis report.

2.1 The selection of the case studies

Our literature review and a 'quick scan' across our network of higher education researchers produced a large set of international examples of structural reforms. An initial analysis reduced this to a 'long list' of 30 reforms which were potentially interesting case studies. For these 30 reforms we produced a standard four to five page description of the reforms using many of the concepts included in our analytical framework (see section 1.3).

To reduce this long list to twelve case studies for in-depth analysis the following considerations were taken into account in consultation with the Commission:

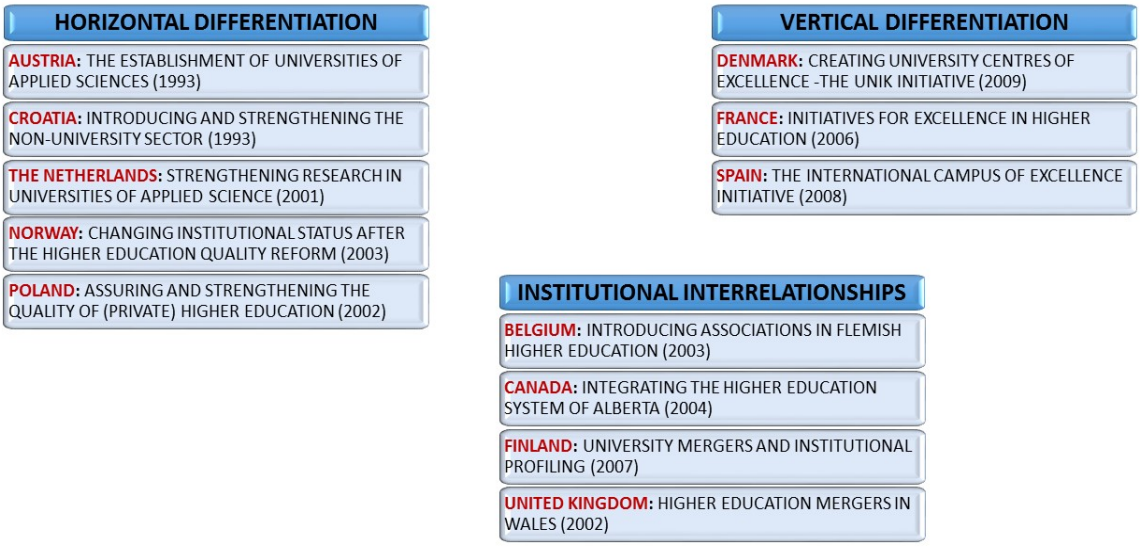
- Ensuring adequate coverage of structural reforms across the three categories of our typology
- Achieving internal variety within the three reform types to the extent possible
- The comprehensiveness of the reform
- Time period (reforms before 1990 and after 2010 were not selected)
- The relevance of the reform and its context to European higher education systems (the Chinese excellence initiatives and policies to encourage international branch campuses in a number of Middle Eastern and South-East Asian countries were not selected for this reason)
- No more than one reform in each higher education system selected so that the case studies would be drawn from twelve different systems
- Selecting a diverse set of higher education systems for the case studies

On this basis the project team and the Commission selected the twelve case studies shown in Figure 3 below.[2]

[2] The German Excellence Initiative would have been an obvious selection but we were advised by our German experts not to attempt a case study in parallel with a government evaluation of the initiative that was in progress at the time of our study. Its report was released while we were finalising this study (*Internationale Expertenkommission zur Evaluation der Exzellenzinitiative: Endbericht*, January 2016)

Figure 3: The twelve case studies grouped by type of structural reform

Note: Some structural reforms have objectives that relate to more than one reform type (see section 1.2). In this figure reforms are categorised by their primary objective. The years refer to the start of the reform.



As indicated in Table 1 below, and in line with one of our selection considerations, the twelve cases are diverse in terms of general context characteristics such as population size, global competitiveness, quality of governance and economic growth, as well as in terms of higher education context characteristics including higher education sector structure, student enrolments, tertiary education attainment and higher education expenditure.

Table 1: **General and higher education context characteristics of the twelve cases studied**

	Population [1]	GCI- 2014/15 [4]	Economic growth GDP per capita 2005-2013 [1]	Governance quality [2]	Number of students (approx.) [1,3]	Tertiary Education Attainment 25–64yrs (2014) [1]	Public expenditure on HE (%GDP) [1]	HE sectoral structure
Austria	Medium	Medium	8.9%	Strong	420.000	29.9%	1.56%	Binary
Belgium - Flanders*	Small (FL)	High	4.6%	Strong	250.000 (FL)	36.9%	1.44%	Binary
Canada - Alberta*	Small (AL)	High	n/a	Strong	165.000 (AL)	n/a	n/a	Complex diversified
Croatia	Small	Low	4.7%	Moderate to weak	165.000	21.4%	0.93%	Binary
Denmark	Small	High	0%	Very strong	290.000	36.1%	2.44%	Complex diversified
Finland	Small	Very high	3.9%	Very strong	310.000	41.8%	2.17%	Binary
France	Large	Medium	3.4%	Strong	2.338.000	33.2%	1.29%	Complex diversified
Netherlands	Medium	High	5.7%	Very strong	675.000	34.4%	1.72%	Binary
Norway	Small	High	1.9%	Very strong	254.000	42.3%	2.12%	Binary
Poland	Large	Medium	34%	Moderate	1.903.000	27.0%	1.13%	Unitary
Spain	Large	Medium	-4.6%	Moderate	1.969.000	34.7%	1.13%	Binary
UK - Wales*	Small (WA)	High	3.6%	Strong	130.000 (WA)	40.5%	1.32%	Unitary (WA)

* Unless otherwise specified, the data refers to Belgium, Canada and the UK.
[1] Eurostat, online 2016. (Poland data are estimates)
[2] World Bank Governance Indicators, online 2015.
[3] National level sources for Austria, Alberta and Croatia.
[4] Global Competitiveness Index (GGI) in The Global Competitiveness Report 2014-2015, online 2015.

Apart from the differences with regard to higher education sectoral structure (university and non-university higher education institutions) included in Table 1, the systems also have different higher education legacies as well as steering modes. More than half of the higher education systems included in our case studies have a

Humboldtian legacy in terms of widely-held views on higher education. Two systems have an Anglo-Saxon tradition (Alberta and Wales) and two have a Napoleonic history (France and Spain). Finally, steering modes in higher education differ. While many higher education systems traditionally operated within a state steering governance model (state control, strong hierarchy, centralised decision making and limited autonomy of institutions), almost all have moved away from this model in the last two decades, although the direction and timing of these changes in steering approaches have been different. Currently more institutional autonomy, strengthened university self-regulation capacities, greater stakeholder involvement and a state role 'limited' to setting market rules are more common.

2.2 Thumbnail sketches of the twelve case studies

Structural reforms primarily aimed at horizontal differentiation

Austria - the establishment of Universities of Applied Sciences

The case study addresses the introduction of a University of Applied Sciences (*Fachhochschulen*) sector alongside the existing university sector at the beginning of the 1990s. This *horizontal differentiation* reform aimed at the diversification and expansion of vocational education, the development of programmes geared towards the needs of the labour market, the promotion of permeability in the educational system and the flexibility of graduate career paths. The key policy instruments were a new *Fachhochschulen* Act (FHStG) and funding mechanisms. Important stakeholders were involved in the design of the policy and there was considerable scope for local and regional initiatives in the implementation phase, also involving private partners. As a result of the reform process, the landscape of Austrian higher education has changed significantly. The strategic and operational goals have been achieved and as a consequence the reform can be considered an overall success.

Croatia – Introducing and strengthening the Non-University sector

The case study focused on the establishment of non-university higher education institutions in Croatia from the mid-1990s and the government's attempts to gradually make these institutions the sole providers of professional study programmes, which implied gradually phasing out such programmes in the university sector. These *horizontal differentiation* reforms aimed at enhancing higher education's contribution to the regionally-balanced development of Croatia as a knowledge society by increasing the quality, efficiency and accessibility of higher education. The policy instruments employed were changes in system level legislation and the introduction of procedures and criteria for the accreditation of institutions and programmes, with no changes in state funding mechanisms. The reform achieved part of its operational goals through the establishment of non-university institutions and somewhat decreasing the number of students enrolled in professional programmes at universities. However, the reform has failed to align types of programmes with types of institutions so the binary divide remains blurred.

