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THE TRASFORMATION OF STEERING AND  
GOVERNANCE IN HIGHER EDUCATION:  
FUNDING AND EVALUATION AS POLICY  
INSTRUMENTS

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# The transformation of steering and governance in Higher Education: funding and evaluation as policy instruments

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**ABSTRACT:** This paper focuses on policy implementation in higher education (HE) to be analysed through the evolution and transformation of the policy instruments, namely those related to the Government funding and evaluation. The research questions are: to what extent instruments can reveal the evolution of policy rationales and justifications? How instruments emerged, and become institutionalised, affecting and being affected by the characteristics of national configuration of HE systems? Whether and how they produce desired effects or evolve in unpredictable ways, generating unexpected results, playing new roles and functionalities? The evolution of the instruments seems to be dependent on some characteristics of the context and some key features of the instruments. The development has been often inspired by NPM principles, which aimed at increasing steering capacity of the policy maker on one side, and university role and autonomy on the other. The common narrative is then declined in very different ways among countries, and instruments implementation reveals the extent to which it is adapted to the existing characters (dominant paradigm) of the HE system.

**Keywords:** Higher Education, Funding, Evaluation, Policy instruments, Policy implementation

**JEL Codes:** I23, I28

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## INTRODUCTION

This paper represents the first outcome produced in the framework of the EUROHESC project on transforming universities in Europe (TRUE); it focuses on policy implementation in higher education (HE) to be analysed through the evolution and transformation of the policy instruments, namely funding mechanisms and evaluation instruments. We want to investigate: a) How steering and governance instruments have been put into action, how this process impacts and modifies the original rationales and justifications, and how the implementation is affected by path dependence; b) The characteristics of the instruments adopted in different national contexts, the types of contamination and combination effects that can be detected, and to what extent they are able to depict the characteristics of the HE national configurations.

In our work we refer to the literature on policy implementation as evolution of the policy action (Majone, Wildawsky, 1978) and to the governance by instruments approach (Lascoumes and Les Gâles, 2004). Our main statement is that policy instruments reveal how policies have been put into action, how rationales changed beside labelling and political rhetoric, and the role played by the actors involved. The implementation of the policy instruments should be investigated by analysing the transformation produced by the interactions between policy makers, intermediaries, stakeholders at national, supra-national and local levels, including the level of the Higher Education institutions (HEIs) to which the instruments have been applied. In this paper we present a first-step analysis based on the evidences emerging from the literature, the policy reports and the administrative documents of the countries involved in the analysis.

We look at two types of instruments, namely funding mechanisms and evaluation instruments, which are tools widely diffused in the European HE systems. The shift toward the managerial paradigm starting from the 80s and affecting all the European countries, with different rate and pace, have been pushed forward though a large diffusion of these instruments. Moreover, market-based reforms stressed the use of funding formula for allocating government core funding; reforms tended to modify teaching fees in order to get them similar to real “prices”, and to improve government project funding as well as the attraction of market-based funding. Other actors (mainly European Union, local governments and non-for profit organisations) have been providing growing amount of money to HEIs. On the one hand, these processes generated diverse “modes of funding” impacting on the organisation and functioning of the HEIs. On the other hand, the need to improve HEIs' performance and make them “accountable” reinforced the introduction of assessment and monitoring of teaching and research, auditing and checking, producing different “modes of evaluation”, thus enhancing processes of differentiation between high level performing/excellent organisation and low performing/poor ones.

We adopt a diachronic perspective along the last fifteen years, and a comparative approach across eight European countries, those involved in the TRUE Project (France, Germany, Italy, the Netherlands, Norway, Portugal, Switzerland, UK).

The paper is organised as follow. The first section presents the main finding of the literature on policy implementation in HE and how the analysis relates to implementation; the second and the third sessions focus on the approach by instruments for studying policy action and policy instruments in the field of HE studies, the fourth session deals with the

research questions and the conceptual framework adopted. Section five presents the implementation of funding (formula and project funding) and evaluation (quality assurance, research evaluation and rankings) in the relevant countries, while the last sessions develop discussion and conclusions.

### 1. POLICY IMPLEMENTATION THROUGH POLICY INSTRUMENTS

Questioning how policies are implemented means understanding how they are put into action, and the conditions for achieving the expected results. The so-called rationale or linear model outlined policy making as a sequential problem solving process, where implementation is one of the phases just after the decision activities (Grindle and Thomas, 1991). This model shows strong conceptual shortcomings (Sutton, 1999). Among these, the proposed dichotomy between policy and implementation is unrealistic and dangerous, since it avoids responsibility of the policy makers. Evidences coming from different pieces of literature suggest that policy implementation is “an ongoing, non-linear process that must be managed” (Plant, 1995). The quoted author sets out six key activities for successful implementation linked to the management of the change process. Other issues facilitating the development of policies highlighted by the literature are: narratives and discourses, labelling, the role played by interested groups (epistemic communities and networks), the consensus and the propensity toward innovation.

Implementation studies have had an interesting development of perspective and critique (O’Toole, 2000), from the book of Pressman and Wildavsky (1973) setting the notion of policy implementation, to the seminal work of Cerych and Sabatier (1986) about HE reforms in different

countries, whose purpose was to analyse the reasons for the success or failure of these reforms, distinguishing between three stages of public policy, namely formulation, implementation and reformulation. Cerych and Sabatier systematically compared goals and outcome of the reforms, as well as the factors affecting the attainment of the goals. The analysis took into account the importance of the change envisaged, the clarity and the consistence of the aims. The authors then revised this conceptualisation into a framework where the relevant dimensions were the deepness of change with respect to the existing values and practices, the number of functional areas where the change is expected, the level of change with respect to the target interested by the reform (HE system, sub-sectors or institutions). From this first systematic work, a debate follows along two main approaches for implementation studies: the top-down and the bottom up. The former opens the field of implementation studies (O’Toole, 1986, Id., 2000), while the latter represents a reaction of criticism (Elmore, 1980), then followed by a combination of the two models proposed by Pressmen and Wildavsky (1984) and Majone and Wildavsky (1978). Majone and Wildavsky defined the essence of implementation as evolution, which implies a continuous process of reformulation and new design of the original one. According to this view, implementation has the effect to change a policy through a process of mutual adaptation, learning negotiations and interactions (Browne and Wildavsky, 1984; Barnett and Fudge, 1981). A further application of combined models is the Advocacy Coalition Framework (ACF), developed by Sabatier, designed for policy issues characterised by high goal uncertainty, high technical uncertainty and by a large number of actors coming from multiple levels of government (Sabatier,

2003, p.30). The author claims that the model is not able to address the HE reforms, because the field is not characterised by conflicts in the beliefs system on the goals. Researchers and agencies involved in a policy subsystem are supposed to play a more neutral role; the presence of policy coalitions can be questioned, involving different actors as politicians, agency officials, stakeholders, intellectual, researchers sharing normative and causal beliefs on core HE policy issues.

Gornitzka et al, (2003) discussed the reasons for the low interest in implementation research in HE, that can be referred on the one hand, to the lack of a unified perspective in the discipline, and on the other hand, to the difficulties of looking at implementation in a field characterised by many autonomous actors, diffusion of authority, ambitious and multiple goals, lack of consensus on new objectives and on new functions going beyond education and research. The authors also recognised the relevance of implementation studies in HE due to the transformation of the public interest in the field, which often includes concerns on efficiency and effectiveness. Improving knowledge about the way reforms have been put into action is a key issue to understanding the effectiveness of processes, how other external trends (globalisation, internationalisation, marketisation) affect it, or new emerging stakeholders influence the practice realisation of the policy. Looking at the HE field, Gornitzka et al. (2003) outlined a certain number of studies that are definitely dealing with policy implementation, although they are labelled in different ways. Some of them use the organisational theory approach, as for instance to deepen the implementation of New Public Management (NPM) in HE in different countries, an issue that Paradeise et al (2009) dealt with, taking as research question how organisations change in response to the government policies. The

quoted work uses both the resource dependency theory and the neo-institutional theory, and develops an analysis of the relationships between specific policies affecting HE reforms from the eighties to 2000s, in order to understand how formal designs have been changed, and how HEIs responded to the policy initiative, reformulating the original objectives and goals (Paradeise et al, 2009). Other studies on implementation used the network approach, where the interest is not only on how policies have evolved in practice, but also on where these policies come from, which kind of interactions generated them. Reforms are seen as continuous, and grounded on the history of the countries where they are produced and applied; moreover, reforms are at the same time drivers of desired and non-desired changes, as well as responses to changes occurred in the environment or within the institutions (Bleiklie et al., 2000).

In our work we intend to look at implementation as a continuous process of negotiation between actors involved, whose interactions modify the policy intentions and goals. Both formal and informal processes are relevant for implementation: authoritative government decisions as well as the pressures coming from the environment and from the assets inside the HEIs. Policy design and policy implementation are not separate phases as in the linear model, rather feedback effects are visible in the evolutionary path, which is influenced by the environment as well as by the institutional context. Problems addressed by the policy action are never solved, but evolve in non-linear neither predictable way, rather implementation creates a new reality (McLaughlin, 1987). We intend to study implementation of HE policy by looking at the evolution of the policy instruments, which support the putting of policies into action. This perspective implies further considerations on the approach by instruments.

## 2. THE APPROACH BY INSTRUMENTS FOR STUDYING THE POLICY ACTION

The study of public policy through the analysis of the instruments was first proposed by Foucault (Foucault, 1988) and later developed by Lascoumes e Le Galès (2004). According to this approach, instruments are considered as institutions (North, 2000) autonomous in respect to the goals for which they were originally established, they follow peculiar path of development interacting with the way the actors use them.

Lascoumes and Le Galès (2004) depict the instruments as institutions that enable a policy to be operative and that organize the relationship between the public power and the recipients, according to the representations (goals) and meanings (values) that they incorporate. Thus the instruments reveal (indicate) the real choices of public policies and their characteristics. This implies two consequences.

First of all, instruments incorporate a theory of the relationship between government and governed institutions. Second, instruments are not neutral: they keep memory of the policies that created them and they are vehicles of specific values. Since they are institutions, they also generate effects that are not connected the original goals, they tend to modify the goals and eventually distort them, creating stable beliefs. Being institutions also mean that instruments persist through out time and they usually change incrementally, by addition or change of specific devices, rather than by radical breakthroughs. Because of the persistence during time, and the inertia for implementing, every government generally uses the instruments created by its predecessor, adapting them to the new policies, while only in rare cases the whole instrument is removed and substituted. Changes in the instruments compel the actors to adapt; thus, instruments tend to increase the

power of the elites, they postpone political goals to action, and their combination makes actors' behaviour easily defined and foreseeable (Power, 1999). In this sense, instruments reveal the actors behaviour (individuals and organisations).

Innovating instruments can pursue different objectives: from the development of solutions linked to the "new governance" (Salamon, 2002) to fostering the reinforcement of top down controls (Hood, 1998) by de-legitimizing of the "old" instruments, which are not able to foster the modernisation of the public action. One important characteristic is that the agreement on the instruments is easier than on policy objectives; thus instruments would allow in principle more spaces for negotiation between different actors involved; moreover, the multiplication, specialisation and fragmentation of the instruments can be depicted as a way for achieving objectives linked to the managerial paradigm through incentives schemes rather than with normative/prescriptive norms.

Modifications of the instruments do not necessarily mean changing the policy goals; in some cases instruments can be modified or substituted by others esteemed to be more effective; in other cases, modifications in the instruments can modify the goals as well. Analysing instruments is thus useful because their change through out time reveals the strategies of the actors; in this sense the instruments may be both vector of change and stability.

Challenging the old instruments may be necessary for the policy action, but sometimes manipulation may well serve to hide the fact the pursued goals are always the same (for instance: a policy oriented to reduce the investment may be pursued by multiplying and combining different measure in order to dissemble the final result). In other occasions, the instruments may be helpful to implement choices that in this way will be disconnected by the responsibility of the future



governments (for instance automatic sanctions for not meeting specific standard, norm or performance indicator).

