PhD program:

Doctoral Research in Economics And Management of Technology (DREAMT)

Curriculum: *Economics and Management*XXIX cycle

University of Pavia,

Department of Economics and Management
In collaboration with: University of Bergamo, Department of Engineering

The Impact of Higher Education Reforms in Italy: Governance, Funding, and Interdisciplinarity

Davide Donina

Academic year 2015/16

Supervisor: Prof. Stefano Paleari

Advisor: Prof. Michele Meoli

First-year Tutor: Prof. Silvio Vismara

Reference SSDs: ING-IND/35; SECS-P/07; SECS-P/08; SECS-P/10; SPS/04; SPS/08

Acknowledgements

Special thanks to my parents, to supervisor and advisor, to the scholars I worked with and the reviewers, who gave me feedbacks and suggestions to improve my ideas and articles, and to those friends who stood by me during these three long and difficult years.

Index

Abst	ract	6
1.	Introduction	8
2.	Higher Education as a Field of Research	14
3.	Research Methodology and Data	17
4.	Context of Analysis: The Italian Higher Education Sector	22
5.	Paper collection	26
5.1.	The Neo-Weberian Reform of the Italian Higher Education System Governance	e:
	Tightening Regulation Instead of Steering at a Distance	31
5.2.	Institutional Governance Reform: What Role for new governing bodies?	56
5.3.	Convergence or Divergence in university institutional governance reforms?	
	Comparing Napoleonic states	75
5.4.	Public Funding Allocation Reform: The 'Standard Cost'	99
5.5.	Inconsistencies in the Governance of Interdisciplinarity: The Case of the Italian	n
	Higher Education System	126
6.	Conclusions	154

Index of Figures

Figure 4.1 Trend of Bachelor and Master Students enrolled into Italian universities 23
Figure 5.1.1 Organization chart of 'standard' institutional governance after the
ratification of Law 2404
Figure 5.4.1 Institutional basic funding (FFO) in nominal terms in the period 2009-2016
Figure 5.4.2 Unitary 'standard cost per student' for each Italian state university 112
Figure 5.4.3 Institutional positioning according to teaching cost-effectiveness and
research performance indicators
Figure 5.5.1 Frequency of departments by size
Figure 5.5.2 University size and disciplinary homogeneity of the departments 133
Figure 5.5.3 Frequency of Doctoral courses by number of disciplinary macro areas
involved in 2015/16

Index of Tables

Table 4.1 Universities into the Italian HE system by status and size	22
Table 5.1.1 Bridging the Governance Equalizer Model and Public Managemen	t Reform
narratives	38
Table 5.1.2 Key tasks for and changes to the new main bodies and structures of	f Italian
universities	42
Table 5.1.3 Academic and non-academic staff in the Italian state universities or	n 31
December of each year	45
Table 5.2.1 Comparison of theoretical perspectives on organisational governan	ce 60
Table 5.2.2 Average and standard deviation of the size of governing councils b	
after the reform	
Table 5.2.3 Board size and lay members in the Administrative Board of Italian	State
universities	
Table 5.3.1 New institutional governance archetype	
Table 5.3.2 Bachelor and Master students per university in 2014	
Table 5.3.3 Board size and compositional requirements by law	
Table 5.3.4 Board size and compositional requirements according to university	
Table 5.3.5 Italian and Portuguese institutional governance model compared to	
international archetype	
Table 5.4.1 Comprehensive state universities with the highest and lowest avera	
unitary state funding per student in 2013	_
Table 5.4.2 Components of institutional basic funding (in million €)	
Table 5.4.3 Standard cost components value	
Table 5.4.4 Regression analysis of the determinants of the unitary standard cos	
student	
Table 5.4.5 Regression analysis of the determinants of the teaching efficiency i	
Table 3.4.3 Regression analysis of the determinants of the teaching efficiency i	
Table 5.4.6 Tenure Academic Staff in Italian state universities by age	
Table 5. 1.0 Tellare readeline start in Hallall state universities by age	, 1 <u>4</u> 1

Abstract

The dissertation analyses how reforms from 2010 to 2015 have affected governance, funding, and interdisciplinarity into the Italian higher education sector. A post-positivistic stance is adopted, through mixed method strategy, combining qualitative and quantitative techniques, and using multiple sources of evidence. Data generated from intertextual and qualitative analysis of the contents of official policy documents and university statutes are analysed and triangulated with statistical data retrieved from publicly available national databases, from ministerial decrees as well as from reports on the Italian higher education system. The first three articles analyse the governance at both systemic and institutional levels, the forth article addresses the *public funding* issue, while the last paper inspects the governance of *interdisciplinarity* into the Italian higher education system. Research contributions highlight the value of taking a more holistic perspective on policy and governance issues. The first article aims to evaluate Italian higher education reform according to broader public management narratives. In order to do this, it bridges the public management reform narratives to a model widely employed in higher education literature to evaluate the governance regime of higher education systems, devising thus a new analytical framework to assess higher education reform trajectories within public management narratives, and employs it to position the Italian case. The analysis shows that the public management narrative that complies to explain the Italian reform is the neo-Weberian one rather than new public management. This result brings out a gap in current higher education literature as it challenges the widely shared assumption that the Italian system is being reformed according to new public management trajectory. Concurrently, the article stresses that new public management is not the only way forward governments are employing to reform their higher education systems and further narratives can benefit higher education research. The papers on institutional governance confirm previous result, showing divergent interpretations of supra-national and national policies at governmental and institutional levels. The comparative paper with Portugal highlights divergences in organizational choices of universities in both countries with respect to the institutional governance model driven by new public management concepts, while the article focused on Italy shows that dissimilarities arise even when a unitary national regulation is implemented, and clusters Italian state universities into groups that made similar choices. Other research contributions also support the value of taking a more holistic perspective. Article on funding allocation reform shows that the analysis of a policy change alone can be misleading since it can fit within more public management reform narratives, while the article on the governance of interdisciplinarity stresses that it is the interaction of policies into several governance domains that is crucial to achieve a policy target. Policy and managerial implications of the findings are also discussed.

Keywords

Italy; Higher Education policy; Law 240/2010; Gelmini reform; Public policy; Higher Education system; Universities; Governance; Funding; Interdisciplinarity; Social science; Post-positivism; Case-study; Mixed methods.

1. Introduction

The study of higher education (HE) field is regarded a potential central discipline of the twenty-first century university (Scott 2000). Higher Education is in fact a key sector of welfare state. In the OECD (Organization for Economic Co-operation and Development) countries, on average, 1.5% of Gross Domestic Product (GDP) – of whom 1.3% from public sources, equal to 3.0% of yearly total public expenditures - is spent on it (OECD 2015, pg. 259). Concurrently, higher education is crucial for the future social and economic wellbeing of nations, regions, and individuals. Romer (1986) and Lucas (1988) in the endogenous growth model introduced knowledge - along with physical capital and labour - as a key factor of production that affects economic growth. Nowadays, the pivotal role of knowledge as driver of competitive advantage and the concept of 'knowledge society' (European Council 2000) - according to future wealth depends on creation and exploitation of knowledge - are widely acknowledged (Mathies and Valimaa 2013; Audretsch 2014; Department for Business Innovation & Skills 2016). Therefore higher education sector and universities - the main locus of production (by research) and dissemination (by teaching) of knowledge – have a key role into the XXI century society (Paleari et al. 2015).