The Netherlands – Strengthening research in Universities of Applied Science

At the turn of the millennium, this *horizontal differentiation* reform—the establishment and institutionalisation of a research function as the second core task of the Dutch universities of applied sciences (*hogescholen*) - was introduced to contribute to the strengthening of the innovative capacity of the Netherlands by the optimal use of the UAS sector in delivering highly-skilled modern graduates and services needed by regional industry and the public sector. For these purposes the UAS research base had to be strengthened. Several policy instruments were introduced to strengthen the UAS research function by means of the introduction of new staff positions, grants for practice-oriented research and grants for the establishment of Centres of Expertise. In the fifteen years since the first steps were taken the stronger research orientation of UAS institutions has achieved a structural and indispensable position in Dutch higher education. In this respect, the structural reform has been successful in changing the Dutch higher education landscape. Conclusive evidence on the volume, quality and impact of UAS research is however not yet available.

Norway – Changing institutional status after the higher education quality reform

The case study in Norway concerns part of the broader Norwegian 'Quality Reform' and pertains to the profiling and changing status of higher education institutions (*horizontal differentiation*). The main overall goal of the reform was to increase efficiency and quality. At the practical level this was translated into giving higher education institutions more autonomy and allowing them to profile and position themselves more strategically. One of the options offered to university colleges was to 'upgrade' to university status. The key policy instrument for the structural changes, starting in 2000, was regulation, with funding provided for the establishment of the quality assurance agency (NOKUT) and other aspects of the reform. The reform goals have been achieved, although there were also some ambiguities given the comprehensive set of interrelated reforms taking place at the same time. Overall, the structural reform was considered to be a success, as there is now more diversification of institutional profiles. The reform has changed the higher education landscape significantly (the number of universities increased from four to eight).

Poland – Assuring and strengthening the quality of (private) higher education

The case study relates to the introduction of national obligatory accreditation (PKA: the accreditation agency) in response to the 'mushrooming' of the private sector after 1989 and low-quality higher education provision in general. The PKA changed the academic landscape (*horizontal differentiation*); its accreditation activity led to closing low-quality study programmes and institutions, partly by anticipation: some institutions preferred not to seek accreditation and stopped operations voluntarily. Since then, the contraction of the private sector has outpaced the general contraction of the higher education system in the context of demographic decline. After initial successes, the impact of the PKA decreased because of its inability to accredit all

study programmes timeously. Also, the PKA, like all accreditation based on self-evaluation reports and site visits, may fail to detect all cases of low-quality provision. The PKA was introduced without waiting for other, more debated, aspects of higher education reform. This tactic proved effective. The involvement of major academic representative bodies in policy design, building on their experiences with voluntary academically-led accreditation, was crucial to achieving wide acceptance of the PKA.

Structural reforms primarily aimed at vertical differentiation

Denmark – Creating University Centres of Excellence: the UNIK-initiative

The case study concerns a *vertical differentiation* reform that aimed to strengthen the strategic capacity of Danish universities - strengthening research priority setting and creating distinctive research profiles - by offering competitive funding. The Danish government launched the five-year UNIK-initiative (2009-2013) as part of the comprehensive Globalisation Strategy of 2007 (UNIK: Investment Capital for University Research). Universities could submit proposals for long-term, large-scale research, which were assessed by an independent international expert panel. Out of 28 proposals submitted four were awarded funding. Paradoxically, the initiative can be seen both as a success and a failure. The initiative has achieved most of its operational goals and it has probably contributed, albeit marginally, to the set of overall strategic goals formulated in the Globalisation Strategy. However, the initiative will probably not be continued as a result of a lack of new funding and limited support from central stakeholders. As the result of its 'one-off' character, the initiative is unlikely to result in substantial long-term changes in the Danish university landscape.

France – Initiatives for excellence in higher education

The case study investigates two strands of policies that have been deployed since around 2006 aiming to improve the competitiveness of French higher education and research at a global scale. The reforms were triggered by the 'shock' of French universities not featuring prominently in the first global rankings. The two policy strands entailed large investments in facilities and in world-class research, and merger operations. In both strands, two 'generations' of policy initiatives were taken, the second generation policies, with increased funding in response to the 2008 financial crisis, have strengthened and continued the first policies up to the present. Investments to increase *vertical differentiation* were concentrated in a few, already strong universities (or those strengthened through mergers). The mergers also started selectively. Higher education institutions competed voluntarily for funding. Merger policies successively included more institutions of higher learning and research (functions which were separate - combining them was a major landscape shift). The higher education landscape has been modernised on a large scale and in a short timeframe with the important aid of significant investment and bipartisan political support.

Spain – The International Campus of Excellence initiative

The case study describes the International Campus of Excellence initiative in the period 2008-2014, which aimed to reduce the fragmentation of the higher education system, to open up universities to society, and to increase their specialisation and excellence (*vertical differentiation*). Universities had to develop strategic partnerships and aggregations among themselves and with other private and public institutions around a common project and campus. During the implementation phase, the excellence objective was blurred towards a more comprehensive approach by also including smaller and peripheral regions and universities. The reform has met the objective of increasing the visibility of the higher education sector in society. However, the impact of the reform was limited by the economic crisis which occurred after the launch of the reform and reduced the amount of available funds, as well as by the limited involvement of crucial stakeholders during the design phase.

Structural reforms primarily aimed at institutional interrelationships

Belgium – Introducing associations in Flemish higher education

The case study analysed the introduction of associations – formal collaborations between one university and at least one university college (*hogeschool*) - in Flemish higher education. The reform, starting in 2003, was a case of changing the *institutional interrelationships* between higher education institutions. The overall aim was to make the higher education system 'Bologna proof', which entailed the associations transforming the two-cycle university college programmes into full Masters programmes equivalent to those offered by the universities. The key policy instruments were regulation (a 2003 Decree) and limited additional funding. The main goal has been achieved, although research-based teaching may not have been fully realised in the former two-cycle programmes. An important side effect was a major change in the institutional landscape with KU Leuven and Ghent University becoming substantially larger than the three other associations in terms of institutional size.

Canada – Integrating the higher education system of Alberta

The case study on higher education in the province of Alberta, Canada, relates to strengthening the *institutional interrelationships* between the 26 higher education institutions in a relatively small higher education system. The main strategic goal was to enhance Alberta's wellbeing through a learning system that was globally recognized, high-quality, responsive to provincial needs and requirements, adaptive to dynamic changes, and able to unleash innovation. The policy process started at the beginning of the 2000s and entailed a long consultation and design phase. The most important policy instruments were communication, regulation (the 2004 Postsecondary Learning Act) and increased overall funding. The very abstract formulation of strategic goals made it difficult to draw a conclusion on goal achievement. However, many changes were realised (e.g. new regulation, an integrated quality assurance system and a six-sector structure for higher education

institutions) and these achievements have resulted in changes to the institutional landscape.

Finland – University mergers and institutional profiling

The case study is an example of *institutional interrelationships* reform. To maintain Finland's prominent position in global economic competition, mergers to form stronger units, with one 'world-class university', were envisaged. Three groups of universities responded to the Ministry's invitation to merge, including the desired special case in the capital. The main policy instruments were regulation and funding: regulation was changed to grant additional programme funding (including private funding tax cuts). The three mergers took place (2007–2010) in the shadow of a large University Act reform that increased the autonomy of higher education institutions. Profiling of universities, with some institutions developing centres of excellence in particular fields, did not materialise. Thus, the operational goals were partially achieved. The strategic goal of changing the Finnish higher education landscape towards more differentiation among universities does not seem to have been achieved, although a formal evaluation of the reform has not taken place. The binary system was maintained and more cooperation between the two sectors (also a policy goal) did not reappear in the policy debate.