A crucial element in this analysis is the comprehension on the one hand of the bounding capability imposed by the instrument and on the other hand of the freedom and space of manoeuvre that it leaves to the actors, how the instruments change the actors policy spaces (Braun, 2006). For instance, shaping the objectives about the performance can be implemented through compulsory rules, or through standards, or guidelines. In all the cases the recipients have different room of manoeuvre and possibility to create spaces for policy action. Moreover, it is important to consider path dependency effects (North, 2000) that influence the present functioning of the instruments and how the instruments themselves will affect future choices as well.

### 3. THE POLICY INSTRUMENTS IN HIGHER EDUCATION

In the last 20 years most European countries faced a multiplication of the instruments used by the government for steering the HEIs, with a common justification toward improving performance and responsiveness, and the level of institutional autonomy. Most of the instruments can be related to the emergence of the managerial paradigm, linked to the neo-liberal ideas and the NPM narrative. Several instruments can be included into this rationale, such as ex-post allocation, evaluation, social accountability. Along this tendency, different conflicting conceptions of the relationships between the State and the HEIs can be identified (command and control, “regulation by the community”, stimulating market forces, repairing market failures) and different objectives of policy intervention as well (optimal allocation of resources or im-

proving the evolution capability of the system). Each of the aforementioned conceptions refers to different desired changes (for instance they are related to the ideas of what Universities should be according to a universalistic, institutional or instrumentalist perspective) and about the type and the value of the expected outcome of the HEIs (public goods, commodities, or learning outcome). Our expectation is that instruments would allow understanding changes in the narrative and in the actors’ relationships in different national environments.

Dealing with policy instruments aimed at steering HEIs means understanding specific features linked to this type of organisations, and identifying a perimeter for the analysis.

As to the former, we follow the Musselin’s proposition of HEIs as specific organisations (Musselin, 2007) because of three characteristics: their academic tasks (teaching and research) are functionally loosely coupled, they are also complex processes so that difficult to grasp (close for investigation and difficult to be described or reproduced), and, lastly, the causal relationships between tasks and results are ambiguous. Nevertheless Musselin stressed also the importance of formal structures and rules in HEIs because of their capacity to be a way for organisations to appear as rational actors, to gain legitimacy, and to conform to the institutional environment. Rules matter because “defining territories and borders and in protecting insiders”, so they have also a defensive role, and generate defensive capacity against changes. The consequences are that the efficiency of top-down hierarchical leadership is difficult to gain, and the diffusion of change and innovation may be complicate. Thus, the aforementioned specificities must be taken into account when studying policy instruments for steering the HEIs, since the effects and the effectiveness can vary a lot.

As to the latter, we know that different countries adopted different instruments as well as combination of instruments for different policy aims. As a consequence, any comparative effort might be strongly constrained by the diversities of the objects under analysis. Nevertheless, we also know that from the 80s a clear movement can be seen in most western European countries, which converges around the adoption of funding and evaluation as instruments for steering the HEIs. Thus, considering both the aforementioned sets of instruments can be justified by their diffusion, which would allow a comparative perspective of the analysis. Funding includes formula and all the relate devices (such as performance assessment for teaching and research, standards and rules) and project funding schemes; evaluation includes the research assessment exercises, the use of rankings, and systems for quality assurance.

A central research question is to what extent the instruments can explain changes of the HEIs. According to the suggestion of Ferlie, Musselin and Andresani (Ferlie et al., 2008), the approach by instrument is a promising perspective for analysing the transformation of Universities; they suggest to explore how instruments for policy action reflect the changes in the narratives for steering and governance, namely the transition from the NPM, the network governance and the neo-Weberian considered as ideal types of public sector organisation.<sup>1</sup>

Instruments also incorporate the kind of interaction between the State and the or-

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<sup>1</sup> For these authors the most interesting set of tools are those linked to evaluation, to formula for both funding and human resources allocation, and networking governance, thus the devolution of responsibilities for HE policy to specialised agencies or to leaders. The interest and the importance of these tools come from the fact that they are largely diffused within Europe, and their evolution went on for many years.

ganisations or the individuals. Again, according to Braun (Braun, 2006b), in research policy the interactions between policy makers and scientific community can be analysed on the basis of two types of relationships: trust and delegation. Some commonalities can be detected between the two, because both are social structures, deriving from decisions under risk taken by policy makers; both entail resources invested on the base of hopes and expectations about other actors' behaviour, and face uncertainty about the future using some control mechanisms. Also differences can be detected: delegation is an authority relation, which use some type of contract for defining the discretion space, while trust is not enforceable by law and the risk is "incorporated into the decision of whether or not to engage in the action" (Braun, 2006). Braun puts into evidence different options<sup>2</sup> available to policy makers for reducing the risk of the research investment; these different options have been introduced in different periods of time, and sometimes the last ones co-exist with the older ones. A transformation of delegation modes from the 70s to the 90s is described, going from a blind delegation, where policy makers trust scientists, to a contract mode, where a contract relationship with policy makers and organisations (instead of scientists) come into evidence, and network delegation mode, where the State is only a facilitator, thus gives the means to research institutions and scientists to self organise innovation networks with user systems, while it left out pretensions of instrumental guidance. National and European policy processes often concur to shape governance and steering instruments through the so-called "two way causality"

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<sup>2</sup> Creating consensus and interaction spaces (for instance new institutions, such as public-private networks), changing career patterns, using intermediaries of trust (peer reviewers), and funding agencies.

rule; thus, both national and European policies tend to act as interlinked factors, inducing transformation in the European HE policies. The literature on the Europeanisation process, proposes different approaches in order to explain the mutual influence of European processes and national policies: a top-down approach (Radaelli, 2000), a bottom-up one (Bache, 2005) and a combination of the two (Borzel, 2000).

The result is that instruments may incorporate combinations of different rationales and justifications, related to policy objectives elaborated at different policy levels. The definition of new funding and evaluation schemes for research activities may lead to new patterns of governance for research, more precisely a multilevel governance, both local, national and international. (Feron, Crowley, 2002; Enders, Fulton, 2002). As to the national level, instruments reveal the rationales of the central government and the local ones, and also in that cases we can face different combinations between the two or contradictory patterns.

Braun (2006a) stated about the existence of a mix of policy rationales dominating the discursive space of S&T policies. He distinguished between the "horizontal dimension", where different discourses on legitimization and transformation co-existed, and the "vertical dimension", which refers to the struggle between sector and global dimensions of policy rationales. A causal link between policy rationales and instruments cannot be identified. Nevertheless, he observed dynamics from the eighties of the discursive spaces suggesting "that the policy instruments used today [...] are neither based on one unifying paradigm nor that they are chosen completely at random. The mix of policy-instruments and the shifts in the importance of various instruments is very likely the outcome of the complex and intense struggle, [...] on different levels of the discursive space of the S&T sector."

Bleiklie et al. (2009) outlined the presence of an overall process of rationalisa-

tion of the HE policies, which is reflected in the development of common legislation, degree system, evaluation criteria, but also favours differentiations in the ways HEIs act and perceive their position within their environment. If rationalisation is the more general trend driving the formulation of policies, the policy instruments that are generated at different policy levels should evolve by incorporating common rationales, while transformations should emerge according to the way in which the different actors (State, academics and stakeholders) use the instruments themselves.

#### 4. RESEARCH QUESTION AND CONCEPTUAL FRAMEWORK

For the purpose of our research, we adapt the definition of the policy instrument provided by Lascomes and Les Gòles, considering instruments technical and social institutions, which put the policy into action regulating the power relationships between the governor and the governed actors on the basis of the incorporated representations, meanings and values. Changes in the instruments and in their mix reveal the characteristics of the policy implementation (actors involved, power relationships and interdependencies), providing knowledge on how policies evolve. The analysis should also allow to depicting unpredictable effects deriving from the use of a policy instruments within a certain environment, and from the combination of different instruments.

In this paper we address formula, project funding, quality assurance and research assessment exercises, and take care of the emergence of rankings as policy instruments. The reason for choosing the aforementioned institutions is that they were at the core of most HE policy reforms, and were linked to policy motivations presenting many similarities between European countries, namely the need of a substantial

turn of HEIs toward efficiency and effectiveness, the reduction of the role of the State by adopting a 'steering at the distance' model, improving the capability of the HEIs to attract external funding, pursuing the HEIs quality through the enhancement of competition for funding. Autonomy and accountability have been considered as the main conditions for achieving the aforementioned results; allocation of government resources, competitive public project funding, evaluation of teaching and research the main steering instruments. Within the described landscape, the emergence of rankings represent a singular case of a device that suddenly gain a central role steering the HEIs, although it does not origin from a policy initiative.

Formula is a sort of guideline for allocating basic government funding on the base of rational and equitable criteria, providing a stable and predictable level of funding. Formula calculation varies over time, reflecting the changes in the emphasis of the government on different objectives. It is based on a combination of input and output indicators aimed to represent the performance of the HEIs, but might include also incentives for specific achievements. Moreover, formula generally goes with other systems of core funding allocation, namely the historical one, can include negotiation processes between the HEIs and the government, and generally applies only to a limited quota of the overall government funding.

Project funding refers to a set of schemes introduced by governments in different countries over the years to steer the HE system and to address particular policy objectives (research priorities, new developments, premium and incentives, joint and open programming). Project funds are thus generally associated to competitive allocation modes, and aimed at achieving specific results. The importance is specially linked to the cut of basic core funding, which impact deeply the resources

available for research, pushing the organisations to seek external resources.

The term quality assurance (QA) includes two main activities: accreditation and evaluation schemes. Schwarz and Westerheijden, (2004) consider accreditation schemes 'all institutionalised and systematically implemented evaluation schemes of HEIs, degree types and programmes that end in a formal summary judgement that leads to formal approval processes'. The accreditation confers a legal status to the institution or a study program, together with the duty for the government to distribute funds and/or grants. Evaluation schemes aim at 'measuring, analysing and or developing quality of institutions, degree types and/or programmes that do not directly or indirectly lead to approval processes'. The boundaries between approval and accreditation and between accreditation and evaluation may be blurred. QA instruments show some drawbacks: on the one side, accreditation and accountability that sets minimum standards may reduce the incentives to be above the threshold. On the other side, where quality improvement is the major goal of evaluation, giving consequences to evaluation outcome is up to the evaluated HEIs, since quality can not be 'inspected' from the outside (Schwarz and Westerheijden, 2004 citing Dill, 1995). Thus, the government decision-making faces a paradox: real consequences are necessary to take evaluation seriously, but they would also turn evaluation into a power game where results count more than the quality. More often, government chooses a mid way and states that results will 'inform' funding, but not automatically, for instance through contract negotiations.

Research evaluation is a policy instrument aimed at providing information to policy makers on the quality and the research performance of the HEIs. It can be drawn in very different ways, as to the

overall design, criteria, methods and indicators (input, output and process indicators), and can be addressed to a broad range of uses, among which the most diffused one is allocation of funding. Jongbloed (2007) indicates several motivations for government enhancing the research assessment as instrument for measuring the research performance, namely enhancing accountability, informing policy-making, institutional marketing. Research evaluation produces effects on reputation and visibility of the HEIs, but the main drawback rest on the fact that it involves complex methodological framework, results might be difficult to interpret, and it is costly and time consuming. These are some reasons for ranking emerges suddenly, having an enormous echo, which impact deeply on the HEIs.