Concurrently, due to its weight over public purse, the sector has increasingly been under scrutiny by public authorities. Since late 1970s, European governments modified the governance and organization of their own higher education and research systems and institutions because they were seen as ineffective, inefficient and over-bureaucratised (Enders et al. 2011). Thus, the traditional European continental model of governance based on strong state regulation and academic self-governance was put into question. The reforms redefined state's role and changed the balance of power within each system (Ferlie et al. 2008) in order to increase accountability and efficiency.

The reform process also took place in Italy, but the pace of reforms raised significantly only in recent years, from the enforcement of the Law 240/2010 (so-called 'Gelmini reform'), a comprehensive reform of the Italian higher education system that Parliament passed on 30 December 2010. This dissertation aims to investigate how Gelmini reform and policy changes from 2010 onwards have affected the Italian higher

_

¹ From the name of the former Minister of Education, University and Research. Law is officially titled: "Norme in materia di organizzazione delle Università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l'efficienza del sistema universitario"

education sector, particularly with respect to governance (at both systemic and institutional levels), public funding, and interdisciplinarity.

The research project develops thus a country-focused case study. Though scholars increasingly focused on globalization and similarities among higher education systems worldwide in the last fifteen years (i.e. Marginson and Rhoades 2002; Vaira 2004; Krücken and Meier 2006; Pinheiro and Stensaker 2014), and European Commission and international organizations (such as OECD, World Bank) grew their influence on the sector as funding agencies (i.e. European Research Council, Horizon 2020) as well as source of legitimacy to policy solutions (i.e. Lisbon strategy, Bologna process) -so similar ideas crop up repeatedly in reforms and policy decisions-, every system is still embedded in its own legislative context and regulation (Ferlie et al. 2008). In this regard, national policy-makers sometimes mimic choices taken by other countries, selectively picking ideas and policies, but they overlook the underlying differences and specificities of their own system. As a result, reforms, though formally similar, can vary considerably from one country to the other and higher education systems receive the same policy with dissimilar interpretations and implementations (Bleiklie and Kogan 2007; Paradeise et al. 2009). For instance, European Council recognized the key role of higher education and research to foster social and economic development, hence Lisbon strategy (European Council 2000) -which intended to deal with the low productivity and stagnation of economic growth- stimulated the European Union to commit to the goal of raising overall expenditure on research and development to 3% of Gross Domestic Product (European Council 2002; European Commission 2002). Though these decisions were agreed at European level, the field of higher education is absent into European Union's founding Treaties. The principle of subsidiarity assures in fact educational matters fall under the primary responsibility of individual European states. Accordingly, whatever the European covenant is, national governments make their own choices. While there are nations that meet or close to the target (i.e. Denmark, Finland, Germany), the public gross domestic expenditure in research and development (GERD) in other countries such as Italy is below 1.3 of GDP, among the lowest in OECD and European countries (source: OECD Statistics, year of reference 2014).

A post-positivistic stance is adopted to investigate the reforms of the Italian higher sector, through mixed method strategy, combining qualitative and quantitative techniques, and using multiple sources of evidence. Data generated from intertextual and qualitative analysis of the contents of official policy documents and regulations

promulgated by the state - e.g. Law 240/2010, ministerial decrees, regulations devolved to buffer organizations- and university statutes are analysed and triangulated with quantitative evidence by leveraging on statistical data retrieved from publicly available national databases, ministerial decrees as well as reports on the Italian higher education sector. The empirical analysis examines in-depth these data through different interpretative lenses, developing descriptive statistics, graphs, tables, and figures, as well as conceiving and estimating synthetic indicators and regression models.

Through a collection of five papers, the research project assesses how reforms and policy changes implemented since 2010 affected three concepts - governance, funding, and interdisciplinarity – in the Italian higher education sector. The *first paper* analyses the governance of the higher education system building on sound frameworks derived from political science and public administration studies. The article assesses the redefinition of power sharing arrangement and interprets the role that the state assumes in the light of public management reform narratives. The second paper focuses on institutional governance of Italian state universities filling in the managerial literature. Basing on the selection method of governing board members, the article interprets first what role new governing bodies should have according to the law; second assesses how each university implemented the unitary national regulation in the revision of their own statute and interprets what role every university assigned to the internal governing bodies. The third paper, filling in the debate on whether convergence or divergence is in higher education organizational change, addresses the critique that policies and reforms of national higher education systems pay little attention to the international scenarios (Lazzeretti and Tavoletti 2006). Particularly, higher education governance structures in Southern European counties are under-researched in comparative perspectives. The article develops thus a comparative study with the Portuguese institutional governance reform (Law 62/2007 or RJIES²) in order to assess how these reforms and their implementation affected institutional central governing bodies. The *fourth paper* changes the focus and fills in the literature about funding of higher education system. It presents first how the public budget allocation formula reform (so-called 'standard cost' reform) modified the allocation method of the Italian state universities' general core funding (namely the basic operational grant, Fondo di Finanziamento Ordinario, FFO) -which covers about 55% of the overall Italian state university system budget (ANVUR 2016).

_

² Regime Jurídico das Instituições de Ensino Superior

Second, it identifies the main drivers influencing budget allocation outcomes and estimates how public resources to each institution will change in the next years. Finally, the *last paper* shifts on the thematic area of governance of knowledge and subject-related aspects. The article assesses how the policy portfolio affects interdisciplinarity and whether it is addressed consistently by considering four governance domains recently reformed. Overall, the dissertation highlights the value of taking a more holistic viewpoint to assess reforms and policy changes.

The remainder of the research project is organised as follows. The next section introduces the higher education research field and its peculiarities in respect to established disciplines. The third chapter presents the methodology and data employed in the analysis. Fourth section introduces the context of analysis, namely the Italian higher education sector and its historical model of governance. Chapter 5 is the main body of the dissertation, wherein the collection of five papers is presented. Finally, the Conclusions summarise the main research contributions, and suggests practical, managerial, and policy implications of the findings as well as avenues for future research.