United Kingdom – Higher education mergers in Wales

The case study concerns the merger of higher education institutions in Wales as an example of the *institutional interrelationships* type of structural reform. At the turn of the millennium the small Welsh institutions were too vulnerable in a UK system characterised by increasing competition and marketization. The reduction of the overall number of universities in Wales from thirteen to eight through (voluntary) mergers in the period 2002-2014 was part of efforts to increase the overall competitiveness of Welsh higher education in the wider United Kingdom higher education system. Since the Higher Education Funding Council of Wales (HEFCW) launched the merger policy in 2002 with direct financial support from the Welsh Government, a fund was established to meet the one-off costs which institutions would incur in merging, bringing their support systems together and rationalising their real estate. The reform was successful in that no Welsh universities experienced financial failure or required bailout during the period, although evidence on whether the overall competitiveness and attractiveness of Welsh higher education in the context of the wider UK system has improved is more equivocal.

3 Comparing structural reforms according to type, goals, process characteristics and outcomes

In this chapter we provide four comparative cross-case analyses. Structural reforms of the same type are compared: reforms aiming at *horizontal differentiation* in the cases of Austria and Croatia, reforms aiming at *vertical differentiation* in the cases of Denmark, France and Spain, and reforms concerning *institutional interrelationships* in the cases of Finland and Wales, as well as reforms related to the research-teaching nexus in the *hogescholen* in Flanders and the Netherlands. At the same time, the compared cases exhibit important differences with regards to goal achievement (Austria and Croatia), the choice of policy instruments (Flanders and the Netherlands), specific aspects of the reform processes (Denmark, France and Spain) or a combination of these characteristics (Finland and Wales). These focused comparisons enable the identification of critical factors affecting the success of structural reform and a systematic consideration of key questions in the policy process (see Chapter 4). For a fuller understanding of the compared cases the interested reader is invited to consult the individual case studies that are published individually with this report.

3.1 The introduction and development of professional higher education sectors in Austria and Croatia

This first comparative cross-case analysis considers two structural reforms aimed primarily at horizontal differentiation that had similar goals, different policy processes and different outcomes.

Structural reforms that started in the early 1990s in both Austria and Croatia were aimed at the introduction of a professional higher education sector in systems initially dominated by, or solely composed of, university institutions. Although prior to the reform in both countries there was post-secondary vocational training, that sector was quite small in terms of numbers of students and institutions and, in the case of Croatia, it had almost disappeared by the late 1980s.

The general rationales for the reforms were quite similar – to create higher education provision that would cater more directly for the expectations of the labour market and that would enhance regional development were deemed to be important goals in both countries. In addition, the reforms were expected to boost the efficiency of higher education, given that the large university sectors were characterised by significant drop out rates and extended time to the completion of degrees.

However, there were differences between the two cases with regards to where the pressure for reform came from and where the ideas on how to reform originated. In Austria, the ministry responsible for higher education commissioned the OECD to undertake an external review of the system in part because of the challenges presented by the recognition of Austrian qualifications in the European Economic Community following the adoption of Council Directive 89/48/EEC (Austrian post-secondary vocational degrees would not be recognised). In Croatia, the introduction of

the professional higher education sector was part of a larger reform effort in the then newly independent country, seeking to revive a once thriving sector and to clarify the binary divide (given that universities provided both academic and professional programmes).

The reforms did not differ significantly in terms of the policy instruments utilised. In both cases, the reforms relied primarily on regulation (system level legislation and/or accreditation requirements), but the *ex-ante* status was different. In the case of Austria the professional education sector was built by upgrading existing upper secondary programmes into fully-fledged higher education programmes. In Croatia, the introduction of the professional sector was intended to be coupled with the gradual phasing out of professional programmes offered by universities. Given that the funding of higher education in Croatia is input based (number of students enrolled) and that the reform did not include a change in funding mechanisms, the intent to offer professional programmes only at professional higher education institutions constituted an inherent threat for the universities. In the case of Austria this was not the case, given that the two sectors were envisaged to have distinct profiles and target distinct student populations. The Austrian professional higher education sector was expected to absorb some of the excess demand for higher education and the reform package that introduced structural changes in Austrian higher education also included a significant boost in autonomy for the universities.

In essence, the reform in Austria was designed in such a way as to ensure that there was a positive outcome for all major actors (in particular the universities), while in Croatia the universities stood to lose a significant part of their funding. Moreover, in Croatia there was no institutionalised way of designing policies and therefore key stakeholders were not involved, while in Austria they were.

In the implementation phase in both cases there was a clear role for the accreditation agencies. In Austria, the implementation was smooth, partly because of an active network of *Fachhochschulen* and communication and information exchanges at the start of the implementation phase. In addition, a degree of flexibility regarding the organisational structure of the new *Fachhochschulen* made it easier for institutions to engage in the process. In Croatia, recurring legislative amendments and constitutional court decisions delayed the full implementation of the reforms. These changes rendered the main policy instrument (regulation) ineffective and led to a situation in which phasing out of professional programmes at the universities was never achieved because it was considered a breach of the constitutional principle of university autonomy. In addition, the newly established non-university institutions were not as active or cohesive as a collective as their counterparts in Austria.

When it comes to the monitoring and evaluation of reforms, the two cases are also rather similar. In Croatia there was no monitoring while in Austria it was limited to quantitative indicators at the study programme level. However, in both countries the accreditation procedures provided information which could have potentially been used as monitoring devices to check whether the reform was on track, but there is no systematic evidence that this was indeed the case. For example, the Croatian accreditation agency produces regular reports on the accreditation of institutions and programmes but there is no clear indication that these reports are systematically used by policy makers to evaluate the reforms.

The main difference between the cases concerns goal achievement. In Austria both operational and strategic goals have been achieved. While the professional higher education sector caters for approximately six times fewer students than the university sector, it has contributed to decentralization and regional development, and the higher education landscape has changed significantly. In Croatia, although new professional higher education institutions have been established, the proportion of students in professional programmes that are studying at universities has stabilized at around one-third and there are no indications that this will decrease in the future. This means that in Croatia the binary divide remains blurred and that the goal of phasing out professional programmes at universities has not been achieved.

Overall, the coupling of two characteristics – there was something to be gained by both sectors in Austria compared to a distinct financial threat to universities in Croatia, and there was considerable involvement of the key stakeholders in Austria in policy design and implementation with no such involvement in Croatia – might explain to a large extent the differences in goal achievement.

Table 2: A brief overview of different aspects of the professional higher education sector reforms in Austria and Croatia

REFORM ASPECT	SIMILARITIES	DIFFERENCES	
		AUSTRIA	CROATIA
GOALS	Introduction of professional higher education sector		
CONTEXT	Better links with the labour market Enhancing regional development Boosting efficiency	External pressure to reform (OECD, recognition of Austrian qualifications abroad)	Increase quality, increase access and improve educational attainment of the population
DESIGN		Consultation with stakeholders, positive outcomes for both sectors	No consultation, universities (powerful actors) potentially lose funding (state funding & tuition fees)
INSTRUMENTS	Regulation (system level legislation and accreditation requirements)	Upgrading existing upper-secondary programmes	Establishing new non-university institutions and phasing out professional programmes at universities
IMPLEMENTATION	Accreditation agency No systematic monitoring and evaluation	Smooth, active network of professional institutions, communication and information	Non-smooth, legislative amendments and constitutional court decisions delayed/blocked implementation
ACHIEVEMENTS		Professional HE sector established and contributed to decentralization and regional development	Professional HE sector established, but professional programmes still offered by the universities – blurred binary divide
Other remarks			Structural reform part of larger reform efforts (1990s: overall public sector reform in the newly independent country, 2000s: Bologna inspired reforms)

3.2 Comparing excellence and profiling initiatives in French, Spanish and Danish higher education

Our second cross-case analysis compares three structural reforms primarily aimed at vertical differentiation that involved similar goals, different policy processes and different outcomes.