We intend to investigate if the choice of the instruments indicates the public policies implementation and its characteristics (rationales and justifications); under which conditions instruments are likely to evolve in unpredictable ways, that are not connected with the objectives pursued or the functionality originally assigned to them; how the national context and policy mix facilitate or constrain the implementation. One can consider the modification and the evolution in the instruments of the policy action in HE as a dependent variable of a top-down process driven by policy makers located at national, supra-national, or intermediate levels. In this perspective, change can result from a hierarchical process (from central policies to institutions and then individuals) or as the product of a reverse process coming from the bottom up, mainly grounded on the autonomy of the HEIs and on the academic freedom. Another approach (Bleiklie, Kogan, 2007) considers change as the outcome of “multiple interlocking processes” within academic disciplines, institutions and central authority. HEIs are regulated by more than one system, namely government, interme-

diary layers, and academics; moreover, tensions in the relationships between actors involved in the process are not restricted to the HEIs and the State, but other layers such as agencies, intermediaries, buffers and academics, are involved as well.

Because we intend to use an approach to policy implementation as evolution in a comparative perspective, we consider more useful to study changes of the steering and governance instruments as a complex process involving multiple actors and processes, which are inscribed in the national configurations of the HE systems (Musselin, 2004).

Testing all the hypotheses would need to look at policy documents and administrative sources for identifying the characteristics of the instruments. Nevertheless it is also necessary to look inside the HEIs in order to analyse how instruments have been re-shaped by the actors involved, thus how instruments reveals actors' behaviours and strategies. At this stage the paper develop upon the main reform processes affecting the selected instruments, the most relevant funding instruments where data and information were available, the institutional evaluation exercises (sponsor, aim, design, tools, outcome, effects on governance and steering) and the ranking practices. We leave out the analysis different policy layers at national level and inside the HEIs, which will be developed in the second phase of the TRUE project. Although the limitation of the analysis, we think that interesting results can be envisaged even at this first stage, indicating the evolutionary path of policy implementation in different national contexts, showing phenomena of convergence and divergence to be explored though an empirical analysis of the actors' motivations, rationales and behaviours.<sup>3</sup>

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<sup>3</sup> Furthermore, we do not take into account at this moment how market forces, networks or other intermediaries, which can be labelled as in-

## 5. THE IMPLEMENTATION OF THE POLICY INSTRUMENTS

Four fundamental aspects can be considered to describe the evolution of the HE funding instruments:

- The role of formula and project funding for the allocation of public funding.
- The relationship and division of powers between Central state and the regions.
- Influence and interaction with European processes.
- The role of governmental agencies in funding.

The combinations of these elements are many and they significantly influence the evolution of reforms and instruments. It is also important to specify the kind of steering goals the policy makers have. According to the state supervisor paradigm, universities become more autonomous while the state sets the goals and evaluates their accomplishment. The state may pursue a mere functional/procedural efficiency; more often, the increasing relevance of HE and research activity for society and economy has justified also the pursuit of substantial goals. The goals pursued have influenced the choice of the funding instruments and their features. The description of National cases in Annex 1 may help to set the general observation presented in the forthcoming sessions.

### 5.1 *The evolution of funding instruments*

Since the seventies in many European countries the growth of investments in HE began to slow down, while the num-

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ber of students accessing to universities started growing faster. These facts increased pressure on the HE system for reaching more ambitious targets with equal amounts of funding. Moreover, throughout the second half of the XX century the society and policy makers became conscious of the benefits that research activity could generate. The rationale that justifies the introduction of new allocation mechanisms is the pursuit of allocation efficiency, both in terms of result-cost ratio and response to societal needs.

The assumption of a never-ending public sector expansion began to be challenged. In Europe, the United Kingdom since the early '80s represented the forerunner in a reform process inspired by managerial concepts of the private economy. In the new conception of HE, the state gains an important role in mediating the interests of the society and should orient the development of the HE. Despite a wide debate on the international breadth of the NPM, recent overviews found evidence of NPM influence in many countries with even late-comers, such as France, finally adopting some NPM-like reforms.

The NPM narrative is also complemented with other two conceptions on the evolving role of the State in the public sector. The network-based governance points out a 'hollowing out' process of the state that seems to have lost its monopoly of power by delegating to other public levels of government upward (European Union) and downward (regions) and other stakeholders as well. The State plays a new role as 'facilitator', instead of steering and commanding it must bargain and coordinate the many actors involved. The neo-weberian perspective is inspired by the principle of democratic revitalization within the public management reform, by reaffirming the role of the state as the main facilitator of solutions and reinforcing representative democracy. Focusing on the policy level does not take into ac-

count internal or external stakeholders, generate policy instruments or affect/transform the existing ones, as well as how policy instruments at HEIs level are constructed or de-constructed according to internal or external drivers of changes.

count the real impact of other actors, which may interact at a formal as well as informal level; rather, the instruments may provide a better ex-post insight of the combination of forces that may have produced the final asset.

The mix of instruments and their use is hybrid and in transition. Elements of the three narratives can be found in almost all countries but NPM appears to have the largest and more detailed evidences (Paradeise et al, 2009; Ferlie et al., 2008). The instrument alone is not a clear sign of one narrative or another, rather it is the way formula, contract and project funding are implemented that is relevant; for instance, contract between the state and the university may be:

- Strongly top-down and detailed (NPM);
- Based on bargaining between HEI top management and the Ministry sharing similar powers (network);
- Involving in the bargaining process also professionals and students (neo-weberian).

By considering the National cases in the Annex 1, it is possible to underline some similarities existing in the evolution of the instruments across different countries.

#### *Formula*

Formula funding has been adopted in different periods, for instance in France it is used since 1968 while in Italy it was adopted only 30 years later; still some common phases and key events can be observed. Formula in most cases starts considering only teaching, and simple input indicators, such as number of students and cost of production weighted for disciplinary field. Sometimes formula is completed by contracts with each university, at this stage also the contracts are simple.

The formula may evolve and include a separate and specific part for research ac-

tivity, with simple input parameters (number and qualification of researchers weighted per disciplinary sector, external funds attracted – Italy 2003) and simple output indicators (scientific production computed through bibliometric indexes – Norway 2002).

Along the last fifteen years, formula tends to become more complex (Fig. 1). In teaching, formula linked to simple output and efficacy indicators was suitable for expansion period (depending from one country to another, since 70s until early 00s) because it sets clear incentives to productivity, even if it often favour opportunistic behaviours (Italy, Portugal). However, the Bologna process dictates more complex criteria, especially in those countries that shifted to the binary system, and the end of the HE expansion period requires a new focus on quality and efficiency.

When expansion chase to be the main priority, then the formula may follow different paths. Some countries adopt output indicators (Portugal). In Italy a quantitative evaluation process of the teaching supply is established, despite this process may produce and over detailed regulation and the return of a bureaucratic approach. In other countries the formula does not evolve, this happens because the control of quality is likely to be better done by other channels. For instance, in the Netherlands the model of governance enables a direct control of the policy makers, since the most important academic bodies are, directly or indirectly, appointed by the Ministry. In UK the quasi market and vertical diversification are enhanced and generate alternative mechanisms for quality and efficiency assurance.

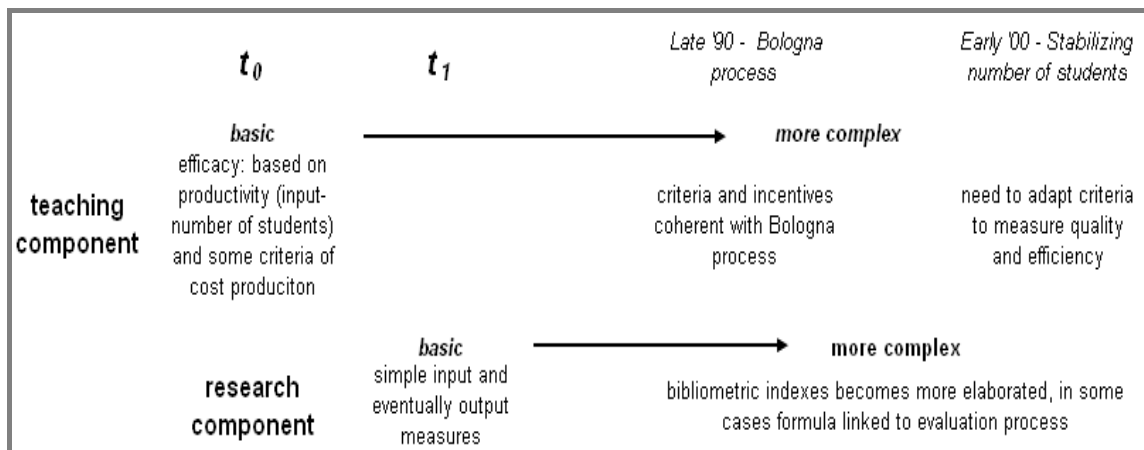
The research component may become more linked to scientific productivity, measured though more accurate tools: for instance, in Norway the bibliometric model becomes more elaborated and comprehends all fields, in Italy a peer re-

view evaluation process is established. Similarly to what observed for the teaching component, in some countries the research component does not evolve. This may be explained by the fact that policy maker esteems project funding, contracts and direct interaction with the academics as more effective. For instance, in the Netherlands research evaluation is common practice since a long time, but it does not directly influence resource allocation; in Switzerland, the Federal government focuses on project funding through specific agencies, and the cantonal governments prefer a direct relationship and bargaining with the HEI; in

Germany, contract enables the Land to specify targets for each institution, while the Federal government relies on direct funding through excellence initiative.

Where the regional level plays a relevant role (Germany, Switzerland), when a direct and consolidate contract relationship exists (France) and when the government appoints and overview the university leadership (Netherlands), then contracting and direct formal and informal relationship enable more flexibility and detailed steering, which represent meaningful advantages in respect to the formula, at least from the policy maker point of view.

Figure 1 – Formula funding



Source: designed by the authors

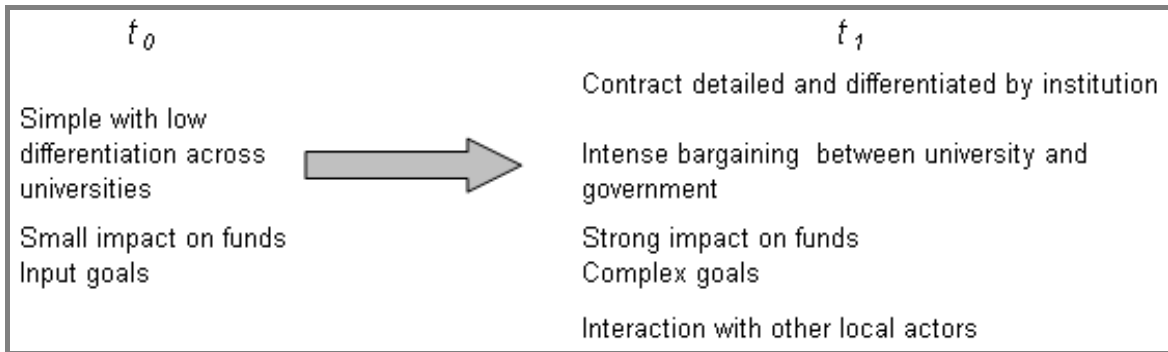
Figure 2 – Project funding



Source: designed by the authors



Figure 3 – Contract evolution



Source: designed by the authors

### Project funding

In most countries project funding rose as an instrument for funding curiosity driven research, and was managed by academics. Through out time this instrument diversifies to fund specific issues, while the influence of policy makers and industry in the selection of research themes grows (Fig. 2). In some countries, the new mission oriented and themes specific projects becomes the most important source for project funding. In other cases the free projects share remain large, but the policy maker pursues more international orientation in research by delegating the project selection to foreign reviewers.

### Contract

Contract and formula funding often occur together. Contract tends to become more detailed (Fig. 3), and the impact on funding is further improved. France represents a particular case, since the use of contract emerged since the beginning of the nineties and unexpectedly became the lever that strengthened the national steering and favoured the emergence of universities as major actors of the HE system. Formula, contract and project may have different steering orientations and be combined in possible modes (Table 1). What influences the way funding instruments are used, combined and their evo-

lution? Two elements seem to play an important role:

- how strong and persistent the political will is;
- being the most important steering level of the HEIs regional or national.