References

- ANVUR (2016). Rapporto biennale sullo stato del Sistema universitario e della ricerca. Roma: ANVUR.
- Audretsch, D.B. (2014). From the entrepreneurial university to the university for the entrepreneurial society. *Journal of Technology Transfer* 39(3), 313-321.
- Bleiklie, I., and M. Kogan. (2007). Organization and governance of universities. *Higher Education Policy* 20(4): 477–493.
- Department for Business Innovation & Skills (2016). Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice.
- Enders, J., H. de Boer, J. File, B. Jongbloed, and D. Westerheijden (2011). Reform of higher education in Europe. In *Reform of higher education in Europe*, edited by J. Enders, H. d. Boer and D. Westerheijden, 1-10. Dordrecht: Sense Publishers.
- European Commission (2002) More Research for Europe: Towards 3% of GDP (September).
- European Council (2000) *Presidency Conclusions* (March), Lisbon, Portugal http://www.bologna-berlin2003.de/pdf/PRESIDENCY-CONCLUSIONSLisbon.pdf
- European Council (2002) *Presidency Conclusions* (March), Barcelona, Spain http://www.bologna-berlin2003.de/pdf/Pres_Concl_Barcelona.pdf.

- Ferlie, E., Musselin, C. and Andresani, G. (2008). The steering of higher education systems: a public management perspective, *Higher Education* 56(3), 325–348.
- Krücken, G., and Meier, F. (2006). 'Turning the University into an Organizational Actor'.
 In G.S. Drori, J.W. Meyer, & H. Hwang (eds.), Globalization and organization.
 World Society and Organizational Change. Oxford: Oxford University Press, 241–257.
- Lazzeretti, L. and Tavoletti, E. (2006). Governance Shifts in Higher Education: a cross-national comparison. *European Educational Research Journal* 5(1), 18-37.
- Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics* 22(1), 3–39.
- Mathies, C. and Välimaa, J. (2013). Is There a Need for a European Institutional Research?. *Tertiary Education and Management* 19(1), 85-96.
- Marginson, S. and Rhoades, G. (2002). Beyond national stetes, markets, and systems of higher education: A glonacal agency heuristic, *Higher Education* 43(3), 281-309.
- Maassen, P., & Olsen, J. P. (Eds.) (2007). *University dynamics and European Integration*. Dordrecht: Springer.
- OECD (2015). Education at a glance 2015, Paris: OECD.
- OECD Statistics accessed at https://data.oecd.org/rd/
- Ongaro, E. (2009) Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain. Cheltenham: Edward Elgar.
- Paleari, S., Donina, D., and Meoli, M. (2015). The Role of the University in Twenty-First Century European Society. *Journal of Technology Transfer* 40(3), 369-379.
- Paradeise, C., Reale, E., Bleiklie, I. and Ferlie, E. (eds.) (2009). *University Governance:* Western European Comparative Perspectives. Dordrecht: Springer.
- Pinheiro, R. and Stensaker. B. (2014). Designing the Entrepreneurial University: The Interpretation of a Global Idea. *Public Organization Review* 14(4), 497-516.
- Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Scott, P. (2000) 'Higher Education Research in the Light of a Dialogue between Policy-Makers and Practitioners', in U. Teichler and J. Sadlak (eds.) *Higher Education Research: Its Relationship to Policy and Practice*. Oxford: Pergamon and IAU Press, pp. 123–147.

Vaira, M. (2004). Globalization and higher education organizational change: A framework for analysis. *Higher Education* 48(4), 483-510.

2. Higher Education as a Field of Research

Nowadays higher education (HE) sector in most countries has high political relevance and is object of intense debates not only within Parliament and amongst political parties, but also in the public opinion. However, many times, these debates over-simplify the high degree of complexity of this public policy sector. A wide array of skills and competences are requested in order to understand the functioning of HE systems and universities. They are not available in a single disciplinary field, but are spread among many cognitive areas. For this reason, scientific research into the HE field is diversified and fragmented, located within a wide range of disciplines (Teichler 2005) such as -among others- philosophy of science, sociology, political sciences, science policy, public policy, public administration, management, economy, organizational studies, regional studies, development, psychology, and teacher training. Accordingly, HE research is very interdisciplinary and presents peculiarities with respect to established disciplines. On the one hand, it benefits from multiple perspectives with theories, methodologies, and research designs borrowed from other disciplines, so a variety of theoretical and methodological frameworks is applied and studies are heterogenous. On the other hand, it has become relatively detached from its 'mother disciplines' and 'nearby domains' (Maassen 2000). Theories and analytical models have been developed within HE literature itself, mixing and integrating theoretical, methodological and practical underpinnings (Tight 2015). For these reasons, HE research lacks a coherent theoretical and methodological framework (Scott 2000) and accepted disciplinary characteristics (Teichler 2000), in spite of the field would benefit from a more holistic view to tackle its complexities.

A rationale of its interdisciplinary nature is that HE research established to respond to social demands or public interests rather than covering an epistemological or disciplinary evolution. It presents indeed the characteristics of soft-applied knowledge, being more practically than theoretically oriented, object- and problem-driven, and applied (El-Khawas 2000; Teichler 2000). In accordance to these characteristics, different types of researchers are recognizable: i) academic researchers searching for general explanations, ii) policy-related researchers identifying policy options for particular issues, and iii) institutional researchers (in North America and Australian HE it is a well-established field and it is often referred to as internal institutional data analysis procedures

and processes; Mathies and Välimaa 2013), seeking context-specific solutions to institutional problems (El-Khawas 2000).

Moreover, HE research presents different historical roots and different foci in world regions. Regarding the historical roots, this research field was already acknowledged in the 1960s in the United States (i.e. the Center for Studies in Higher Education –CSHE–in UCLA, Berkley was established in 1957), while it emerged as research area only in the 1980s in Europe. Looking at the research foci, another specificity is that it is a multi-level and multi-actor field. Thus studies on HE range from micro-level (e.g. students' learning style, academic work) to macro-level phenomena (e.g. national HE system reforms, globalization) and address a wide array of objects of study: policies, structures (interactions), governance and so forth (Saarinen and Ursin 2012). Again, there are geographical differences. Research in the United States is more practice-focused and interested mainly on meso- and micro-levels, while on the European side it focuses more on policy and macro-level (Scott 2000).

In sum, Teichler (2000; 2005) classified the objects of study of HE research into four main thematic areas: i) quantitative-structural aspects (e.g. elite and mass HE, educational and employment opportunities), ii) knowledge and subject related aspects (e.g. academic versus professionalism, skills and competences), iii) person- or teaching-and learning-related aspects (e.g. guidance and counseling, teaching and learning styles), and iv) aspects of institution, organization and governance (e.g. management, funding). Alongside these areas, more recently new objects of study such as v) knowledge and technology transfer; vi) research, innovation and creativity; and vii) ranking, evaluation, and competition emerged.

Due to all its peculiarities, the overall level of research investment in the HE field remains low despite its potential value for policy-makers, HE managers, and society in general (Locke 2009). There are few professorships, research centres, and study programmes on HE in (continental) Europe and only a limited number of academic researchers devote themselves full-time and long-term to researching on HE. Most scholars come from and remain based on other disciplines and departments, devoting themselves part-time and/or short-term to this field (Tight 2015). Nonetheless closer links between HE research and core stakeholders are increasingly requested. Policy-makers are in need of both new ideas for the development of their HE sector, as well as of policy analysts for the evaluation of the status quo and the impact of their reforms. Consequently, the number of doctoral students undertaking research in the field is increasing (The

Higher Education Conference 2016) and, as Scott (2000) suggested, the study of HE itself could be the central discipline of the twenty-first century university.