Structural reforms to stimulate excellence in higher education in the three countries were developed in a similar period, from about 2007 onwards, in response to the global competition in higher education and research. This perceived competition was perhaps symbolised through the appearance and diffusion of university rankings, which were first published in 2003 (Shanghai ranking) and 2004 (Times or THE ranking). The public debate about global university rankings generated a political concern in many countries that their national universities were not sufficiently visible and/or performing on a global scale. Developing differentiated profiles among a country's higher education institutions by selecting specific areas in which to concentrate institutional investments and efforts, and concentrating national higher education resources (money and teachers/researchers) in fewer higher education institutions to create critical mass were interrelated, key operational goals common to the reforms in these three countries, although other, more specific goals were included in each country.

Because these reforms are recent and systematic evaluation of impacts is missing, it is difficult to assess to what extent they have met their strategic goals of enhancing quality and efficiency, and increasing global recognition and relevance. At this time, we can however consider the achievement of operational goals, and then explore which factors explain the relative success of the reforms in this respect. The French structural reform has met its goal of increasing critical mass and pooling resources, whereas it only partly achieved institutional profiling. The campus of excellence initiative (CEI) in Spain has had limited success in terms of the operational goals of profiling and pooling resources/achieving critical mass (see next paragraph) but has increased collaboration between higher education institutions and with public and private sector organisations. Finally, the Danish UNIK initiative did not fully meet its goal of profiling higher education institutions. In the following paragraphs we focus on themes and factors that stood out in this comparative analysis.

Profiling, a higher education institution selecting specific knowledge areas in which to concentrate its institutional investments and efforts, emerges as the most difficult operational goal across all three cases (as will also be shown in the next section, which compares merger reforms): none of the reforms was fully successful in this regard, while they were generally more successful in terms of achieving their other goals. The Spanish experience suggests specific reasons why profiling may be problematic. Namely, many goals were pursued at the same time, which may reduce the system's capability to meet all of them. Developing focus areas for research and education inevitably means side-lining other areas, which is a hard decision to 'sell' in a higher education institution at any time. In Spain, the internal governance of universities has traditionally been consensual and egalitarian, with institutional leadership having limited formal powers and legitimation to select 'flagship' areas. Accordingly, profiling was culturally and politically problematic. These difficulties were possibly exacerbated by the fact that the overall amount of additional funding was not large, implying a high risk that the development of one area would occur at the expense of others.

In terms of the reform implementation period, the Danish case in contrast to France suggests that discontinuing an instrument (competitive additional research funding) soon, in this case after five years, may affect goal achievement negatively. The French

government continued its policies for concentration and modernization of facilities over a longer period of time and seems to have achieved more than the Danish reform did. It is impossible to determine causality, however: there is a logic in ending spending on a policy if it does not seem to be achieving its goals, while there always is the possibility that continuing might lead to goal achievement eventually.

In the Spanish case the scope of the reform and resources allocated to it may explain why it was less successful than the other two reforms, at least regarding operational goals. First, the scope of the reform was broader in terms of the number of institutions involved: practically all universities in the system (although this was not the original intention), whereas a more restricted sample (France) or a minority (Denmark) of universities were the beneficiaries of the other initiatives. The scope of the goals also has to be compared with the resources available per targeted university, which were much larger in France than in Spain. Spain's total additional funding was similar to the sums spent in Denmark, which is a much smaller higher education system in which only a minority of institutions were targeted. The issue of funding was exacerbated by the economic crisis in Spain, whereas in France the crisis led to even more resources being invested to counterbalance the effects of the crisis. The crisis had no impact on the Danish reform funding.

Notable differences also emerged in the area of political support, which was strong across the various political parties in all cases except Spain, where the reform was designed by a small group of academic experts in the new General Secretariat for Universities. Moreover, in the federal higher education governance structure of Spain, the body responsible for the reform was obliged to negotiate both with the national and regional governments.

Approaches to policy design and implementation are related to some extent to the political and administrative tradition of each country. In Denmark a consensual approach and communication involving all stakeholders characterized the design phase, and afterwards the implementation occurred rather smoothly.[3] France and Spain adopted a more top–down approach in the design of the policy. However, while in France strong political support and the unitary structure of the country allowed the reform to maintain its course during implementation, this did not occur in Spain, where regions and universities managed to turn the reform into a much less selective, more comprehensive exercise.

Several approaches to policy design and implementation may be suitable, as long as they are consistent with each other. That is, if consensus between the parties involved is pursued and reached during the design phase, as in the Danish case, there is little risk that the policy intentions are resisted later and are changed during implementation. If a top-down approach to design is adopted, then strong political support and steering is required during implementation. This occurred in France, but not in Spain.

[3] It should be added, however, that political debate in the higher education systems at the time of these reforms focused on the larger reforms of which the selected cases were part. Our cases took place while politics concentrated elsewhere, so to speak.

Table 3: A brief overview of different aspects of the excellence initiatives in France, Spain and Denmark

REFORM ASPECT	SIMILARITIES	DIFFERENCES		
		FRANCE	SPAIN	DENMARK
GOALS	Increase international visibility and excellence by profiling HEIs, resource concentration, economies of scale, critical mass	To develop larger units with integrated higher education and research roles	Increase collaboration between universities and with regional actors; improve HEI governance	Improve HEI management; international cooperation; support young researchers
CONTEXT	Global competition in Higher Education	Restricted sample of HEIs involved Strong political support	Increasing HEI participation, eventually almost all involved Weak and fragmented political support	Few HEIs involved Strong political support Part of larger reform package
DESIGN		Top-down Selected stakeholder consultation Interactions: local-regional Several design phases	Top-down A small group of academics within the (new) General Secretariat for Universities designed the reform in a short time	Broad stakeholder consultation Selected stakeholder influence Interaction open and frequent Limited number of institutions targeted
INSTRUMENTS	Programme funding	Funding relatively large and sustained over time	Funding mostly in the form of loans	Funding, not sustained after first cycle (five years)
IMPLEMEN-TATION	Institutional autonomy respected	Economic crisis used to increase funds/loans for higher education	Strong influence of the regions Strong negative impact of the economic crisis on available resources	Minority of universities benefitted
ACHIEVEMENTS	Limited success in profiling HEIs	Achieved goals of increasing critical mass and pooling resources	Limited success in terms of increasing collaboration, pooling resources & critical mass	Rather successful but discontinued

3.3 Higher education mergers in Finland and Wales

The third cross-case analysis compares two structural reforms primarily aimed at institutional interrelationships that involved similar goals, similar policy processes and similar outcomes.

Mergers in Finland and in Wales occurred for comparable as well as different reasons. The main parallel is that in both cases mergers were intended to make the higher

education system more competitive; they should improve performance through concentration of resources in fewer, stronger institutions (achieving critical mass, economies of scale and efficiency). Moreover, in both cases maintaining a regional spread of higher education provision to serve the population was an important condition.

A first difference is that competition for Finland meant stronger in global competition, while in Wales competition was with the rest of the UK.

Second, Finland attached additional goals to the mergers: the reduction of overlap in programme offerings among higher education institutions (efficiency gains) by aiming for more specialised higher education institutions, each with a unique profile. In Wales there was no parallel to this goal of profiling. Each university should offer a full portfolio of study programmes to serve the regional student base and to provide all-round education to its students.

Third, in Wales the sense of urgency was greater than in Finland, as without mergers a number of higher education institutions would not have sufficient income to survive in the long run. Increasing marketization of the UK system had increased the vulnerability of the small Welsh institutions, and hence of the whole Welsh system. In Finland the threat was more abstract, a fear of losing competitiveness at a global scale after the 'Nokia miracle' of the 1990s. Another threat was the forecast Finnish demographic downturn: the system would not be tenable given a smaller student population.

The fourth difference concerns the structure of higher education: binary in Finland and unitary in Wales. The Finnish ministry initially presented cooperation across the binary divide as an option, although the separate roles of both institutional types should be retained. However, universities only proposed mergers with other university-level institutions.