A strong political enables the policy maker to have better control of the instruments and use it for its own goals. A support to this statement can be found in the fact that a strong government steering can occur by many different instruments: with formula (UK, Norway), direct top-down appointing (Netherlands) and project funding (Switzerland). On the contrary, the Italian case shows that as political will is weak and not stable, the instrument activates automatism that make it evolve and influence also other aspects of the academic life. For instance, the introduction of a component for research in the formula made the simple input measures not more suitable and spurred the development of a nationwide peer review evaluation process of scientific production. The evaluation process provided reliable information, and favoured the growth of the share of funding allocated via formula. A virtuous cycle is emerging. The instrument influences the future choices of the policy maker and the design of new instruments in the future.

Table 1 –Funding instrument mix

	most important funding subject	Formula			Contract			Project funding			
		% of HE public funding allocated by the formula	teaching	research	level	% of HE public funding allocated by contract	detail	level	% of HE public funding allocated by re-search project	academic free	thematic - goal oriented
<b>Norway</b>	national government	45%	simple input/output* (47%)	PhD, attraction of funding, productivity (53%)	no			national	1%	strong	weak
<b>Portugal</b>	national government	90%	measure of efficiency and productivity	no	development multiyear contracts with HEIs that adopted the foundation model (3 universities), for other universities a marginal share of public funds is allocated through development contracts for specific objectives(e.g., quality improvement of teaching...)			national	3%	strong	weak
<b>Italy</b>	national government	7%	output and discipline coverage ratios (66%)	connected to input and evaluation process results (33%)	no			national	3%	strong	weak
<b>Germany</b>	Länder	variable - large	mild simple input - output indicators		regional	medium - some strategic task		Federal	12%	strong - excellence initiative	
<b>France</b>	national government	marginal -flows through the contract	simple input/output (100%)	no	national	70%	high - bargaing not top down	national	30%	strong: cnrs labelling (20%), ANR	medium; from different ministries
<b>Switzerland</b>	Cantons	large share	70%	30%	regional	tasks	top down	Federal	21%	strong	strong
<b>UK</b>	national government (through state agencies)	59%	simple input/output (75%)	(25%) connected to evaluation process	no			national	29%	embedded both in research councils mission	
<b>Netherlands</b>	national government	90%	simple output (50%)	simple output, but large part is actually historical (50%)	no			national	10%	strong	medium

\*numbers of students, credits and degree certificates

Source: designed by the authors

There is also the case of a country with strong government in which the instrument produces unintended effects, by modifying the government role. This is the case of France: the contract was initially linked to a small amount of funding, but gradually became more important, and empowered university level by creating a more symmetrical relation with the state.

The issue of the most relevant government level seems to be associated with the choice of the instrument. It is observed that in the countries where the regional level of government is very important, Germany and Switzerland, then contracts are set between Länder/Cantons and the HEIs, while the Federal government mainly funds through projects.

### 5.2 Quality assurance

QA started as a separate instrument in university management in half 80s, taking inspiration from business practices of quality control. Many elements spurred this process in the HE: massification weakened the traditional tools of control; the rise of the managerial narrative with concepts such as: autonomy, deregulation, steering at a distance, emphasis on

efficiency and demand for accountability. QA was an alternative to the former strict bureaucratic control giving more room for institutional autonomy. Pioneers in Western Europe were countries such as UK and the Netherlands. QA spread around Europe, often by a mimicking process oriented toward other national experiences that were esteemed to be an optimal benchmark. The diffusion of QA accelerated between late 90s and early 2000s mainly as a consequence of the Bologna Process and the successive declarations (table 2).

HE debate in the 90s was characterised by multiple national frames on quality problems (Reichert). The globalisation and the Bologna process seemed to bring new energy and direction to the QA. The Bologna declaration spurred new initiatives especially as to accreditation schemes (Schwarz and Westerheijden, 2004; Eurydice, 2010). One of the most important initiatives was the creation of the European Association for Quality Assurance in Higher Education (ENQA) in 2004 followed by the agreement on European Standards and Guidelines for Quality Assurance (ESG, 2005) in the European Agencies dealing with QA (EHEA), and the creation of a European Quality Assurance Register (EQAR, 2008).

Table 2 - Main Phases in the diffusion of QA in western Europe

half 80s until half 90s	late 90 s	2003 on wards
<p>Pioneers mimicking QA practices in business sector</p> <p>Influence of the NPM narrative Main pioneers: UK and the Netherlands</p> <p>1994 EU pilot study-&gt; influences the design of QA sistem in some European countries</p>	<p>Bologna declaration triggers changes in the HE system and debate on the need of QA systems mimicking pioneers according tonational trajectories: Portugal-Dutch; Norway - Sweden</p>	<p>Reforms of the QA system in the Netherlands, France, Germany, Norway, Italy. Bergen, Berlin and London meetings increase the role of the EU level in the QA still large national path dependence, though ENQA, EQAR, ESG: accreditation of QA agencies, soft steering, metaevaluation</p>

Source: designed by the authors

Table 3 – Main orientation of the QA systems

Main orientation of the QA system	Countries
Evaluation	Portugal Switzerland UK
Accreditation	France Germany Italy Norway
Accreditation, evaluation	The Netherlands

Source: designed by the authors

The Register aims at enhancing trust and confidence in European HE by listing quality assurance agencies operating in Europe, which have proven their credibility and reliability in a review against the Guidelines<sup>4</sup>. The ESG comprises a set of standards for agencies that wish to be considered as trustworthy and professional in the performance of their functions in the EHEA, irrespective of their structure, function and size and the national system in which they operate. ESG stresses stakeholder interest, institutional autonomy and minimum burden on higher education institutions.

European cooperation in QA also occurs at discipline and professional levels. For instance, although there is no formal obligation in France nor in the UK to register in order to practice as a professional engineer, in both countries the established standards provide a strong incentive for the accreditation of engineering degree programmes. In Portugal accreditation of engineering programmes by the Order of Engineers has preceded general QA procedures. Engineering has always been in the forefront of discipline-specific accreditation. Quality processes, especially if tied to improvement, need to be more discipline specific, especially when sup-

<sup>4</sup> After the inclusion of three QA agencies in 2008, in 2009 they grew to 17.

ply becomes wider, heterogeneous and market driven then State monitoring may prove to become cost consuming and less effective. Indeed, the “engineering” model can be (and in some cases is) used as a pilot for other professional disciplines (Augusti et al.)<sup>5</sup>

Different actors, contexts and levels shape QA policy instruments and techniques. We can try to point out the main changes occurred in the last decade (Tab. 3). Continental countries (France, Italy, Norway, and Germany) have seen traditionally a major role of the state / land, with focus on accreditation and a stronger equality orientation. Thus, the main goals of accreditation were to control the evolution of the system and to grant similar quality standards across the HEIs.

At present we face a common trend toward 'intermediation' in QA, with agencies between HEIs and the central government, but the power and autonomy of the agencies largely depends on the kind of relationship with the State. In France

<sup>5</sup> In 2004 the European Network for Accreditation of Engineering Education - ENAEE promoted the EUR-ACE (EURopean ACcredited Engineer) project, that was completed on 2006. The “EUR-ACE Framework Standards” do not intend to substitute national standards, but to provide a common reference framework as the basis for the award of a common European quality label (the EUR-ACE label).

and Italy agencies are established mainly for organizational purposes; in Norway a compromise is visible, the State still has a supervision of the process but its influence is less pervasive; in Germany the agencies are becoming the main foci of the QA assurance process, in which the stakeholders confront. The different behaviour of Germany seems to depend on two main factors: the first is that Länder are not large enough to manage a modern comprehensive accreditation process, the second lies in the national well-rooted practice of involving all the most important stakeholders in the decision process, which is now placed in new bodies like the Akkreditierungsrat and the agencies. Agencies are more protected and more independent, because they have many promoters (they are inter Länder and/ or inter universities agencies), and they interact with an intermediary body (the Akkreditierungsrat) rather than directly with the Ministry. Functional and financial autonomy emerges, as well as orientation toward the stakeholders and the market, while references to the compliance of Akkreditierungsrat's statements are rare or nuanced<sup>6</sup>. Competition between the agencies is emerging, even in an international arena: German agencies may accredit HEIs from other countries, and vice versa. Such competition in a market for accreditation may be closer to improvement orientation, since the main purpose is not assessing a minimum standard, rather to gain a label of quality

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<sup>6</sup> From the AQUIN website *"Degree programmes are evaluated by reason of their characteristic purpose as well as on the basis of the quality criteria developed and applied by the agency" "(the agency) operates as a non-profit organisation which is financed through membership fees as well as through HEIs for accreditation services provided" "main objective is to provide guidance and information for students, employers and higher education institutions and to contribute to more transparency in the market of study programmes", "the agency serves quality assurance in an open education market"*

whose prestige depend on the prestige of the agency.

In sum, in the group of continental countries the interaction of managerial and Bologna principles generate different responses. Germany: change in the paradigm of control; Italy and France: new bureaucratic orientation, or neo-weberian, Norway: softer ministry control. Germany seems to be developing a unique system with an overall meta-accreditation on the top and an increasingly relevant market-oriented quality assurance on the bottom, which is less oriented on equality and more oriented to excellence and competition. Hood et al. (2004) already pointed out that in Germany a change in the control model was occurring, from autonomy and mutuality (subject specific and cross disciplinary) toward competition and oversight; our observation seems to show that even some oversight have partially changed into competition. On the contrary, after a phase of more flexibility, Italy and France are shifting to centralized steering again, even if in different ways. The devolution process in Italy may in the future change the context again and favour a German like system, especially as the meta-accreditation of the EQAR becomes widespread.

A second group comprises the Dutch system and Switzerland. QA processes have a long-standing tradition in the first country, while they are more recent in the latter. Major responsibility for QA is up to the universities, and quality control is exerted in the type of mutuality within institutions (Hood et al., 2004), still the State / Canton monitoring is strong, and often occurs in a non formalized way. Recent years have seen rising competences of the new agencies. Major goals were similar: increasing the visibility of the system' quality, increasing efficiency, providing information for students, faculty and policy makers.

The third group is composed of the two

countries where HEIs traditionally enjoyed full autonomy and the system is more market-oriented: UK and Portugal. One common goal of QA in these systems is to increase the reputation of the institution; professionals are also an important promoter of QA processes. There are some differences. In the UK these practices were introduced to improve control of public spending and accountability. A shift toward the agency occurred, which is in part influenced by the government. In Portugal QA initiatives have been promoted and managed largely by the public HEIs themselves through the CRUP, in order to affirm their quality standards *vis a vis* the private HEIs.

The most recent European initiatives, such as ENQA, ESG and EQAR, all have the main focus in the agency and softly hints at improvement. ESG favours convergence on the meta-evaluation systems and promotes a common space where members, evaluators and HEIs can confront on methods and techniques for accreditation. The effects of European pressures have been not homogeneous. In some cases they produced an increased role of the agencies and more independence (Norway, Germany, Switzerland, the Netherlands). In France the EHEA emerges as an *escamotage* to reform and re-legitimate a centralized steering, accreditation and evaluation system. In Italy the introduction of the new degree system had a dramatic centrifugal effect; at that point, there was not the political will to choose the market as the new source of status and order, on the contrary the State retained this role through a renewed centralized and bureaucratic-like control.

Increasingly, government accreditation coexists with accreditations promoted by various stakeholders' group; the risk of evaluation overload and overlapping between various accreditation and evaluation processes (Schade, 2004) exists both for State led countries (with a problem of

bureaucratic expansion in Italy, France, and Norway), as well as where market and agency led ones, with a multitude of agencies labelling quality and standards (UK, Portugal, Germany).