References

- El-Khawas, E. (2000). Patterns of Communication and Miscommunication between Research and Policy. In S. Schwarz and U. Teichler (eds.) *The Institutional Basis of Higher Education Research: Experiences and Perspectives*. Dordrecht: Kluwer, pp. 45–56.
- Locke, W. (2009). Reconnecting the Research-Policy-Practice Nexus in Higher Education: 'Evidence-Based Policy' in Practice in National and International Contexts. *Higher Education Policy* 22(2), 119-140.
- Mathies C. and Välimaa J. (2013). Is There a Need for a European Institutional Research?. *Tertiary Education and Management* 19(1), 85-96.
- Maassen, P. (2000). Higher Education Research: The Hourglass Structure and Its Implications'. In U. Teichler and J. Sadlak (eds.) *Higher Education Research: Its Relationship to Policy and Practice*. Oxford: Pergamon and IAU Press, pp. 59–67.
- Saarinen and Ursin (2012). Dominant and emerging approaches in the study of higher education policy change. *Studies in Higher Education* 37(2), 143-156.
- Scott, P. (2000). Higher Education Research in the Light of a Dialogue between Policy-Makers and Practitioners. In U. Teichler and J. Sadlak (eds.) *Higher Education Research: Its Relationship to Policy and Practice*. Oxford: Pergamon and IAU Press, pp. 123–147.
- Teichler, U. (2000). The Relationships between Higher Education Research and Higher Education Policy and Practice: The Researchers' Perspective. In U. Teichler and J. Sadlak (eds.) *Higher Education Research: Its Relationship to Policy and Practice*. Oxford: Pergamon and IAU Press, pp. 3–34.
- Teichler, U. (2005). Research on higher education in Europe. *European Journal of Education* 40(4), 447–69.
- The Higher Education Conference (2016), http://www.hec2016.org/
- Tight, M. (2015). Theory Development and Application in Higher Education Research: Tribes and Territories. *Higher Education Policy* 28(3), 277-293.

3. Research Methodology and Data

The research project adopts a *post-positivistic* philosophical approach (also called post-empiricism). This meta-theoretical stance critiques and aims to amend positivism. Positivist philosophical assumptions and ensuing realist-objectivist methodologies rest on the faith in the existence of an objective social world (realist ontology), and the possibility of objective know-ability to understand reality in unbiased ways (objectivist epistemology), believing thus the researcher and researched object independent of each other (Schwartz-Shea and Yanow 2012; Schwartz-Shea forthcoming). Like positivists, post-positivists pursue objectivity, but—contrarily to formers- they recognize the possible effects of biases and accept that theories, background, knowledge and values of the researcher can influence what is observed (Robson 2002). This epistemological vision is more in line with interpretative social science research, which—believing reality as socially constructed (constructivist ontology; Berger and Luckmann 1966)- assumes that the researcher takes part in sense-making and representation of these meaning (interpretative epistemology) (Schwartz-Shea and Yanow 2012; Schwartz-Shea forthcoming).

In order to shed light on how recent reforms affected the Italian HE sector, the research project develops a case study on the Italian HE system through a mixed method strategy and using multiple sources of evidence. The case study is the appropriate research method to address how- or why-questions in a real-life setting with low levels of investigator control (Yin 1989). It is a common for public policy analysis and most of the literature that I mention in the papers addresses research questions through this method (i.e. Gornitzka and Maassen 2000; Kehm and Lanzendorf 2006; Paradeise et al. 2009; Musselin and Teixeira 2014). At the same time, the research design applies a mixed method strategy to address properly the multifaceted world of higher education research. Thus I exploit several theoretical streams of social sciences literature such as neo-institutionalism, theory of organizations, theory of policy design, and public administration/management reform narratives as well as theories and frameworks developed within higher education literature such as the 'governance equalizer model'.

The analysis is supported by the use of multiple sources of evidence (Yin 1989) - particularly policy documents, facts and statistics, as well as previous literature-, combining qualitative and quantitative techniques (Eisenhardt 1989). I apply qualitative intertextual analysis of the contents of official policy documents issued in the period from

2010 to 2015 (Law 240/2010 text promulgated by the government, and ensuing regulation) and university statutes. Law 240/2010 approved by the Italian Parliament on 30 December 2010 is in fact a *delegation law* (Ongaro 2009). It determines the general content of the regulation, devolving detailed recommendations to the ensuing ministerial decrees promulgated by the Ministry of Education, University, and Research (MIUR), as well as to buffer organizations like the government-mandated agency for quality assurance (the Italian National Agency for the Evaluation of Universities and Research Institutes, ANVUR), and the elective advisory body representing Italian academics (the Italian National University Council, CUN). In order to assess how individual universities transformed the formal requirement of Law 240/2010 into their own statutes, a 'synoptic table of the governance choices of Italian universities' has been built. It summarizes the main choices of all Italian universities regarding the composition and selection rules of central governing, management, and evaluative bodies, and the formal requirement regarding internal organizational structures. The same dataset regarding board composition and selection criteria of their members has been collected for Portuguese state universities. The qualitative analysis is triangulated with quantitative evidence. Statistical data retrieved from publicly available national databases on the Italian HE sector (Statistica MIUR, Cineca), from ministerial decrees as well as from reports written by the MIUR and buffer organizations have been collected and employed to assess changes in the Italian HE system and universities.

The empirical analysis examines in-depth these data according to different interpretative lenses, developing when useful and appropriate descriptive statistics and graphs, conceiving tables and figures to summarize theoretical and practical contributions, and estimating synthetic quantitative indicators and regression models to facilitate the interpretation. In detail, methods and research tools used in each paper are presented below.

Regarding the governance of the HE system, most of the available literature contextualized European higher education reform within New Public Management theoretical framework (NPM; i.e. Kehm and Lanzendorf 2006; de Boer et al. 2007; 2010; Musselin and Teixeira 2014). Yet scholars of public management in Mediterranean countries have shown that reforms in these countries have some elements borrowed from the NPM toolkit, but a focus on them alone gives a distorted picture because these states followed NPM in only limited and selective ways (Kickert 2007; Ongaro 2009). Therefore, the *first paper* of the collection addresses the misfit between the expectations

based on the New Public Management theory and the practice into the Italian HE context. In order to disentangle the tensions, the article analyses and interprets the governance regime of the Italian HE system with respect to three theoretical public management reform narratives identified by the broader public management literature. Rather than choosing ex-ante one of the narratives as framework, the article presents all of them and bridge to the Governance Equalized Model, a widely employed model in HE literature to assess the governance regime and power sharing arrangements into HE systems. In this way, I develop a new analytical framework that links HE reforms to broader public management reform narratives. Then I analyse the main changes that occurred in Italian HE system governance according to the five dimensions of the Governance Equalized Model, and only ex-post I identify by abductive reasoning which public management reform narrative explains better the reform trajectory of the Italian HE system governance.