In both cases, the structure of the policy process was fairly similar: the central authority[4] proclaimed the goals and the main method of the reform. The central authority named a target number of higher education institutions to which it wanted to reduce the system: from twenty to fifteen in Finland; from thirteen to around six in Wales. Certainly in Wales the numerical target was not very strict, and when with eight institutions there were no further volunteers for merging, the regional government and the funding council were satisfied. In Finland the target number was attained well before the target year of 2020.

The main policy instruments were largely similar in both systems, with a central role for project funding: higher education institutions that engaged in (the first steps of) a merger process could gain additional financial support from the central authority. A time frame was established in both systems: bids for project funding had to be submitted before a certain date and a (fairly loose) end date for the process was set as well.

[4] As a consequence of the different governance arrangements in Finland (with a national higher education ministry) and Wales (with a regional government - that changed in status during the reform process through devolution of authority from the UK to the four nations - and a separate funding council), the term 'central authority' will be used here.

Through negotiations and close monitoring of the merger project organisations (groups including leadership from the higher education institutions involved) the central authority kept a close watch on the desired direction of the merger processes and on their progress. In Finland monitoring also occurred through negotiations on performance agreements. In Wales, it was the Higher Education Funding Council for Wales's role to do this. In both cases, institutional autonomy was respected. The higher education institutions that entered into a merger process did so on the basis of a voluntary strategic decision on their part. In Finland, less far-reaching options for cooperation were also proposed, such as associations, to make the process less daunting at first, and to provide an exit route from the process which institutions could take with grace rather than having to proclaim failure if a full-scale merger were not attained. Also, in both systems individual arrangements could reflect different interpretations of the meaning of merger. In Wales this was explicit, each merger was treated as a *sui generis* case. In Finland, the three mergers revealed different levels of integration, for example with the two merged institutions in Turku retaining their own strategies.

It had been a strong desire of the Finnish minister to have one 'world-class' university in the country. The merger of three universities in Helsinki into the new Aalto University was a response to this desire, realised probably (although the documents are silent on how it was achieved) through (informal) negotiations, and with the promise of extra funding, over and above the additional funding for other mergers. Aalto University's rise in the international rankings however has not been spectacular until now. In Wales, an early attempt by the central authorities to effectuate a blueprint for the mergers failed. Pushing higher education institutions beyond their 'bottom–up' willingness to merge appears risky and may go awry. Both case study reports also note one case of a merger process that failed (Finland) or of an institution that remained unwilling to merge (Wales). The voluntary mergers proceeded mostly well, and most kept within the time frame that the central authorities had intimated in advance.

Apart from the central authorities and the higher education institutions, the role of labour unions was remarkable in both cases. In Finland, the unions mainly defended the status quo position of academics regarding their protected labour positions in the major reform that was taking place at the same time (a law on increased institutional autonomy). In Wales, the unions apparently saw mergers as an opportunity to increase their popularity by protecting academics and other employees during the mergers.

In conclusion, in both cases the main operational goal - reduction of the number of institutions - has been achieved. The mergers have changed the higher education landscapes. In Wales, institutional financial viability and leadership and governance have been improved, a critical mass of shared services has been achieved, and generally performance has improved. In Finland mergers have taken place with similar effects as in Wales. However, the goal of profiling Finnish universities has not been achieved.

Table 4: A brief overview of different aspects of the merger reforms in Finland and Wales

REFORM ASPECT	SIMILARITIES	DIFFERENCES	
		FINLAND	WALES
GOALS	More competitive HE system Performance increase by resource concentration, economies of scale, enhanced critical mass	Additional goals: • avoiding overlap • institutional profiling • establishing one world-class university	Strong focus on financial viability
CONTEXT	Maintain regional provision of HE	Aiming to be globally competitive Part of a larger reform Binary HE structure Demographic downturn foreseen	Aiming to be nationally competitive More marketization Unitary HE structure Greater sense of urgency for mergers (financial viability)
DESIGN	Central authority proclaimed the goals and main method, but no governmental blue print for the mergers		The target number of institutions (after mergers) was less strict
INSTRUMENTS	Project funding		
IMPLEMENTATION	Institutional autonomy respected; selection of partners and merger plans up to the institutions	Negotiations and monitoring by government (including. as part of performance contracting)	Negotiations and monitoring by national agency (HEFCW)
ACHIEVEMENTS	Reduction of number of institutions as intended. Other goals (financial viability, economies of scope, reducing overlap, and critical mass) also mostly achieved. In both systems only one merger 'failed'.	Goal of more differentiation (profiling) not achieved as a result of the mergers Establishment of world-class university questionable	University management professionalised
Other remarks	Clear role of unions		

3.4 Strengthening the research-teaching nexus in the *hogescholen* sectors in Flanders and the Netherlands

Our final cross-case analysis concerns two structural reforms (of different types) that involved similar goals, different policy processes and similar outcomes.

The Flemish case (introduction of Associations) and the Dutch case (strengthening research in the UAS sector) both investigated the government´s intention to improve teaching and learning in the *hogescholen* sector. In Flanders, transformation of the *hogescholen* two-cycle degree programmes into academic oriented master's programmes was meant to boost the 'academic' component of these study

programmes by strengthening the research-teaching nexus. In the Dutch case, the intention was also to strengthen the research-teaching nexus at *hogescholen* in order to produce graduates with a different set of skills ('reflective practitioners'). To achieve this, staff with a stronger 'research orientation' were seen as a prerequisite.

In terms of goal achievement the structural reforms in Flanders and the Netherlands show considerable similarity. Both reforms can be seen as a success: the operational goals have been achieved. In Flanders, as intended, *hogescholen* two-cycle study programmes have been transformed into accredited master's programmes. In the Netherlands, curricula have been adapted, more research-oriented staff have been appointed, and practice-oriented research conducted by the UAS sector has become institutionalized. That said, the achievements must be seen against the background of concerns about the longer-term sustainability of the achievements of the reforms. More time (and probably more resources) is needed to ensure lasting effects that really make a difference.

While the operational goals of the structural reforms and the outcomes are largely similar, there are a number of clear differences. First, a main difference between the two cases was that the Dutch government very explicitly stressed that it wanted to maintain the binary divide between *hogescholen* and universities, whereas at the start of the Flemish structural reform, in 2003, the government was ambivalent about a binary divide. It was not clear whether the associations of hogescholen and universities would be temporary. In 2015, the net result is the same: both systems are still binary systems. The drivers for change differed as well. The Flemish reform was mainly externally driven. In response to developments at the European level, the Flemish government wished to make its higher education system 'Bologna proof'. In the Netherlands the internal dynamics in higher education formed the basis for the reform, which was essentially initiated by the UAS sector itself and accommodated by the Dutch government.

Second, the main difference is to be found in the chosen policy design to improve the research-teaching nexus in the two systems. In Flanders the strengthening of the 'academic' orientation of the *hogescholen* study programmes was accomplished by forcing *hogescholen* to associate with a university – the whole higher education sector was involved and the key to goal achievement was cooperation, albeit by partners with significantly different power bases. In the Netherlands, the universities were not part of the reform process and competition amongst the *hogescholen* was the mechanism adopted to strengthen research-oriented teaching and learning.[5] Thus, the Dutch *hogescholen* had to develop a research orientation themselves (as they were teaching institutions at the time), while in the Flemish case the research expertise came from the universities, which implied that the research focus of the *hogescholen* themselves only received marginal attention. In line with this the policy instruments deployed in the two countries were different as well. The Flemish government opted for regulation (the 2003 Decree), accompanied by limited one-off funding, whereas the Dutch government opted for 'soft regulation' (covenants), followed up by a number of temporary funding schemes that eventually became part of the regular funding model.

[5] In the beginning the competition was limited in the sense that every *hogeschool* had the option of whether to apply for grants or not.