Some similarities can be detected between QA and funding. Also in the case QA, a strong and persistent political will is associated with a better control of the instrument; in France QA become centralized by using the lever of the EHEA process; in the Netherlands QA practices have been established since a long time, while in the UK they have been consolidated despite a strong tradition of institutional and academic autonomy. On the contrary, Italian unstable policy leadership has favoured an escalation of control vs buffering and opportunism, and even growing bureaucratic and stringent control. The prevalence of the regional level of government, in the case of Germany favours a partial lose of control of the oversight in favour of market like form of control.

### 5.3 *Evaluation of research as a steering tool*

The government's need to steer research activity developed by the HEIs emerged through out the second half of the XX century, and initially focused on conditional selection and monitoring of research projects according to their likely contribution to national strategic objectives. In most countries investment in prospective evaluation guiding resource allocation was much greater than investment in retrospective evaluation of the results. As state funding for research stabilized since early 70', pressure for efficiency increased. Since early '80, NPM narrative favoured the emergence of a new relationship between a state 'supervisor' that sets goals in terms of efficacy and thematic priorities, and more autonomous HEIs. This process further

spurred practices to make universities accountable, judge to what extent goals have been achieved, and to correctly allocate resources. During the '90 and '00, increased attention was put on ex post evaluation, both regarding project results as well as HEIs productivity through research assessment exercises in the frame of formula funding systems.

Whitley (2007) defines Research evaluation systems (RES) as “*organised sets of procedures for assessing the merits of research undertaken in publicly-funded organizations that are implemented on a regular basis, by state or state delegated agencies*”. Evaluation systems can be distinguished according to their frequency, formalization, standardization and transparency (of procedures and criteria). These features usually occurs together: evaluation in continental European countries have been usually informal, on disciplinary basis, process neither results being published; in other countries the process is more frequent, formal, standardised and transparent (it is the case of the British RAE). Six features affect the functioning of the evaluation system, and most of them are linked to the characteristics of the funding system (Whitley, 2007):

- High frequency and significance of project performance review<sup>7</sup>.
- The incorporation of varied policy goals in funding procedures<sup>8</sup>.
- Variety of funding agencies and their goals.
- Organizational independence and capabilities of HEIs.

<sup>7</sup> Higher frequency increases the importance of performance based funding and the costs of project failure, while in block-grant funding regimes the ability to conduct research does not depend on performance in the short-medium term

<sup>8</sup> When they are distinct from intellectual ones, they limit the concentration of control of the academic elites

- Cohesion and prestige of scientific elites in each society.
- Segmentation of HEIs in terms of funding, objectives and labour markets.

Whitley analyses how the variation in these features affect the impact of evaluation system on knowledge production. It is also plausible that the variation of some of these features would also play a role in the evolution and implementation of the RES itself. For instance, we may expect that strong and cohesive scientific elites will be more likely to avoid the inclusion of external stakeholders in the evaluation process, to avoid full shift towards bibliometric evaluation (at least in some disciplines).

Hicks (2009) studies the evolution of evaluation of research exercises in US, UK and Australia; three countries with a quite long tradition of research evaluation. In US, magazines and independent bodies assess the research quality, while in UK and Australia evaluation occurs on government mandate. The author identifies some common themes in the evolution of the instruments. There is a tension between increasing complexity and need for practicality; complexity emerges as response to pressures for fairness across heterogeneous academic disciplines, and easily increases because of the absence of any accounting of the exercise' full cost. Excessive complexity put the evaluation at risks or make it even fail: in UK the Research assessment Exercise (RAE) submissions' burden has risen questions about the cost/benefit ratio of the exercise (Geuna, Martin 2003); the aim at assessing group level excellence (in Australia) and tracking each researcher scientific productivity (US) have not been accomplished. Thus, there seems to be a convergence towards peer informed, metrics based, departmental level evaluation; which may represent a kind of compromise between complexity and practicality. The move from peer review to bibli-

ometric is difficult, and it is more likely the opposite (as in Australia). Attention to evaluation is high, although only marginal share of revenues is affected: for instance, despite 20% of government resources is allocated through RAE results, actually the median impact on university budget was only 0.6% (Hicks 2009 citing Sastry and Bekhradnia, 2006). Greater scientific productivity seems to be achieved at the cost of evaluation, which is presumably less than the cost of increasing research funding.

The quoted literature show that evaluation most often does not emerge as an independent government led instrument, rather as accessorial to a funding instrument that aims at allocation according to performance in research activity and coherence with the governmental/academic goals. Despite its initial dependence on the funding process, evaluation may rise as the most powerful component of the policy, as shown by the RAE case, or even as an independent instrument with indirect effects on funding, as in the case of the Netherlands.

The type of instruments used and their evolution may be very useful to understand the underlying policy goals and the relationship between governor and governed subjects. Though, instruments are not always completely under policy maker control: they may autonomously produce unintended effect and trigger a series of changes. Thus, it is not easy to set with certainty when changing instruments is actually the outcome of a policy rationale or rather a process that depends on other factors too. The case of the use of research assessment exercise well illustrates this point.

Ex post research evaluation occurs in many countries but research assessment exercise only occurs in large countries, where the main funder is the national government and formula is the preferred allocation tool. Italy and UK possess all

these three relevant features. Norway and Portugal are small countries, the assessment exercise may seem too costly, and conflicts of interest may be difficult to eliminate, given the smaller size of the academic community. In the Netherlands evaluation occurs but does not affect allocation, it is not organized to evaluate HEI or department level, rather as discipline focused and oriented to provide information to political and academic leadership; the use of evaluation' results is flexible and discussed together with the subjects under evaluation. In this case, rather than the size of the country, other factors seem to ease other solutions for steering. Netherlands is a country where NPM reform had a strong impact, but with some relevant differences compared to the UK: the 'steering at the distance principle' is complemented with an important role of the State in the process to select the academic leadership, while British universities are completely autonomous in this sense. The relationship between Ministry and academic leadership is based on cooperation rather than on 'assessment and control' principle; disciplinary evaluation not directly influencing allocation seems to be apt for this relationship. German Länder and Swiss Cantons are also too small to justify an assessment exercise at that level. Moreover contract seems to prevent both regional and nation wide assessment linked to allocation, since local and national governments prefers direct interaction that are based on more information and grants more freedom.

Other general observations can be outlined by the analysis of evaluation practices.

As we say, in most countries evaluation was introduced in order to support other steering instruments, mainly funding ones. This represented a first move away from the traditional Humboldt approach of complete academic freedom. Still, evaluation was initially done by academ-



ics and steering instruments privileged fundamental research: the major aim was that of a more efficient allocation. A step forward in the steering of research is represented by the increasing involvement of policy makers and stakeholders in the evaluation process, which both points out the recognition of the powerful potential of evaluation and the will to gain direct voice on the choice of research goals. In some cases, policy makers even promote the establishment of a specific and stable agency for evaluation. This initiative may reflect the will to further enhance policy maker steering, and to secure evaluation activity from future political rethinking and academic influence. Though, evaluation has proved to be very effective, because the information flow is appreciated by researchers and results impact their reputation. This happens when the evaluator is competent (for instance, prestigious peers), and when criteria and methodology are shared; these elements will help academics disposition to *internalize* such external pressure. RAE in UK is a good example, since the HEFCs appoint many prestigious academics to manage the evaluation exercise, criteria are clear and set after a deep participatory process of discussion. Nevertheless, as in the case of QA the presence of a dedicated Agency might favour the institutionalization of evaluation, with the risk of routine and bureaucratization, reducing rather enforcing its efficacy. Evaluation appears to be resilient and self-enforcing, it tend to become an autonomous instrument, more elaborated and complex through out time. The case of Italy shows that despite a weak and unstable political will, when evaluation enters in the discourse and rhetoric of HE management it does not leave easily (Reale, Seeber, 2011). Rather than bureaucratization through and agency, the most effective initiative to secure evaluation and its efficacy may well be evaluation itself.

#### 5.4 *The resistible rise of rankings*

The diffusion and success of university rankings is relatively recent. At the beginning they were not directly created as steering tools, rather published by newspaper, or they are merely one of the outputs of evaluation processes. The instrument rose in the Anglo Saxon HE market (USA) and quasi-market (UK), then the mass media favoured its diffusion in the continental HE systems, which were becoming mass and managerial systems. There are main different explanations for the emergence of the ranking and their impact at macro level as well as at institutional level (Stensaker and Kehm, 2009). As to the former, rankings might emerge as regulation tool in the quasi-market, due to the hollowing out of the State; or, in the frame of the globalization process, where HE is increasingly seen just as another economic sector, rankings provide information to consumers in an international market; or rankings can be an outcome of the audit society: massification requires new instruments for accountability. As to explanations for the institutional level, one might be the institutional identity creation: in a race for prestige and position in the academic order (Dill and Soo, 2005) rankings provide institutions with prestige; another explanation see ranking as a symptom of the emerging knowledge society and the tendency to emphasise certain dimension of knowledge production.

Sauder et al. (2009) focus on the meso and micro level factors to explain why rankings have permeated law schools in US so extensively and why these organizations have been unable to buffer. They use Foucault's conception of discipline (Foucault, 1978) through two important processes: surveillance and normaliza-

tion.<sup>9</sup> Some environmental pressures are less “decouple-able” than others because of the organization’ member disposition to *internalize* external pressures: cognitive and emotional factors mediate or amplify these pressures. Despite rankings are harshly criticized and disapproved by most academics and faculty deans, they have proven to be generative. Three factors facilitate internalization:

- Anxiety: rankings are engines of status uncertainty. Personal judgement of institutional prestige is fuzzy but rather stable, it is difficult that HEI reputation can change rapidly in peoples’ mind. On the contrary, rankings create a kind of clearer view, where positions can rapidly shift.
- Resistance: individuals and organizations never fit into the particular identity that discipline imposes, so they often try to resist. Though, resistance facilitates the internalization of discipline because it expresses an investment in a relationship, that makes rankings “a point of reference around which action and beliefs are organized”.
- Allure: it emerges from the desire to tame ranking, for instance by manipulating data; it is a symbolic response but at the same time the hegemony of ranking is also reinforced.

The success of ranking might also be explained by the need that humans have of

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<sup>9</sup> “Rankings create a public, stable system of stratification comprised of unstable positions. The result is a social structure exquisitely suited for generating anxiety, uncertainty, meticulous monitoring, and discipline. Processes of normalization and surveillance change how members make sense of their organizations, their work, and their relations to peers. In this way, abstract systems become embedded in organizations and embodied in members and are the reason why organizations cannot buffer the effects of rankings” (Sauder et al., 2009).

cognitive maps that help them making sense and order of a complex environment (Tversky and Kahneman, 1974; Taleb, 2007). Such human attitude has been studied also in Science, in the need for paradigm that can support scientific research; a paradigm crisis spurs an immediate search for a new one (Kuhn, 1962). We can point out three main features that determine the success of a narrative (an interpretation, a paradigm, etc.), that are outlined in a similar way by Kuhn for the analysis of scientific paradigms:

- Perceived adherence to reality (the fact that the paradigm fail to foresee experimental results may undermine its credibility).
- Degree of detail, which actually influences how extensively can be used (the paradigm is useful and used until it can be used to solve new problems; narrative outside science does not necessarily need to help solving new problems forever).
- Simplicity, which influences how easily can be communicated and shared by many different users (the Ptolemaic system was still able to make correct prevision when the Copernican system succeeded because of its much greater simplicity).