The *second* paper approaches organizational change of Italian state universities, focusing on institutional governance. The paper grounds on a taxonomy based on different theories regarding the board role -which suggest different methods to select board members- and on composition (i.e. share of external members) and procedures for the selection of collegial governing bodies' members (i.e. election versus appointment) according to the new statute of every Italian state university. First, the article interprets the role governing bodies should have according to the law; second it analyses whether there are dissimilarities in the interpretation and implementation of the unitary national regulation at institutional level and clusters Italian universities into groups that made similar choices.

The *third* paper addresses the lack of comparative studies with respect to Southern European countries and provides a comparative analysis on the same issue with another country (Portugal) recently reformed. The article investigates how HE reforms (Law 62/2007 or RJIES in Portugal and Law 240/2010 in Italy) and their implementation affected institutional central governing bodies by considering institutional decision-making power allocation, rector selection method, governing bodies' composition, and criteria for selection of their members.

The *fourth* paper moves on another major change that affected the Italian HE system: the *public budget allocation formula* reform (also called 'standard cost' reform). After presenting the rationale of the reform, the article first introduces the new funding formula explaining which variables are considered by the Ministry of Education,

University, and Research (MIUR) to allocate funds. Second, employing allocation outcome data collected from ministerial decrees, I map the redistributive effect to explain the budgeting variations of each university according to two key performance indicators (one teaching- and the other research-related). Third, the article conceives and tests a more parsimonious and transparent ordinary least square regression model on a different set of variables than those employed by the Ministry in order to pinpoint the main drivers influencing budget allocation outcomes and to verify whether the allocation reform is leading to a rebalance of public funding among institutions. Finally, the article interprets which is the budgeting theory that explains the Italian public funding allocation reform.

Lastly, the *fifth* paper focuses on the thematic area of knowledge and subject related aspects, particularly the governance of interdisciplinarity into the Italian HE system. The article adopts the more holistic viewpoint of policy portfolio and explores whether it recognizes the interdisciplinary target, how supposedly affects it, and whether the policy portfolio addresses interdisciplinarity consistently. Four governance domains, all object of reforms in the period from 2010 to 2015, are considered: i) universities' internal organization, ii) institutional research assessment exercise, iii) doctoral education, and iv) academic recruitment/careers. The interaction and consistency of the policies are assessed both within and between governance domains by triangulating evidence from qualitative analysis of the contents of policy documents and regulations designed by the government, MIUR, and buffer organizations, and evidence from quantitative analysis of universities' internal changes related to these policies.

References

- Berger, P.L. and Luckmann, T. (eds.) (1966). *The Social Construction of Reality. A Treatise in the Sociology of Knowledge*. London: Penguin Books.
- de Boer, H.F., Enders, J. and Schimank, U. (2007) 'On the ways towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria and Germany' in D. Jansen (ed.) *New Forms of Governance in Research Organizations: Disciplinary Approaches, Interfaces and Integration*, Dordrecht: Springer, pp. 137–152.
- de Boer, H., Huisman, J., and Meister-Scheytt, C. (2010). Supervision in 'modern' university governance: boards under scrutiny. *Studies in Higher Education* 35(3), 317-333.

- Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of Management Review*, 14/4: 532–50.
- Gornitzka, Å. and Maassen, P. (2000). National Policies Concerning the Economic Role of Higher Education. *Higher Education Policy* 13(3), 267–285.
- Kehm, B.M. and Lanzendorf, U. (eds.) (2006) *Reforming University Governance:* Changing Conditions for Research in Four European Countries, Bonn: Lemmens.
- Kickert, W. (2007). Public Management Reforms in Countries with a Napoleonic State Model. In C. Pollitt, S. van Thiel, and V. Homberg (eds.) New Public Management in Europe: Adaptation and Alternatives. Basingstoke: Palgrave Macmillan, pp. 26– 51.
- Musselin, C. and Teixeira, P.N. (eds.) (2014). *Reforming Higher Education. Public Policy Design and Implementation*. Dordrecht: Springer.
- Ongaro, E. (2009). Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain. Cheltenham: Edward Elgar.
- Paradeise, C., Reale, E., Bleiklie, I. and Ferlie, E. (eds.) (2009) *University Governance:* Western European Comparative Perspectives, Dordrecht: Springer.
- Robson, C. (2002). Real World Research. A Resource for Social Scientists and Practitioner-Researchers. Malden: Blackwell.
- Schwartz-Shea, P., and Yanow, D. (2012). *Interpretive Research Design: Concepts and Processes*. New York and London: Routledge.
- Schwartz-Shea, P. (Forthcoming). Interpretive social science. In *Encyclopedia of Political Thought*, ed. Michael Gibbons. Wiley-Blackwell Publishers, DOI:10.1002/9781118474396.wbept0533.
- Yin, R.K. (1989) Case study research: Design and methods. Thousand Oaks, CA: Sage.

4. Context of Analysis: The Italian Higher Education Sector

The Italian higher education (HE) sector is a unitary system, namely it comprises only university-type HE institutions. They divide between state and non-state universities.

State universities are 66 including comprehensive universities, polytechnics (namely technical universities—the only difference with traditional university is that they are specialized in the fields of engineering and architecture), one university specialized in sports training, two universities for foreigners, and five small institutions specialized mostly or exclusively in doctoral training. The number of students enrolled per institution vary greatly: from few hundred students in institutions specialized in doctoral training to one university (Roma La Sapienza) with more than 100,000 students enrolled (data from Statistica MIUR).

Non-state HE sub-system includes further 29 universities: 19 traditional universities and 11 long-distance learning universities. The majority of non-state universities are private, but this group includes as well four public (non-state) universities (Aosta, Bolzano, Enna, and Reggio Calabria for foreigners), which were founded, are funded and owned by the local public authority (the Region or the Province), and are subject to the same regulation of private universities. Most of non-state institutions are small: only two private institutions (Cattolica and Bocconi) enrol more than 10,000 students.

Table 4.1 summarizes the composition of the Italian HE system by state vs nonstate status and size of the institutions.

Table 4.1 Universities into the Italian HE system by status and size³ (academic year 2014/15)

2014/15	State universities	Traditional non-state universities	Long-distance learning non-state universities
Total	66	19	11
Mega	12		
Big	15	1	
Medium	17	1	1
Small	22	17	10

Source: Reprocessing data from Statistica MIUR

³ **Mega Universities:** More than 40.000 bachelor and master students; **Big Universities:** Amongst 20.000 and 40.000 bachelor and master students; **Medium Universities:** Amongst 10.000 and 20.000 bachelor and master students; **Small Universities:** Less than 10.000 bachelor and master students

22

In the academic year 2014/15, students enrolled in state universities were about 1.5 million (with a declining trend in the last years, see Figure 4.1), instead non-state universities enrolled about 150 thousand students, two third in traditional universities (half of them in the two private universities previously cited: Cattolica and Bocconi) and one-third in long-distance learning institutions.