Third, both governments acknowledged the special nature of higher education institutions as being rather autonomous organizations, and therefore allowed for a significant degree of self-governance during the reform process. In both cases there was limited involvement and interference from government and politics. However, this self-governance was practiced in different ways. In Flanders a small group of 'inner circle' experts and stakeholders played a key role (with clear interests), whereas in the Netherlands independent agencies managed the reform process.

Fourth, the evaluation and monitoring of the reform processes were different. In the Netherlands there was close monitoring of progress from the outset and evaluations during the process created moments of learning that further shaped the process. In Flanders agency reports focused primarily on outcome evaluation instead of on process evaluation. The impact of monitoring and evaluation on the reform process was less far-reaching than in the Dutch case.

In retrospect, although both structural reform trajectories have been successful it could be argued that the Dutch structural reform process was smoother, more orchestrated, and less unpredictable than the Flemish one, which seems to be related to a more straightforward design and implementation process (with an independent process 'manager'); the organic nature of the change itself, driven by internal dynamics, and seen as the next step on the road to the maturity of the sector; and lower levels of complexity in the sense that the reform concerned a sector instead of the whole system.

This comparison demonstrates that similar goals can be achieved successfully in different ways and by different means. Cooperation as well as competition can lead to the strengthening of the research-teaching nexus. Moreover, this comparison shows that these different paths, including their goal achievement, have different effects on the higher education landscape in at least two ways. Firstly, the change in the higher education landscape in Flanders is more significant than in the Netherlands. In Flanders the system as a whole has changed, while in the Netherlands the change mainly concerns one of its two sectors. Secondly, the power imbalances among the Flemish institutions have increased considerably, with the Universities of Leuven and Ghent as dominant players. Such a significant effect is not visible in the Netherlands.

Table 5: A brief overview of different aspects of the *hogescholen* reforms in the Netherlands and Flanders

REFORM ASPECT	SIMILARITIES	DIFFERENCES	
		THE NETHERLANDS	FLANDERS
GOALS	Improve teaching and learning	Strengthening the research-teaching nexus, and stronger research orientation at UAS	Transforming two-cycle programmes of *hogescholen* into accredited master's programmes
CONTEXT		Internal dynamics and initiatives in UAS sector important Government clear on maintaining the binary divide	External drivers (Bologna) important Government ambivalent regarding binary divide
DESIGN	Significant degree of self-governance, institutional autonomy respected	Reform related to the UAS sector Independent agencies managing the reform	Reform related to the system: associations involved both sectors Involvement of inner circle experts and stakeholders
INSTRUMENTS		Covenants and initially temporary funding, later part of regular funding. New UAS staff category	Regulation and (limited) funding
IMPLEMENTATION		Close monitoring and interim evaluations of reform More orchestrated process Gradual process	Outcome evaluation More unpredictable process
ACHIEVEMENTS	Operational goals achieved	Adapted curricula, research-oriented staff appointed, practice-oriented research common at UAS	Accredited master's programmes
Other remarks		Limited changes in the landscape	Significant changes in the landscape with power imbalances

4 Critical factors affecting the success of structural reforms in higher education and key questions for 'structural reformers' in the policy process

This chapter discusses critical factors affecting the success of structural reform in higher education and offers a set of key questions for structural reformers for each of the components of the policy process (design, policy instruments, implementation and evaluation). Before these are presented, it is important to stress that these critical factors and our reflections on the key questions should not be interpreted as policy 'recipes'. As the next two sections illustrate, it is important to bear in mind that reform policies must always be seen in their contexts (section 4.1) and that – despite the many similarities between the cases in terms of the scope and nature of the structural reforms – there are still many important differences (section 4.2).

4.1 Important events and changes in the context

Some major events, outside and inside the world of higher education, not necessarily directly related to the structural reform itself, have affected the reform processes and their outcomes. Across the twelve systems a number of such events can be noted:

Relatively predictable longer term events

- Globalisation led to a reconsideration of the position of the country and its higher education system in the world (e.g. Denmark, Finland, France and Spain).
- Demographic changes. In Poland, a declining population, amongst other things, has caused a decline in student numbers, and, consequently, a reduction in the number of institutions (contraction).

Less predictable shorter term events

- The financial and economic crisis of 2008 and beyond resulted in fiscal austerity in several countries (e.g. Wales and Spain) but led to increased funding in France. In Alberta the institutions were confronted with substantial cut backs in their operational funding budgets.
- Changes in the political composition of government over the course of the structural reform. In Alberta there was no (real) political change during the reform period, while in other systems the political complexion of the government did change, sometimes more than once (e.g. Croatia, Flanders, France, Netherlands, Norway and Poland). Changes in coalitions or the political parties in power did not, however, noticeably affect the structural reforms we studied – suggesting broad and cross-party support for the structural reforms once initiated.

As regards higher education more specifically, several contextual developments should be emphasised as well:

- Policy ideas and initiatives at the European and international levels have in most cases supported and legitimated the selected structural reforms. The Bologna Process and the European agenda towards the establishment of the knowledge society (Lisbon Strategy, EU modernisation agenda etc.) have been reported as significant contextual factors in several countries (e.g. Austria, Croatia, Netherlands, Norway and Spain).
- Increased levels of international competition and the spread of 'neo-liberal' views on higher education are also cited (e.g. Austria, Alberta, Denmark, Finland and Wales), in some systems accompanied by changes in higher education funding models (e.g. Denmark and Wales).
- Many of the studied structural reforms did not occur in isolation but as part of, or in parallel with, broader higher education reforms (e.g. Croatia, Denmark, Finland, Norway and Spain). A key issue is to what extent different reforms are synergetic and have multiplying effects.

From a bird's eye view,[6] contextual developments (globalisation, Bologna, EU policies and agendas, international rankings etc.) have sometimes triggered structural reforms. Sometimes they have fitted well with the structural reforms, creating 'favourable winds' or increased legitimacy. Other contextual developments have created difficulties for the successful implementation of the structural reforms we have studied (e.g. fiscal austerity and the co-existence of, or collision with, other policies).

4.2 Similarities and differences between the case studies

Not only do contexts matter. It should be borne in mind that the twelve cases exhibit both similarities and differences concerning various aspects of structural reform in higher education. In this section we briefly summarise these similarities and differences across the different elements of our analytical framework (see section 1.3).

When it comes to *operational goals*, in most of the structural reforms the focus was on developing distinct institutional profiles, both in relation to horizontal differentiation (Norway and Alberta, for the latter a secondary objective) and in terms of vertical differentiation (Denmark, Finland, France and Spain). In addition, a number of reforms focused on establishing (Austria and Croatia) or strengthening the non-university sector (the Netherlands) as well as improving the cooperation between the two sectors (Flanders). Some of the structural reforms were closely linked to improving the research function of higher education, by creating critical mass and pooling resources (Finland, France and Spain) or by introducing a (practice-oriented) research focus in the non-university sector (the Netherlands). Reforms in Poland and Wales had very specific operational goals closely linked to the more general higher education context – introducing minimum quality standards into the previously unregulated private sector (Poland) and ensuring competitiveness, accountability and financial sustainability (Wales).

[6] We refer readers interested in the details of how particular contexts affect the reforms to the twelve case study reports published individually together with this report.

Concerning *strategic goals*, there is more homogeneity. Overall, improving the quality and efficiency of higher education are the most prominent strategic goals. As can be expected, structural reforms focusing on vertical differentiation (Denmark, France, Spain and to some extent also Finland) were introduced in order to increase international visibility and competitiveness, and in some cases also to ensure relevance and effectiveness of research. Facilitating innovation, improving access and ensuring balanced regional development were strategic goals in other cases (Austria, Alberta, Croatia and the Netherlands).

Concerning *policy design*, two important features stand out. One, regardless of the specific approach to steering higher education in different countries, ministries responsible for higher education are by and large the key actors in structural reforms, setting the agenda and developing specific solutions. Different steering approaches play an important role in the extent of the consultation that occurs with other stakeholders in the design phase and in which stakeholders are consulted. Second, higher education institutions are far from homogeneous in their interests; resistance to what is perceived as an adverse change for a set of institutions can be strong. In the more successful cases significant attention was given to creating consensus in the design phase in order to reduce conflict during implementation (e.g. Norway, Poland and Wales). Where such consensus was not achieved, there were problems in implementation (e.g. Croatia and Spain).