We often replace elaborated but fuzzy cognitive map with wrong but clear ones. Kahneman reports an enlightening tale on this issue that resumes some observation made through his and Tversky’s work (FORA.tv, 2009):

*A group of scouts gets lost in the Alps; after three days they come back. The chief of the camp ask them.*

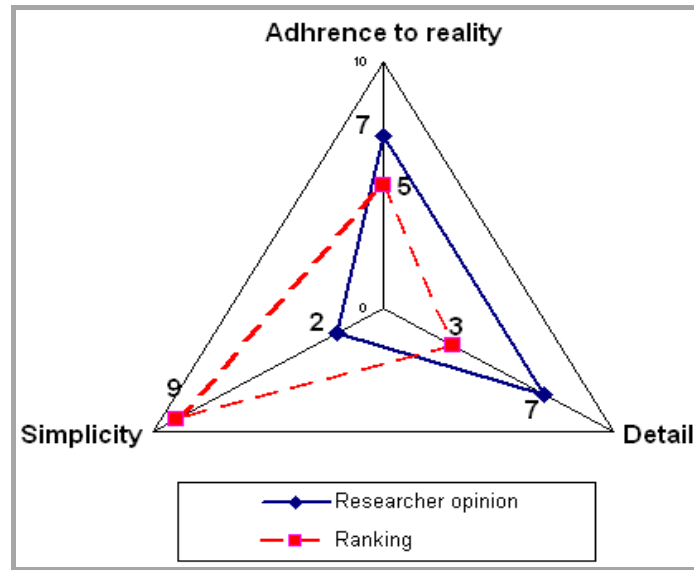
*C: “how did you manage to come back?”*

*S: “we were desperate but finally we found this map.”*

*C: “but this is a map of the Pyrenees!”*

*S: “yes, but it is a map!”*

Figure 4 – Criteria driving the adoption of a cognitive map



Source: designed by the authors

Moreover, when many people are involved, having one view of reality may reduce bargain and conflicts, even when the limits of such view are evident. This view will be resilient, unless an alternative view with a comparable degree of detail and simplicity is provided; the characteristics of the problem and users will influence the importance and use of each narrative. This may be the case for rankings; individual academics have elaborated and complex ideas on institutional prestige but they are not formalized and difficult to communicate, focused on the discipline they work. They will go on making reference to their experience for their work, but they have to make reference to rankings when communicating with outsiders. The less skilled the audience the simpler will be the cognitive map; the adoption of ranking is also decided by university outsiders, users such as students, their families, policy makers, etc. that may be the reason why ranking appear to be crude to academics.

A wide literature describes the pro and cons of the rankings. Many authors point out that rankings have had a surprisingly deep impact on the HE sector, which is

traditionally stable and elitist; despite their limits, they are likely to exist and diffuse also in the future. Moreover, different kinds of rankings have had different impact on the considered countries

There are three main types, which are oriented to different audiences: a) Rankings published by newspapers with a focus on teaching and national level; target: students and their families. Their impact on students' choices is uncertain and according to many studies it is not large; b) International rankings published by universities or newspapers with a focus on research activity and institutional prestige. Target: academics, policy makers, other stakeholders; c) Rankings published by institutions or evaluation agencies. They often resume the results of assessment exercises. Target: academics, policy makers, other stakeholders.

The responses to rankings of policy makers, HEIs and academics may be very different, as well as the relationship between existing rankings. In UK, for instance, rankings published by the newspaper have developed quite simultaneously with governmental rankings; they appear to be associated with the rise of quasi-market

in HE and they receive great attention in the system. In the case of Italy newspapers' rankings emerged in late nineties to inform students. Government does not diffuse information on teaching assessment process; only in recent times a ranking produced by the Ministry of University and Research level was published, including both teaching and research evaluation results.

The impact of rankings on academics has been widely studied, while the impact on policy-making is much more uncertain. Rankings may generate useful information, as in the case of ranking produced by research assessment exercises (Italy, UK), and support the concentration of resources in order to improve rankings and efficiency (UK). In Germany, the results of the international rankings produced concern among policy makers and academics on the low standings of German HEIs; there was a reaction by the policy makers oriented to spur excellence, and also by academics to develop a new approach that may correct some of the drawbacks of the existing rankings (see, for instance CHE ranking – Brandenburg 2009). In other case the use of rankings as a policy instrument that can inform, support or justify policy initiatives is not even contemplated. The implementation of rankings as policy instruments needs to be better explored, in order to understand: which actors spur their use, which elements may favour or limit use, diffusion and impact in different national contexts.

## 6. CONCLUDING REMARKS

In this paper we investigate policy implementation in HE by looking at the evolution of some policy instruments, namely formula funding, project funding, quality assurance and research evaluation. Moreover, we take into account the rise of ranking as a new instrument adopted

by policy makers. Our research wants to understand: to what extent instruments can reveal the evolution of policy rationales and justifications; whether and how they evolve in unpredictable ways, generating unexpected results, playing new roles and functionalities, how instruments emerged, and become institutionalised, affecting and being affected by the characteristics of national configurations of HE systems. The work is developed within the TRUE project, adopting a comparative and diachronic perspective; limitations of the analysis derive from the need to control the results through strong empirical evidences at government and institutional levels.

Beside the aforementioned limitations, some interesting results can be outlined.

The evolution of the HE funding instruments shows some similar features across the European system considered by the TRUE project. Among the innovative funding instruments of the last decades there are: the use of formula, specific contracts between government and each institution for the allocation of basic resources (or extra resources), and the use of project funding for research activity. Formula, contract and project emerge as instruments for a more efficient allocation and, in second instance, as steering tools. They imply a change in the relationship between the state and the universities, as the role of the state changes from regulator to supervisor of universities autonomous on procedural matters. Once activated, such instruments are not fully in control of the policy maker, rather they interact and partially bound state choices also in the future. This happens also because when the state begins to steer HEIs, it also legitimates them as relevant actor of the system and they become fledged active counterparts.

Evaluation rises as independent steering instruments mostly as to QA and ex post research assessment exercises, but affects

countries in different ways. Moreover, the origin of the instruments and the drivers of change are different, with the European processes playing a leading role as to the former, while the latter is mostly linked to the national political initiative and affected by path dependence. On the other hand, rankings are emerging as a powerful instrument not originated by a policy initiative, whose diffusion and impact on HEIs seem remarkable. Policy makers are joining the game, making formally or informally reference to rankings as justification for different policy initiatives (such as the excellence initiative in Germany), but a formal use in policy making is not evident yet.

The capability of the policy maker to manage the instrument depends on his strong and persistent political will, and on capability to bargain with universities. The development of the considered instruments has been often inspired by NPM principles, which aimed at increasing steering capacity of the policy maker on one side, and university role and autonomy on the other. The common narrative is then declined in very different ways among countries, and instruments reveal the extent to which it is adapted to the existing characters of the HE system. For instance, an ongoing 'agencyfication' process for managing policy instruments is visible in most countries, but in some case the possibility is to give rise to bureaucratisation and routine processes, weakening the steering capability of the instruments. Moreover, there have been different starting points across European

countries, which strongly influenced the evolutionary path of instruments. It is still unclear the degree of convergence between countries, and whether present configurations are stable or they are a step toward a further convergence or a new diversification phase. Much might depend on the intensity of the European integration process that in cases such as the QA has been the mean and the trigger of the way the instrument has been put into action.

Finally, the chosen mix of policy instruments used in the considered countries seems to be affected at the same time by traditions linked to the national configurations, and by the need of a rationalisation of the HE system, with the reinforcement of HEIs as autonomous, strong and tightly coupled organisations. Different implementation of the instruments in the mix might contribute to produce unexpected and unintended results for steering the HEIs. Further empirical research is needed in order to outline the importance of the instruments in terms of investment of resources and symbolic values, the political discourse for their implementation, the degree of novelty of the instruments themselves according to the national experience, the role of the different actors involved (government, intermediaries, buffers and academics), the impact on HEIs and the transformations of the instrument (modifications of the design, changes in the functioning, misapplication) deriving from interactions between policy layers and the HEIs.

ANNEX 1

	Formula, Project and contracts	QA and Research Evaluation
<b>GERMANY</b>	<p>90% of HE funding comes from the Länder, which have legal responsibility for the HEIs, the contents and organization of studies, as well as quality. Allocation is largely based on historical value but a variable share of the budget is linked to performance, measured through simple input measures of enrolment, teaching and some-time research activity (third party funding). Basic funding is decreasing, while program-linked earmarked funding is increasing. The relationship between HEIs and regional government is symmetrical, nevertheless there are contract agreements mostly focused on educational productivity (Lepori et al. 2005).</p> <p>The most important funding initiative of the federal government is the 'Excellence initiative', a response to the concern on the relative low ranks of German HEIs in international rankings. The initiative aims at spurring excellence, both in terms of academic and of socio-economic outcomes, by bringing universities and research institutions closer together around 'cluster of excellence'. Federal level stresses academic-industry collaboration. The Federal government also funds projects through 4 agencies (OECD, 2007).</p>	<p>The QA system was based on approval of the programmes according to framework regulations. This system was inefficient and it has been replaced: there was a shift from approval to accreditation as a precondition for approval. Accreditation of study programmes is carried out by accreditation Agencies, who in turn are accredited by the cross-Länder accreditation council (Akkreditierungsrat), which also defines the basic requirements of the process. The legal basis of the accreditation system is set out in the Law. All stakeholders must be involved in the agencies. Akkreditierungsrat takes into account the European standards (ESG). German HEIs may be accredited also by agencies from other countries. Agencies' mission statements often emphasize independency and market orientation, rather than compliance with Akkreditierungsrat's standards. Thus, the top-down basic supervision is complemented by a competitive orientation toward the market.</p> <p>Evaluation of teaching was introduced in mid 90s to support HEIs in the quality promoting. There is not a national institution to coordinate evaluation activities; there are initiatives at Land, regional, and cross regional level between HEIs.</p> <p>Evaluation of research is accessorial to funding procedures. There is not an ex post evaluation process.</p>
<b>NORWAY</b>	<p>The main public funder of the HE system is the national government. The basic component is about 55 per cent of university budgets, the rest is allocated through a formula: Education component 21%, Research component accounts 24%(Sletta, 2007; Frølich, 2009). More complex research output indicator have been gradually introduced. Substantial growth in publication and impact have been noted since the introduction of the new formula (Lepori et al 2005; OECD, 2007).</p> <p>A small portion of funds is allocated through competitive grants are allocated by the Research Council and other minor bodies; free projects have a declining role compared to programmes promoting specific research issues (Slipersæter et al., 2007 ; Poti and Reale, 2007).</p>	<p>The Bologna process inspired an important reform process. In 2003 a new system of accreditation was introduced: an independent accreditation agency was created (NOKUT); formal accreditation schemes were introduced; each HEIs should establish a functioning quality assurance system. Accreditation regards institutions as well as programmes. Accreditation is based on a mix of self evaluation and external review, with the publication of a report. NOKUT decides on accreditation and the decision is sent to the ministry for final approval. NOKUT also evaluates the HEIs' internal quality assurance systems. The creation of the NOKUT represents a decentralization compared to the previous arrangement, even if the Ministry still has the final say on institutional status.</p> <p>Research evaluation plays an accessorial role in the frame of the formula funding (bibliometric techniques) and in project funding, where in some disciplines may be a signal of academic prestige.</p>
<b>FRANCE</b>	<p>The central government plays a key role. Formula exists since 1968. Contracts between state and HEIs have been established since 1991, based on student number and specific priorities, they determine 70% of the university public funding. An increasing share of university budgets (20% in 2005) flows directly to research labs without universities having any role (Frølich 2008). The emergence of universities as central actors can be associated with the steering by contract. Negotiation partially changed the nature of the relationship with the State, from hierarchical to more symmetrical (Musselin and Paradise, 2009). much of research is done in mixed research units, with academic and Cnrs personnel. Units are selected by a national committee through a 'labelling' process, similar to the project funding selection process (Theves et al. 2007). The Agence Nationale de la Recherche (ANR) has been recently created to reorganize and enhance the national competitive allocation of research funding. A large share of funds still depend on the CRNS but ANR is getting more important. This new hybrid model may represents a step towards the European standard model of research funding (Theves et al., 2007).</p>	<p>QA processes reflect the new paradigm of increasing institutional autonomy. Programmes accreditation traditionally consisted in complying with the ministerial regulations (conformity check). In 2002, following Bologna declaration, the degree structure changed: the ministry allowed universities to propose new programmes and the only guidance was the criteria used for accreditation. The French minister of education saw in the European Higher Education Area (EHEA) the opportunity to reform the system. New degree structure and the threat of external competition from other countries has pushed all institutions towards a common degree structure and an accreditation system that, given the weakness of the HEIs, can only be provided by the state (first though CNE, then since 2006 though the AERES). HEIs should evaluate individuals.</p> <p>Research evaluation plays several roles: it is accessorial to contract, in order to assess the achievement of the goals by the HEIs; accessorial in the labelling process, supporting the selection process and indirectly signalling a high quality standard. AERES is meant also to evaluate public research institutions and teams. Evaluation process is based on self evaluation followed by external review on the basis of the self evaluation report. Evaluation results influence the strategic decisions of the government and the academic leaderships.</p>