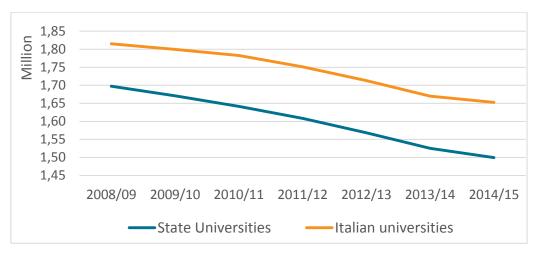


Figure 4.1 Trend of Bachelor and Master Students enrolled into Italian universities

Source: Reprocessing data from Statistica MIUR

The governance of the Italian HE system was a typical example of a centralized Napoleonic model. HE and research were seen as part of the public service, universities as public agencies, and academic staff had civil servant status. Administrative action tended towards uniformity: laws and ministerial decrees defined detailed rules for all institutions (management for processes), and the university organizational culture was highly legalistic and procedural: administrative personnel's main function was to check that universities respected the law (Reale and Potì 2009). Collegial decision-making bodies, mainly composed of professors, dominated internal university governance, while institutional leadership was weak: the rector was an academic elected as a *primus inter pares* and his/her main roles were internal consensus building, mediating among different, often divergent, interests of internal groups (Capano 2008). Accordingly, Clark (1983) described Italian HE governance as combining the authority of state bureaucracy and of faculty guilds, while Braun and Merrien (1999) defined Italian governance as an example of the 'bureaucratic-oligarchic' model typical of the continental European tradition.

Law 168/1989 introduced structural changes and greater autonomy and accountability as the new principles for regulating the relationship between the state and universities. From the mid-nineties, reforms granted the institutional level more autonomy and decision-making power, by shifting the funding system from a line-item to a lump-sum budgeting model, and moving recruitment decisions from national to university-selected disciplinary committees. However, the MIUR preserved the same professional powers and duties: rules for recruitment, civil servant status of personnel, level of salaries, ceiling on personnel expenditure and student tuition fees, and basic rules for the composition of university governing bodies remained centrally established. At institutional level, the two main collegial governing bodies (the Administrative Board and the Academic Senate) mainly composed of academic staff and which presented large-scale isomorphism in their composition held the main powers. Indeed, external regulation by the state through a large number of detailed rules and academic self-governance were again the dominant dimensions of governance.

In this context, academic disciplines were the backbone of higher education sector. Italian HE system was structured into 14 *disciplinary macro-areas*⁴ and nearly 400 *disciplinary sectors*, the so-called 'settori scientifico disciplinari' (SSDs; Law 127/1997 and ministerial decree of 26 June 2000), which are the smallest units of disciplinary research in Italy. The disciplinary taxonomy was used by the government to create a central regulation scheme for teaching and research and by academics through the national disciplinary communities and professional associations to exercise their influence over the reward system and career decisions (Paradeise et al. 2009). In sum, Italian universities were a kind of confederation of chair-holders and disciplinary groups (Capano 2014).

In this context, Law 240/2010 ('Gelmini reform') was approved by the Italian Parliament on 30 December 2010. Rationales were to increase autonomy, accountability, and quality (Reale and Primeri 2014) 'in accordance with the principles of simplification, effectiveness, transparency, and efficiency' (Law 240/2010, Article 2).

⁴ 1. Mathematics; 2. Physics; 3. Chemistry; 4. Geology; 5. Biology; 6. Medicine; 7. Agricultural Science; 8. Architecture and Civil Engineering; 9. Engineering and Informatics; 10. Humanities; 11. Philosophy, History, Pedagogy, and Psychology; 12. Law; 13. Economics; 14. Social and Political Science.

References

- Braun, D. and Merrien, F.-X. (1999). *Towards a new model of Governance for Universities? A comparative view*. London: Jessica Kingsley.
- Capano, G. (2008). Looking for Serendipity: The Problematic Reform of Government within Italy's Universities. *Higher Education* 55(4), 481–504.
- Capano, G. (2014). The Re-Regulation of the Italian University System through Quality Assurance. A Mechanistic Perspective. *Policy and Society* 33(3), 199-213.
- Clark, B. (1983). *The Higher Education System. Academic organization in Cross-national perspective*. Berkeley and Los Angeles: University of California Press.
- Paradeise, C., Bleiklie, I., Enders, J., Goastellec, G., Michelsen, S., Reale, E. and Westerheijden, D.F. (2009). Reform Policies and Change Processes in Europe. In J. Huisman (ed.) *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*. London: Routledge, pp. 88–106.
- Reale, E. and Potì, B. (2009). Italy: Local Policy Legacy and Moving to an 'In Between' Configuration. In C. Paradeise, E. Reale, I. Bleiklie and E. Ferlie (eds.) *University Governance: Western European Comparative Perspectives*. Dordrecht: Springer, pp. 77–102.
- Reale, E., and Primeri, E. (2014). Public Policy Design and University Reform: Insights into Academic Change. In: Musselin C & Teixeira P N (eds.) *Reforming Higher Education: Public Policy Design and Implementation*. Dordrecht: Springer, pp. 39-63.

5. Paper collection

The research project is composed of five papers that fill in the policy-related and institutional types of research (El-Khawas 2000) and cover two of the thematic areas suggested by Teichler (2005): institution, organization and governance (management and funding) and knowledge and subject related aspects (interdisciplinarity).

The first three papers focus on HE organization and governance, which are analysed at both systemic and institutional level. The *first paper* addresses the Italian HE system governance. The origins of 'system governance' in HE can be traced back to scholars in the 1980s that noted a gradual change in the governments' steering philosophies. The word 'governance' replaced 'government' and 'policy' to capture a change from an all-seeing government with a close watch on public HE towards an environment in which a multitude of stakeholders at different levels are involved in the steering of the HE systems (Rhodes 1996; Huisman 2013). Key macro-elements of such changes are increasing institutional autonomy, introduction of market mechanisms typically inspired by New Public Management principles- and shift in policies from exante to ex-post evaluation. Therefore scholars, building on sound frameworks derived from political science and public administration studies, started to investigate the impact of new policies at system level. Filling in this literature stream, the article takes a structural approach to policy change and investigates the redefinition of the state role in the light of public management reform narratives. The structural approach highlights that changes to HE policies occur within structures or socially constructed entities in which relationships occur (it juxtaposes to actor-centred approach that focuses on individual and collective actors as driving force of policy change; Orr and Jaeger 2009; Saarinen and Ursin 2012). I identify which is the management reform narrative that better explains the Italian reform trajectory, and how Law 240/2010 and following policy changes have affected the power sharing arrangement and coordination mechanisms in the Italian HE system. Despite reform rhetoric was influenced by the New Public Management, research contribution shows that it is the Neo-Weberian reform narrative that explains better the actual features of the Italian HE system (i.e. tightening regulation, centralisation of power in the hands of state, elected rector, etc.).