When it comes to *policy implementation*, it appears that structural reforms are rarely accompanied by an explicit implementation plan. Very often specific time frames within which reforms are expected to be completed are not specified. The relevant ministries have a reasonable control over the implementation process, though a stronger role of higher education institutions themselves can be seen in reforms which involve interrelationships between institutions (mergers and alliances in Flanders, Alberta, France, Finland, Spain and Wales). In other cases, the strong involvement of institutions and/or regional authorities led to unforeseen effects, resulting in a deviation from the initial goals and plans (e.g. Flanders, Croatia and Spain).

In terms of *policy instruments*, the structural reforms studied relied primarily on regulation, more specifically on system level legislation or regulation related to institutional and programme accreditation. In some cases, changes in funding models (e.g. Austria, Finland, the Netherlands) as well as specific grants and earmarked funding (e.g. Denmark, France, Finland, the Netherlands, Spain and Wales) were introduced as an integral part of the reform. However, in some cases (e.g. Croatia) there was no specific funding instrument developed, which diminished the success of the reform. Reliance on independent agencies or experts as well as a specific focus on advice, training and sharing of information is less prominent.

Formal *policy evaluations* of the reform impact (i.e. achievement of strategic goals) are largely absent. However, in some cases there were mid-term as well as *ex post* evaluations related to the achievement of operational goals, sometimes used to re-design the reform (e.g. Denmark, the Netherlands and Spain). A variety of actors were involved in such activities: the ministry, independent agencies, international experts and/or higher education institutions themselves. However, in some cases, monitoring of the reform as well as a proper *ex post* evaluation was missing (e.g.

Alberta and Croatia), which prevented the early identification of problems in reform implementation.

In terms of *goal achievement*, in half of the cases – Austria, Denmark, France, the Netherlands, Poland and Wales – all (or almost all) of the operational goals were achieved. In some of these cases, the extent of the landscape change was, however, relatively small (e.g. Denmark), but the achieved goals in these cases correspond well to the intended scope of the reform and thus the reforms can be deemed to have been operationally successful. In the six other cases, the achievement of operational goals was sometimes more limited, either by strong side effects (e.g. Flanders, Alberta, Croatia, Spain) or by the fact that the instruments developed were not really conducive for the achievement of the operational goals (e.g. Finland and Norway). As a result of the failure of the reform to include a clear specification of the strategic goals in almost all of the selected cases, the lack of systematic monitoring and evaluation, the absence of clear indicators to measure the achievement of the strategic goals, and the complexity of the reform processes, it was not possible to identify clear causal links between the reforms and their strategic effects (neither would the Ministries that initiated the reforms be able to do so). For these reasons it is very difficult to assess to what extent the strategic goals of the structural reforms were achieved.

4.3 Critical factors affecting the success of structural reforms

The cross-case analyses allowed us to identify a number of critical factors in structural reform processes that appear to have a *potentially* crucial influence on the final achievement and effects of the reform. Five such critical factors emerge from the twelve case studies and the cross-case analyses. We stress that these factors are not *conditional* factors (necessary and sufficient) for success. We highlighted in the previous sections that contexts matter and that the reform cases differed considerably. It is therefore important to stress that these critical factors of the structural reform process should not be considered as sufficient conditions for the achievement of the goals of the reform. Structural reforms may be only partly successful or unsuccessful for reasons unrelated to these critical factors: changes in the general or higher education context and competing parallel reform initiatives are two good examples from our case studies. Also as indicated by the use of the word 'potentially', not all factors are equally relevant to all structural reforms: again to give two examples; on funding - adequate funding for the costs of mergers in Wales was clearly critical but institutions in Poland participated in mandatory accreditation without financial compensation for the costs of self-evaluation; and on consensus - achieving broad institutional consensus on highly selective and competitive excellence initiatives is unlikely, as would be expecting the 'worst part' of Polish private higher education to support obligatory accreditation. For these and other reasons we are reluctant to term the five factors 'critical success factors'.

The involvement of salient stakeholders in the design stage of the reform and the building of a consensus on the need for the structural reform and its strategic and operational goals

The analysis revealed that in cases in which there was active involvement of salient stakeholders in the design stage of the reform and/or cases in which consensus between the stakeholders about policy problems and policy solutions was built (the latter may not always be possible), the implementation of the reform was smoother and its operational goals were achieved (e.g. Austria, Canada, Norway, Poland and Wales). The opposite is also true, in cases in which crucial stakeholders were not consulted, they blocked the implementation and/or goal achievement was rather limited (e.g. Croatia).

The development of adequate funding instruments to support the reform

Additional funding specifically allocated for reform implementation or changes in how funding is allocated in general, also emerges as an important element. Financial support adequate for the scope of the reform (e.g. France and Wales) and allowing a sustained effort (the Netherlands), enables its success, while cases in which funding was not considered as a reform instrument (e.g. Croatia) or where insufficient additional funding was allocated (e.g. Spain) turned out to be less successful.

The careful construction, to the extent possible, of a 'win-win' reform design that is sensitive to the different contexts and interests of the institutions in the system

In an ideal situation all higher education institutions would see that they have something to gain from the reform or at least believe that they will not be disadvantaged by it. This situation contributed to the success of the reforms in a number of our cases (e.g. Denmark, France, Austria, Norway and the Netherlands), whereas in cases in which the position and status of some higher education institutions and/or regions was potentially endangered, the implementation of the reform was negatively affected (e.g. Croatia and Spain).

Setting a time frame for the implementation and evaluation of the structural reform which is commensurate with the scope and complexity of the reform

Our case studies present a wide range of structural reforms in terms of scope and complexity. These include cases where implementation may have ended prematurely (e.g. the UNIK programme in Denmark) before sustainable goal achievement was possible as well as cases where the scope and ambition of the reform requires a considerable time lapse before a meaningful evaluation of (strategic) goal achievement is possible (e.g. strengthening the research-teaching nexus in Dutch and Flemish *hogescholen*; or research concentration and the modernisation of facilities in

France – which our case study researchers suggest requires a decade or more before an adequate evaluation is possible).

Systematic monitoring and evaluation which supports adaptation of the reform design and implementation where needed, and allows the achievement of the strategic and operational goals to be properly assessed

Monitoring and evaluation is an often neglected part of the reform process. In some cases it was not possible to assess whether the reform was progressing as planned (e.g. Canada and Croatia). Monitoring and evaluation provide the necessary basis for adaptation of the reform goals and instruments (if needed), ensuring that they are more in tune with the context in which the reform is being implemented (e.g. Denmark, the Netherlands and Spain). On the other hand, evaluation needs to be designed in such a way that it does not create an overload for those involved in implementation.

4.4 Key questions for structural reformers

In this section we reflect on a number of key questions - derived from our case study analysis - that need to be considered by structural reformers in each of the three phases of the policy process (design, implementation and evaluation) and in the use of different policy instruments. The questions are presented as considerations for governments and policy makers contemplating embarking on a structural reform process. Also here the caution applies that our reflections and suggestions should not be interpreted as policy recipes or 'best practices'.

Policy design

In all the reform cases the governments (and/or the ministries responsible for higher education) have taken the lead in the structural reforms. This is obviously related to the fact that the focus of the project was on state-wide initiatives with strong involvement of public authorities and involving some or all higher education institutions. So the project did not include, for example, mergers initiated by institutions themselves. 'Taking the lead', however, has materialised in very different ways. Differences were found along the following dimensions (with many cases not being positioned at the extreme ends of the dimension):

Should the structural reform be framed against the background of external or internal drivers or both?

Governments can frame their structural reforms against the background of external challenges from outside the system or internally-oriented challenges originating within the system, or a combination of these. For example, the Bologna Process was often portrayed as an external driver, whereas concerns about quality or efficiency were often seen as internal drivers. How governments present the challenges will have consequences for how higher education institutions perceive the problem and affects

their motivation to respond to or solve the problem. External drivers carry the risk of being seen as 'alien' forces, but at the same time allow for the policy challenge to be seen in a broader perspective.