<p><b>UK</b></p>	<p>HEIs receive 38% of their budget from the HEFCs, 24% from tuition fees, 16% from Research councils grants, 22% from other incomes (for instance donation collected by charitable trust). Basic HE funding is organized at national level and the Ministry of education is responsible, but with 4 separate HEFCs that operate at the 4 regional (State) levels. Funding for teaching depends on number of students completing components of academic programs (63%); Funding for research (20%) is allocated on the basis of RAE results, that focus on: quality of research (70%), degree thesis supervision (15%) and charitable support (10%); minor components from competitive projects (6,3%) and earmarked capital funding (10,6%). The resulting block grant is determined and the universities are free to spend it. RAE tends to concentrate resources in excellent universities and departments. There are 8 disciplinary Research councils focusing on specific issues.</p>	<p>British universities are responsible for the evaluation and approval of their own degrees. Professional bodies approve and recognize programmes that lead to professional qualification or licence to practice, but the university right to offer courses is not limited. On the contrary, individual autonomy has been eroded by collegial and increasingly managerial authority. National QA arrangements can be considered an aspect of that erosion. The Quality assurance agency (QAA), created in 1997, is responsible for the evaluation of the universities and to encourage continuous improvement. It does not make a direct judgement about the quality rather expresses the degree of confidence in the institution; such judgement may affect the institution's reputation and the decision of the HE funding councils (HEFCs). Evaluation can be seen as a running battle between governments and university leaderships. Externally monitored QA is now accepted by academics. The Research Assessment Exercise (RAE) is an ex post research evaluation process that aims at evaluating the research units in the British HEIs; the focus of the evaluation is the scientific production along the different disciplinary sectors, it is based mainly on peer review. RAE provides to HEFCs information for the allocation of funding. Evaluation' results also impact research practice and management.</p>
<p><b>SWITZERLAND</b></p>	<p>The university act (1999) aimed at creating shared steering of cantons and confederation:the Conference of Swiss universities (CUS) was reformed, academics were excluded and now it is composed exclusively by policy makers. Academic leadership is in charge of implementing CUS policies (Paradise et al., 2009). Funding system reflects this general goal. Cantons are the main funders of the university in their land, allocation is based on output criteria related to teaching (70%) and research (30%) activity (Lepori, 2006). The Federal government activity is growing. It funds the two Federal institutes of technology (FIT) and subsidizes the cantonal universities and the applied universities. Federal government also provides funds for the two main agencies for project funding. The Swiss National Science foundation (SNF) funds academic research, it is a private foundation managed by professors, but the Federal government may influence research subjects and selection of projects. The Commission for Technology and innovation (CTI) funds applied research and joint projects between universities and industries. The confederation plays a major role in project funding and increased strongly in the '90 (Lepori, 2006). Since the end of the 1980s, Switzerland has participated in the European Framework Programs on a project-by-project basis</p>	<p>QA assurance in Switzerland has rapidly evolved in the last decade. QA is considered to be the responsibility of universities themselves, as was officially established since 2000. In 2003 the Centre of Accreditation and Quality Assurance of the Swiss Universities (OAQ), was requested by the CUS to control the QA system internal to each university. OAQ also publish guidelines and principles that should lead the definition of the internal QA systems, these principles are explicitly coherent with international standards and especially with ESG standards. Accreditation procedures were promoted since 2007 and they are also in charge of the OAQ. The aim is to verify that institutions and programs satisfy minimal quality standards; accreditation procedure is voluntary. Research evaluation occurs in the project funding selection process; it signals high quality standard and coherence with Federal goals. It also occurs to assess the achievement of goals set in the canton-HEIs agreements.</p>
<p><b>PORTUGAL</b></p>	<p>The funding system consists of 3 parts: teaching - formula; investment: Ministry's approval of development plans; research: mainly project competitive system. Formula has been oriented towards the growth of the system: from 1986 until 2006 it was mainly linked to the number of students. In some occasion the universities chose opportunistic behaviour in order to manipulate the formula. In 2006, besides the number of students, criteria for quality and performance have been introduced with a focus on efficiency (Amaral et al. 2007). Research funding aims at promoting the internationalisation of the system by using foreign reviewers, on a more competitive basis, to evaluate the quality of research, which is organized in "Research Units" (most of them placed in the HEIs) and "Associated Laboratories". This has resulted in a system of direct financing of research units bypassing national research institutions (Amaral et al. 2007).</p>	<p>The uncontrolled expansion of the private sector, the public polytechnic academic drift and excessive pedagogical autonomy of public universities led to great mismatch between the outputs of the HE and the needs of the labour market. This increased graduate unemployment rates and paved the way for professional accreditation. The CRUP (council of Portuguese university rectors) decided to lead the implementation of the quality assessment system in order to guarantee the quality of public universities vis a vis private ones. At present there is no national accreditation run or controlled by the state, and the public universities have full pedagogical autonomy. In sum, there are three main evaluation/approval schemes: registration/approval of institutions and study programmes by the state, with almost no selection; the national quality assessment system (led by CRUP) and various schemes run by professional organizations. Ex post Research evaluation plays an important role in the context of research unit and associated laboratories selection and funding.</p>

<p><b>THE NETHERLANDS</b></p>	<p>Public funding of universities is allocated through formula (90%) and project funding (10%). The formula has a teaching component linked to the number of students and study performance. Research component has a strategic share (55%), that was aimed at funding strategic research but it is still is still based mainly on historical allocation; research formula also considers PhD productivity, attraction of research contracts, top research schools (Boozerooy and de Weert, 2007; Jongbloed, 2007). The direct funding is allocated by the Research Council (NWO) in the form of competitive grants and by the Royal Netherlands Academy of Arts and Sciences (KNAW) in the form of support for Academy researchers and professors. The competition takes place on the basis of bottom-up research proposals. A growing share of funding is allocated through programs oriented to specific issues of societal relevance, where goals are set together by government, science and industry representatives.</p>	<p>After Bologna the need to introduce accreditation increased, and in 2003 a new accreditation system was introduced, with the major goal to ensure the transparency of the system. The Netherlands Accreditation Organization (NAO) was created. Accreditation is based on the same principles of self evaluation and peer review in the pre-existing quality assessment system, in which this country was pioneer. External assessment are carried out by quality agencies, the accreditation is given by NAO. Consequences for non accreditation are loss of study grants, funding of the programme, and awarding degree with a legal status. HEIs take initiative for accreditation: they invite a quality agency to assess the quality of a programme. There have been some long-standing themes in the HE decisions about quality: the balance between autonomy and accountability, the need to introduce instruments that could show the Dutch quality standards to the outside world. The Bologna process has been a major driver for HE system change.</p> <p>Research evaluation supports the project selection process; obtaining funds signals high academic prestige and coherence with government goal.</p> <p>Ex post research evaluation is supervised by the QANU and the academic bodies. Each unit should self evaluate every three years and is evaluated externally every six years. The results of the assessment is one element considered within the project funding selection. The Standard Evaluation Protocol (SEP) defines the main elements of the evaluation system, which aims at assessing scientific as well as managerial quality.</p>
<p><b>ITALY</b></p>	<p>The reform of the HE system in 1989 introduced the university autonomy principle; in 1993 the funding model was changed from a line-item to a lump sum budget allocation, based on historical cost. In 1996 was introduced formula, which redistributed a relevant share of funding between universities according to simple teaching productivity criteria. In early 2000 a new formula was introduced that allocated a small part of the lump sum budget according to more complex and sophisticated input in research (project funding) and in teaching, that was inspired by the Bologna process (productivity in terms of credits, degrees). The new model became increasingly complex and detailed, with many bounding quantitative requirements. Similarly to the Portuguese and Norwegian cases, opportunistic behaviours of HEIs were favoured. There is no agency for the allocation of funds; the CNR lost this role in 1999. Project funding for academic research have been traditionally oriented to free research, but it is decreasing. Programs oriented to promote specific themes and/or industry-university cooperation are less important; in some cases they have been even suspended and not awarded on a regularly basis (Poti and Reale, 2007). Regional government still have a very marginal role.</p>	<p>Despite the introduction of the autonomy principle in 1989, in Italy the structure of degree courses did not change much until 1999, when the Ministry rapidly transposed the principles and criteria of the Bologna declaration. The new degree system deleted the established structures and eased an impressive multiplication of the courses. The reform had to reconcile two conflicting factors: the institutional autonomy in the definition of university curricula and the need for legal validity of degrees through references to national regulation. The 'classe' was introduced, to group degree programmes with similar qualifying educational objectives. Nevertheless, the 'classe' device proved to be too weak. The introduction of requirements and standards even more stringent was seen as the only way to limit such explosion and bring order again.</p> <p>Evaluation of quality teaching is up to the HEIs.</p> <p>The VTR 2001-3 wa the first and the only ex post research evaluation process; it aimed at assessing the quality of the scientific production of the HEIs (peer review), the capability to invest and attract financial and human resources for research. There was a cultural impact in disciplines where systematic evaluation was a novelty; university leadership was interested in the HEIs ranking; results still determine the allocation of a share of the lump sum allocation.</p> <p>Evaluation also serves project selection and in some discipline signals academic prestige; evaluation success rate is also</p>



REFERENCES

- Amaral A and Magalhaes A (2002), "The emergent role of external stakeholders in European Higher Education governance", in Amaral A, Jones G A, Karseth B, *Governing Higher Education: National Perspectives on Institutional Governance*, Kluwer, Dordrecht, 1-21
- Amaral A., Rosa M.J. (2004) Portugal: professional and academic accreditation – the impossible marriage?, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Amaral A., Rosa M.J., Tavares D.A. (2007) "Portugal report – survey interview with stakeholders of the Portuguese HE system" in *Funding systems and their effects on HE systems - Oecd – march 2007*
- Augusti G., Freeston I., Heitmann G., Martin R.P. (2008), *Accreditation and QA of engineering education in Europe: Setting up a pan-European system* in "Implementing and Using Quality Assurance: strategy and practice", 2° European Quality Assurance Forum – EUA Bruxelles
- Auranen O., Himanen L., Nieminen M., Puuska H.M. (2008), "Connections between university research funding, publication performance and impact of research comparison of five countries" 13th Nordic Workshop on Bibliometrics and Research Policy; Tampere 11-12 September 2008
- Bache I., (2005), "Europeanization and Britain: towards multi-level governance?", Paper prepared for the Eusa 9th Biennial Conference, Austin, Texas, 31 March - 2 April
- Barnett S. and Fudge C. (eds), 1981, *Policy and Action. Essays on the Implementation of Public Policy*, London, Methuen
- Bleiklie Høstaker, R. and Vabø, A. (2000), *Policy and practice in higher Education. Reforming Norwegian Universities*, London, Jessica Kingsley Publishers
- Bleiklie I. and Kogan M. (2007), "Organization and Governance of Universities", *Higher Education Policy*, 20
- Bleiklie, I., Enders, J. and Lepori, B. (2009), "Some thoughts on the TRUE perspective." Paper presented at the TRUE kick off meeting, Bergen, October
- Boezerooy P., de Weert E. (2007), *Country report - Higher education in the Netherlands* CHEPS – International higher education monitor, Enschede
- Borzel T., Risse t., (2000), *When Europe hits home: Europeanization and domestic change*, EIOP Pap., 4, 15
- Brandenburg U. (2009) "Germany: another system of ranking universities", available at <http://www.universityworldnews.com/article.php?story=20090212190025210>
- Braun D. (2006a), The mix of policy rationales in Science and Technology Policy, *Melbourne Journal of Politics*, November
- Braun D. (2006b), *Delegation in the distributive policy arena. The case of research policy*, in Braun D., Gilardi F. (eds), *Delegation in Contemporary Democracies*, Routledge, 146-170
- Brennan J., Williams R. (2004) Accreditation and related regulatory matters in the United Kingdom, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- CHEPS (2006) "Reflecting on higher education policy across Europe : a CHEPS resource book". University of Twente, CHEPS, Enschede
- Browne A. and Wildavsky, A. (1984), *Implementation as mutual adaptation*, in Pressman J. and Wildavsky A. (1984), *Implementation*, Berkeley University of California Press, p. 206-231
- Cerych L., Sabatier P. (1986), *Great Expectations and Mixed Performance: the Implementation of Higher Education Reforms in Europe*, Trentham Books
- Chevallier T. (2004), The changing role of the State in French Higher Education: from curriculum control to programme accreditation, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Costes N., Crozier F., Cullen P., Grifoll J.,