The *second paper* approaches organizational change of Italian state universities focusing on institutional governance. Although literature stresses that reform efforts aim to turn universities into more complete organizational actors (Krücken and Meier 2006)

and to strengthen their corporate identity (Whitley 2008; Braun 2014; Seeber et al. 2015), most European universities are not free to choose their own internal governance structures. In fact, HE laws define details of governance bodies, decision-making processes and other relevant procedures for public universities (Kretek et al. 2013; Musselin and Teixeira 2014). Law 240/2010 also forced all state universities to revise their own statutes to comply with the new regulation. The paper thus fills in the managerial literature and analyses how Italian universities revised their statutes and formal governance and management structures in order to assess whether Italian state universities have incorporated the principles of the new law coherently with its political aims. The article shows dissimilarities in the implementation of a unitary national regulation and clusters Italian universities into groups that made similar choices.

The third paper fills into the debate on whether convergence or divergence is in HE organizational change, while addressing the lack of comparative studies with respect to Southern European countries. The article considers the Italian and Portuguese institutional governance reforms and develops a multi-level analysis, first addressing how international concepts prompted by international organizations (i.e. OECD, World Bank) have been translated into national laws ('Gelmini' reform in Italy and RJIES in Portugal); second assessing how all state universities in both countries implemented them by analysing their new statutes. Research findings show that, despite somewhat different national regulation, universities in the two countries converged towards similar choices about the composition of their main governing body, but the convergence is toward a different institutional governance model with respect to the one promoted by international organizations. Thus, the article shows that the same governance archetype develops very differently in various administrative traditions. In this regard, organizational allomorphism is more apt than both converge and divergence to explain the changes. In addition, the article stresses that both Italy and Portugal preserve traits of their previous institutional governance model (i.e. directly elected rectors in Italy; larger board in Portugal), showing that the historical-institutional context influences and limits feasible policy alternatives.

The *fourth paper* turns on another major change that affected the Italian HE system: the *public budget allocation formula* reform (also called 'standard cost' reform). It modified the allocation method of Italian state universities' basic operational grant (*Fondo di Finanziamento Ordinario*, FFO), which covers about 55% of the overall Italian state university system budget (ANVUR 2016). Filling in the literature on financial

management reforms and different approaches to cut-making in times of public-spending austerity, the contribution analyses the impact of the new funding allocation method. Findings show that the new formula increases equity in state funding among Italian universities, namely the new formula assigns a more balanced amount of public resources per student to every state university, concurrently taking into account differences in the cost of education among disciplinary macro-areas (while institutional research performance is considered in a different funding line - the performance-component).

Finally, the last paper focuses on the thematic area of knowledge and subject-related aspects within the Italian HE system. Since interdisciplinary research is widely considered pivotal to address the grand challenges of modern society (Nature 2015), the fifth article assesses the governance arrangements for interdisciplinarity into the Italian HE system. Previous studies in this literature stream focused mainly on Anglo-Saxon contexts and on a single policy instrument at a time. Yet in recent decades scholars of public policies stressed that it is the interaction of policy instruments that is crucial for achieving policy goals (Howlett and Rayner 2013). Accordingly, I adopt a policy portfolio perspective on four governance domains recently reformed to investigate whether interdisciplinarity is recognised as a target by Italian HE policy, and how the policy portfolio supposedly affects it. Findings evidence that, though some elements potentially favouring interdisciplinarity have been introduced, a disciplinary rationale still dominates the Italian HE system governance, while inconsistencies emerge both within and between governance domains. The article stresses thus that the interdisciplinary target may be hindered not only by the dominance of a disciplinary rationale, but also by inconsistencies within and between governance domains because they provide contradictory and conflicting signals to individual scholars and universities.

References

- ANVUR (2016). Rapporto biennale sullo stato del Sistema universitario e della ricerca. Roma: ANVUR.
- Braun, D. (2014). Governance of Universities and Scientific Innovation. In C. Musselin and P.N. Teixeira (eds.), *Reforming Higher Education*. *Public Policy Design and Implementation*. Dordrecht: Springer, 145-173.
- El-Khawas, E. (2000). Patterns of Communication and Miscommunication between Research and Policy. In S. Schwarz and U. Teichler (eds.) *The Institutional Basis of*

- *Higher Education Research: Experiences and Perspectives.* Dordrecht: Kluwer, pp. 45–56.
- Howlett, M., and Rayner, J. (2013). Patching vs packaging in policy formulation: Assessing policy portfolio design. *Politics and Governance* 1(2), 170–182.
- Huisman, J. (2013) *System and Institutional Governance in Higher Education: A Researcher's Goldmine*, accessed online at http://www.lhmartininstitute.edu.au/ http://www.lhmartininstitute.edu.au/ http://www.lhmartininstitute.edu.au/ http://www.lhmartininstitute.edu.au/ http://www.lhmartininstitute.edu.au/
- Kretek, P.M., Dragšić, Ž., and Kehm, B.M. (2013). Transformation of university governance: on the role of university board members. *Higher Education* 65(1), 39-58.
- Krücken, G., and Meier, F. (2006). Turning the University into an Organizational Actor. In G.S. Drori, J.W. Meyer, and H. Hwang (eds.), *Globalization and organization*. World Society and Organizational Change. Oxford: Oxford University Press, 241–257.
- Musselin, C. and Teixeira, P.N. (2014). Introduction. In C. Musselin & P.N. Teixeira (eds.), *Reforming Higher Education. Public Policy Design and Implementation*. Dordrecht: Springer, 1-17.
- Nature (2015). Why interdisciplinarity research matters. *Nature* 525(7569), 305.
- Orr, D. and Jaeger, M. (2009). Governance in German Higher Education: Competition Versus Negotiation Of Performance. In J. Huisman (ed.), *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*. London: Routledge, pp. 13–32.
- Rhodes, R.A.W. (1996). The new Governance: Governing without Government. *Political Studies* 44(4), 652-667.
- Saarinen and Ursin (2012). Dominant and emerging approaches in the study of higher education policy change. *Studies in Higher Education* 37(2): 143-156.
- Seeber et al. (2015). European Universities as Complete Organizations? Understanding Identity, Hierarchy and Rationality in Public Organizations. *Public Management Review* 17(10), 1444-1474.
- Teichler, U. (2005). Research on higher education in Europe. *European Journal of Education* 40(4), 447–69.

Whitley, R. (2008). Constructing Universities as Strategic Actors: Limitations and Variations. In L. Engwall and D. Weaire (eds.) *The University in the Market*. Colchester: Portland Press, pp. 23-37.