Should the structural reform clearly specify the intended solution to the identified problem or should higher education institutions or other bodies (committees or agencies) be given the flexibility to explore a number of potential solutions?

In terms of the specificity of the reform agenda, governments were either relatively clear in their policies about what they thought was the solution or gave considerable leeway to others (expert committees, higher education institutions themselves) to explore the problem and come up with solutions. It appears that most cases entailed a reasonably well-defined solution offered by government, with limited scope for exploring alternative solutions. Well-defined solutions offer more clarity and may lead to an efficient implementation of the reform. Creating the space for the exploration of alternative solutions offers an opportunity to arrive at the 'best' solution, to increase legitimacy and to create 'buy-in' from key stakeholders (and hence reduces the potential for conflict in the implementation phase).

Should the structural reform focus on the entire higher education system or on selected institutions within the system?

Our case studies include examples of both system-wide structural reforms and reforms focused on parts of the system (a particular sector or specific institutions). Governments were – see the previous point – relatively clear in their problem analysis and in the specific solutions adopted (e.g. mergers, excellence initiatives, setting up a new sector of higher education institutions). However, governments seemed to have considered only to a limited extent what the consequences would be for those institutions not taking part in the reform but that would clearly be affected by the reform outcomes (e.g. institutions not awarded the status of 'excellent'; institutions not involved in mergers then being confronted with potentially stronger competitors; universities being challenged by a new sector of higher education institutions).

How specifically should the strategic goals of the structural reform be formulated?

It was striking that for almost all of the twelve structural reforms the strategic goals were formulated in very abstract terms. On the one hand, a distinction between abstract overarching strategic goals and more specific operational goals as a guiding principle makes sense. On the other hand, one may query whether very abstract goals are meaningful. First, the achievement of abstract goals is very difficult to measure (how to assess a higher quality of education or increased efficiency?). Second, governments seldom attempted to evaluate the achievement of the strategic goals.

Policy instruments

Which policy instruments should be used to implement the structural reform?

As outlined in chapter 1, we have distinguished between four categories of policy instruments: regulation, funding, information and organization. A first observation is that the structural reform processes studied show that a mix of policy instruments has been used. Governments combine regulatory, funding, information or organization instruments to change institutional behaviour. In most cases new policy instruments, tailor-made for the structural reform process, were established. Only in one case were existing instruments used to introduce/structure the reform. We consider aspects of funding and regulation in the paragraphs below while organisation is discussed under policy implementation. Information is also frequently used in the structural reform processes. Much emphasis has been given to the release of information and advice at the outset of the reform to announce the government's intentions, explain the need for change, or to discuss the issues at stake. Publishing white papers and national agendas are good examples of such information provision.

If funding instruments are to be part of the implementation of the structural reform, what form of funding should be used?

Funding is one of the most frequently used instruments. Different operational models were found, ranging from tax benefits, a change in or modified use of existing funding models, a one-off grant for the implementation of the reform, or an on-going grants system. In (nearly) all cases the use of funding as an instrument concerned additional funding. We did not find examples of the reduction of regular funding and its redistribution based on different reform related criteria (this can have zero sum game characteristics). Additional funding and especially recurrent additional funding (see following point) is a powerful instrument to change institutional behaviour. Whereas temporary funding may be fit-for-purpose, it creates uncertainty as higher education institutions might not be sure about whether they will be able to sustain the reform. We have not been able to detect what the long term effects of temporary funding are, but suggest that governments carefully assess the risks of institutions reversing their changed behaviour once the temporary funding has ended.

The scale of resources allocated to the reform process differ considerably and obviously relate to the scope of the reform. It appears that governments have often paid limited attention to an accurate estimation of the costs involved (i.e. have set the budget *a priori*) and to specifying budgets for the different phases of the reform process.

If regulation instruments are to be part of the structural reform what form of regulation should be used?

As stated earlier, regulation has been the main policy instrument utilised. On the one hand we observe traditional regulation by means of adapting national legislation. On the other hand we see 'soft regulation mechanisms' such as the use of covenants and agreements. The advantages of soft regulation is that it is less time-consuming to develop the instruments, more flexible (tailor-made solutions that are flexible and adaptable), and in principle it leaves explicit space for the institutions to be engaged which enhances acceptance and legitimacy. Traditional regulation can be efficient (low transaction costs) and transparent when it concerns reforms that apply to the entire

system or a whole institutional sector. Acknowledging the role that regulation can play in reform processes, governments in several countries have opted to respect institutional autonomy, as a special feature of the higher education sector, and to rely more on the self-governing capacity of the sector.

Policy implementation

Where should responsibility for managing/monitoring the implementation of the structural reform be located?

Most ministries had a reasonable degree of control – be it sometimes at some distance – of the implementation process, but quite often a clear implementation plan was lacking and time frames were not adequately specified.
In many cases the most important actors in the implementation of the structural reform were the higher education institutions themselves and (semi-independent) agencies (such as accreditation agencies) that supervised the process and/or evaluated the outcomes. The feedback provided by such agencies, informing not only the government but also the institutions involved (in the form of advice) has in most cases positively influenced the implementation and achievements of the reform.
In some cases an existing agency performed these functions while in others a new agency or committee was established. The advantage of a (semi-)independent agency is that it 'forces' those in charge of the agency to systematically think through the implementation process and the desired outcomes, which led in many of our cases to the development of relatively clear indicators for monitoring and evaluation.

Leaving considerable leeway to the higher education institutions themselves allows for tailor-made solutions at the institutional level and may lead to swift implementation. At the same time, it creates the risk of unwanted deviations from the reform intentions and potential delays in implementation if those within the institution perceive the reform as unnecessary, irrelevant or even unwanted.

Most structural reforms followed – despite the initiatives being government-led – a bottom-up approach or a mix of bottom-up (local initiatives and experiments) and top-down (regulation) approaches. The choice for bottom-up approaches (possibly in combination with top-down input) resonates with the literature that stresses the importance of respecting institutional autonomy and giving a reasonable degree of discretion to the professionals who have to implement the reform.

Policy evaluation

How should monitoring and evaluation be built into the structural reform process?

Overall, evaluation was the least developed aspect of the policy process across the twelve case studies even though monitoring, feedback and evaluation should clearly be integrated into reform processes. Formal evaluations focusing on the impact of the reform (strategic goals) were largely absent. In some cases, independent researchers

were asked to evaluate the outcomes of the reform. There were some formal evaluations focusing (*ex post*) on operational goals and the evaluation of outcomes.

There was much more scope for monitoring and reporting progress and mid-term reviews than was actually utilised in many of the reform processes. Care should evidently be taken to ensure that such assessments do not lead to an excessive burden on those involved in the reform process. The obvious advantage is that regular stock taking may help solve implementation problems as they arise and may stimulate learning from the experiences of other parties involved in implementation. That such monitoring and evaluation may potentially lead to modifications to the ambitions and goals of the reform should not be perceived as a problem, for this is a preferable option to being confronted with a case of policy failure after the fact.

The cases showed that there is considerable potential for using a broader set of evaluation tools than were utilised. Governments often made use of a single instrument, whereas a sound combination of tools (reports, indicators, expert reviews, international advisory panels, etc.) would yield more insights into (midterm) progress and achievements.

4.5 Final reflection

This chapter closes our synthesis report on the study of structural reforms in higher education. It discussed the critical factors affecting the success of structural reforms in higher education and offered a set of key questions for governments and policy makers for each of the components of the policy process (design, policy instruments, implementation and evaluation). At the outset of the project, we did not intend to offer the 'ultimate' policy solutions for major structural reform challenges in higher education. Our empirical analyses confirm that contexts do matter and that reforms differ in many important respects. That said, we consider that our analysis of critical factors and our reflections on key questions hold important policy lessons for future structural reform processes in higher education.

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