- Harris N., Helle E., Hopbach A., Kekäläinen H., Knezevic B., Sits T., Sohm K. (2008), *Quality Procedures in the European Higher Education Area and Beyond – Second ENQA Survey*
- Dill, D.D. and Soo, M. (2005), Academic Quality, League Tables, and Public Policy: A Cross-national Analysis of University Ranking Systems, *Higher Education* 49(4), 495–533
- Elmore R. F., Backward mapping Implementation research and policy decisions, *Political Science Quarterly*, 94, 4 p. 601-616
- Enders J., Fulton O., (2002), “Blurring boundaries and blistering institutions: an introduction”, in *Higher education in a globalising world. International trends and mutual observation, A festschrift in honour of Ulrich Teichler*, Higher Education Dynamics, Kluwer Academic Publishers, London, 1-16
- Erawatch (2009), “Research Inventory Report For: Germany”, available at <http://cordis.europa.eu/erawatch/>
- Eurydice (2010) *Focus on Higher Education in Europe 2010: The Impact of the Bologna Process*
- Ferlie E., Pedron L., Reale E. (2007), *Changes Doctoral Education in England and in Italy. The role of Graduate Schools and effects of changes on fund-raising for doctoral education*, Paper presented at the 20 CHER Conference “The Research Mission of the University, Dublin, 30th August – 1 September
- Féron E., Crowley J., (2002), “Internationalization and the Governance of Research, Innovation”, *The European Journal of Social Sciences*, 15, 4
- Foucault M. (1978), *La “gouvernementalité”*, in *Dits et Écrits, III, 1975-1979*, Gallimard, Paris, Paris, 1994, 635-657
- FORA.tv (2009) “Nassim Taleb and Daniel Kahneman: Reflection on a Crisis” available at [http://fora.tv/2009/01/27/Nassim\\_Taleb\\_and\\_Daniel\\_Kahneman\\_Reflection\\_on\\_a\\_Crisis](http://fora.tv/2009/01/27/Nassim_Taleb_and_Daniel_Kahneman_Reflection_on_a_Crisis)
- Frølich N. (2008) “The politics of steering by numbers”, NIFU Step, rapport 3/2008
- Frølich N., Strøm B (2008), Higher Education Funding and Incentives: evidence from the Norwegian funding reform, *European Journal of Education* Volume 43 Issue 4, Pages 563 – 576
- Ferlie E., Musselin C., Andresani G. (2008), The steering of higher education systems: a public management perspective, *Higher Education*, 56, 325-348
- Finocchietti C., Capucci S. (2004), Italy: accreditation in progress, autonomy, minimum standards, Quality Assurance, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Gornitzka A., Kyvik M., Stensaker B. (2003), Implementation analysis in Higher Education, in Gornitzka A., Kogan M., Amaral A (eds), *Reform and change in Higher Education*, Springer, p. 35-56
- Grindle M. and Thomas J. (1991), After the decision: Implementing Policy Reforms in Developing Countries, *World development*, 18, 8
- Harvey L. (2008) *Using the European Standards and Guidelines: Some concluding remarks* in “Implementing and Using Quality Assurance: strategy and practice”, 2° European Quality Assurance Forum – EUA Bruxelles
- Hicks (2009) Evolving regimes of multi-university research evaluation, *Higher Education*, 57, 393 -404
- Hood C. (1998), *The Art of the State*, Oxford University Press, Oxford
- Hood C., James O., Peters B.G., Scott C. (2004), *Controlling Modern Government*, Edward Elgar, Uk - USA
- IHEP (2009), “Impact of college rankings on institutional decision making four country case studies”, Institute for Higher Education Policy; available at <http://www.ihep.org/publications/publications-detail.cfm?id=126>
- Geuna A, Martin B. (2003) “University research evaluation and funding: an international comparison”, *Minerva* 41, 277-304
- Kuhn T. (1962) “The Structure of Scientific Revolutions”, University of Chicago Press

- Lascoumes P., Le Galès P. (2004), *Gouverner par les instruments*, Press de la Fondation Nationale des Sciences Politiques, Paris
- Lepori B., Benninghoff M., Jongbloed B., Salerno C., Slipersaeter S. (2005) "Changing patterns of HE funding: evidence from CHINC countries" *An interim report for the project Changes in University Incomes: Their Impact on University-Based Research and Innovation (CHINC)*, November 2005
- Lepori B. (2006), "Public research funding and research policy: a long-term analysis for the Swiss case", *Science and Public Policy*, volume 33, number 3, April 2006, pages 205–216
- Lepori B., Dinges M., Potì B., Reale E., Slipersaeter S., Theves J., van der Besselaar P., van der Meulen B. (2007), Comparing the evolution of national research policies: what patterns of change?, *Science and Public Policy*, 34 (6), 372-388
- Jeliazkova M., Westerheijden D. (2004), The Netherlands: a leader in Quality Assurance follows the accreditation trend, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerheijden D. (2004) Dordrecht, Kluwer Academic Publisher
- Jongbloed B (2007a), "On Governance, accountability and the evaluative State", in Enders J, van Vught F (eds), *Towards a cartography of higher education policy change*, CHEPS, Enschede, 132-138
- Jongbloed B. (2007b), "Steering the Dutch academic research enterprise: Universities' responses to project funding and performance monitoring" 20th Annual CHER conference University College Dublin 30 August – 1 September, 2007
- Majone G., Wildavsky A. (1978), Implementation is evolution, in Freeman H. (ed.), *Policy Studies Review Annal 2*, Berverly Hills, sage, 103-117
- McLaughlin M.W., 1987, Learning from Experience: Lessons from Policy Implementation, *Educational Evaluation and Policy analysis*, 9, 2, 171-178
- Musseilin C. (2004), *The long march of French universities*, Routledge Falmer, NY
- Musseilin C. (2007), *Are Universities specific organisations?*, in Krucken G, Kosmutzky A., Torka M. (eds), *Towards a Multiversity? Universities between Global Trends and National Traditions*, Verlag, Bielefeld, 63-86
- OECD (2007), "Funding systems and their effects on HE systems - international report", Education Working Paper No. 6 - march 2007
- O'Toole, L. J. (1984), Interorganizational Policy Implementation: A Theoretical Perspective, *Public Administration Review*, 44, p. 491-503
- O'Toole L. J. (2000), Research on Policy Implementation: Assessment and Prospects, *Journal of Public Administration Research and Theory*, 2, 263-288
- Paradeise C, Reale E, Bleiklie I and Ferlie E (eds., 2009), *University Governance: Western European Comparative Perspectives*, Dordrecht, Springer
- Plant, R. (1995). *Managing Change and Making it Stick*. Harper Collins, London
- Potì B. and Reale E. (2007), Changing allocation models for public research funding: an empirical exploration based on project funding data, *Science and Public Policy*, 34 (6) July, pp. 417-430
- Power M. (1999), *The Audit Society: Rituals and Self Verification*, Oxford University Press, Oxford
- Pressman J. and Wildavsky A. (1973, then 1984), *Implementation*, Berkeley University of California Press
- Radaelli C., (2000), Whiter Europeanization? Concept stretching and substantive change, *EIOP Pap.*, 4, 8
- Reale E., Seeber M. (2011), Organisation response to institutional pressures in Higher Education: the important role of disciplines, *Higher Education*, 61, 1-22
- Reichert S. (2008), *Implementing And Using Quality Assurance: Strategy And Practice*. 2° European Quality Assurance Forum – EUA Bruxelles
- Sabatier P. (2003), From policy implementation to policy change: a personal odyssey, in Gornitzka A., Kogan M., Amaral A.(eds), *Reform and chance in Higher*

- Education, Springer, p. 17-34
- Salamon (ed. 2002), *The Tools of the Government: A Guide to the New Governance*, Oxford University Press, Oxford
- Salmi, J. and A.M. Hauptman (2006), "Resource Allocation Mechanisms in Tertiary Education: A Typology and an Assessment"., in *Global University Network for Innovation (Ed.) Higher Education in the World 2006. The Financing of Universities*, Palgrave MacMillan, Basingstoke, U.K. pp. 60-81.
- Sauder M., Espeland W. N. (2009), "The discipline of rankings: tight coupling and organizational change", *American Sociological Review*, Volume 74, Number 1, February 2009 , pp. 63-82(20)
- Schade A. (2004), Shift in paradigm in Quality Assurance in Germany: more autonomy but multiple quality assessment?, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Schwarz S., Westerhejden D. (2004), Accreditation in the Framework of Evaluation Activities: a comparative study in the European Higher Education Area, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Seeber M. (2010), "Steering heterogeneous sciences in the Dutch and Italian higher education systems", CERIS CNR, WP, 4/2010, Rome
- Sivertsen G. (2008), "Experiences with a bibliometric model for performance based funding of research institutions" In *Excellence and Emergence: A new Challenge for the Combination of Quantitative and Qualitative Approaches*, 10th International Conference on Science and Technology Indicators Vienna, Austria
- Sletta K. (2007), "Funding Higher Education Institutions in Norway", Norwegian Ministry of education and research, presentation Latvia, 13. November 2007
- Slipersæter S., Lepori B., Dinges M. (2007), "Between policy and science; research councils responsiveness in Austria, Norway and Switzerland" *Science and Public Policy*, Volume 34, Number 6, July 2007 , pp. 401-415
- Stensaker B. (2004), The blurring boundaries between accreditation and audit: the case of Norway, in 'Accreditation and Evaluation in the European Higher Education Area', eds. Schwarz S., Westerhejden D. (2004) Dordrecht, Kluwer Academic Publisher
- Stensaker B., Kehm B. M. (2009), "Introduction" in *University rankings, diversity, and the new landscape of Higher Education*, Sense publisher
- Sutton R. (1999), *The Policy Process: An Overview*, WP 118, August, London
- Taleb N. N. (2007), "The Black Swan", Random House
- Thèves J., Lepori B., Larédo P. (2007), "Changing patterns of public research funding in France", *Science and Public Policy*, 34(6), July 2007, pages 389–399
- Tversky A., Kahneman D. (1974) "Judgment Under Uncertainty: Heuristics and Biases" *Science*, 185, 1124-1131
- Whitley R. (2007), *Introduction*, in Whitley R. and Glaser J., *The changing governance of the sciences*, Springer, 3-30

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