5.1. The Neo-Weberian Reform of the Italian Higher Education System Governance: Tightening Regulation Instead of Steering at a Distance⁵

There is nothing a government hates more than being well informed (J.M. Keynes, 1937)

Abstract

In December 2010, a comprehensive reform (Law 240/2010, or 'Gelmini reform') changed the institutional governance and internal organization of Italian state universities. This paper investigates the redefinition of the state role in the light of public management reform narratives, linking them to the Governance Equalizer Model to evaluate how the on-going reform process has affected the power sharing arrangement and coordination mechanisms in the Italian higher education system. Rhetoric of reform was influenced by the New Public Management narrative; Law 240 was presented as a fundamental change to the traditional Italian governance regime, based on detailed state regulation and academic self-governance. In practice, contradictions between the rhetoric of the reform and the effectiveness of implementation are evident: Italian reform complies more with the Neo-Weberian narrative and it did not have any substantial impact on power distribution.

Keywords: University governance; Higher education reform; Public management reform narratives; Governance regime; Italy; Gelmini Reform.

Introduction

Since the late 1970s, European governments began to reform the governance of higher education (HE) and research systems, redefining the state's role and changing the balance of power within each (Ferlie et al., 2008). Many European countries developed policies of 'steering at a distance' (Kickert, 1995) by reducing state control and increasing autonomy, shifting from a centrally planned model to a more self-regulated one. Coordination mechanisms changed from a traditional state-dominated regulation to an approach wherein various actors play a role ('multi-actor governance').

_

⁵ A version of this chapter co-authored with Stefano Paleari and Michele Meoli has been published on *Higher Education Policy* (2015), 28(2), 215-234, with the title 'Higher Education Reform in Italy: Tightening Regulation Instead of Steering at a Distance'. In the published version, sections 'Theoretical framework', 'Bridgding Governance Equalizer Model and Public Management Reform Narratives' and 'Coordination Mechanisms...' are fully my contribution; 'Introduction' and 'Discussion and Conclusions' are written jointly with the co-authors. Instead, I am responsible for all the changes in this chapter with respect to published version.

The reform process also took place in Italy. The Parliament passed Law 240 of 30 December 2010 ('Gelmini reform'), a comprehensive reform of institutional governance and internal organization of Italian state universities, which proclaims autonomy and accountability as its basic principles (Article 1). This paper analyses how the narratives of public management reform affected the Italian HE system reform trajectory and how the state role changed. However, we do not only aim to evaluate the state-university relationship, but also to examine how other actors interact and develop their activities to steer the system. To do this, we address the consequences of the on-going reform process on the power-sharing arrangement and coordination mechanisms in the Italian HE system, employing the Governance Equalizer Model, a framework already employed in previous historical and international comparative studies (Kehm and Lanzendorf, 2006; de Boer et al., 2007; CHEPS, 2009; Schimank and Lange, 2009; Westerheijden et al., 2009). We set up the theoretical and analytical framework of the paper, by connecting the Governance Equalizer Model to the public management reform narratives. Then, we employ its governance dimensions to analyse the Italian case study.

The contribution of the paper is twofold. First, we contribute to the theoretical literature on HE reforms and coordination mechanisms by bridging the Governance Equalizer Model to the public management reform narratives. Second, from the analysis of the Italian case study, we show that the Italian reform, rather than the New Public Management (NPM) approach, which has been dominant in the HE policy literature, has been following a different trajectory, taking a Neo-Weberian path.

The article starts by presenting the main narratives of reforms in public management literature. The following sections make a literature review on the relationship between the state and universities and on the coordination mechanisms in HE systems, presenting the Governance Equalizer Model and its dimensions (external regulation, external guidance, competition, academic self-governance, and managerial self-governance), and link it to public management reform narratives. Afterwards, we turn the focus on the Italian case, before presenting the historical context of the Italian HE policy and the climate in which the new act was passed, then analysing the actual power distribution in the university governance according to the five governance dimensions. Finally, we conclude with a discussion of how coordination mechanisms in the Italian HE sector have changed and we identify which public management reform narrative better explains the on-going reform. We argue that, although the new legal

framework was supposed to represent a turnaround, it continues to tightly regulate the HE system and has not substantially affected the Italian HE governance regime.

Theoretical framework: Narratives of public management reform

Higher Education institutions (HEIs) have always been considered a special type of organization. Mintzberg (1979) described universities as professional bureaucracies, because they operate within a strongly structured institutionalized field, while academics are characterized by a high degree of autonomy. Indeed, universities were defined as loosely coupled organizations (Weick, 1976), wherein single organizational units have great autonomy even if they formally belong to the same organization, and university governance as 'organized anarchy' (Cohen et al., 1972; Cohen and March, 1974), because the units pursue autonomous interests with a limited influence of central decisions. For these specific reasons, during the 20th century, HE governance was generally studied as a 'stand-alone' sector of state intervention, not directly or easily comparable with other types of organization, even within the public sector (Maassen and Olsen, 2007; Ferlie et al., 2008).

However, the transformations recently experienced in the HE sector are similar to those undergone by other key public services. Therefore, recent studies evaluated HE sector reforms within the main narratives of public services reform, and transformation of the HE systems in last decades has been frequently associated with the NPM narrative. However, in public management literature, Pollitt and Bouckaert (2011) identified two further narratives to conceptualize reforms: Network Governance and Neo-Weberian state. Each narrative can be linked to specific conceptions and theories regarding the state role and relations between the state and society. Ferlie et al. (2008) has detailed the manner in which each applies to the HE sector.

The *NPM* refers to a well-known public sector reform wave, which started in the late 1970s during the economic downturn in Anglo-Saxon countries as reaction against traditional bureaucracy and 'big government' (Pollitt and Bouckaert, 2011). These reforms were based on the belief that governments had become overloaded, so that Western welfare states had become unaffordable, ineffective, and overly constraining on employees and citizens. The major intents of NPM reforms were to reduce public sector expenditures and to make public organisations more efficient by substituting old public administration for a new one, based on the principles that guide private sector

organisations and market laws. Consequently, NPM reform relies on increased competition between service providers and the creation of market or 'quasi-market' mechanisms (rather than on planning), accountability, and control for results through strong performance measurement. It emphasises decentralisation of control to empowered and entrepreneurial management rather than collegial public sector professionals and administrators (Ferlie et al., 2008).

By contrast, *Network Governance* narrative re-envisions the relationship between the state and civil society as more participatory in nature (Pollitt and Bouckaert, 2011), through the decentralisation of powers and horizontal channels. In the Network Governance, the state outsources the direct responsibility for fulfilment of public services and steers the system through contracts, alliance building, partnership, and persuasion, rather than hierarchy. In this narrative, the concept of 'multi-level governance' emerged to make sense of the new conditions, and 'governance' replaced 'government' to denote the inclusion within governing processes of a greater range of actors. The Network Governance narrative captures the change from a rather static view of steering towards a much more pro-active, flexible, and dynamic approach. The state becomes a relationship-facilitator, plays more an influencing and less a directing role, and devolves power, responsibility, and authority to other actors.

Finally, the third narrative is the *Neo-Weberian* one. It reflects a more optimistic and trusting attitude towards the state apparatus than NPM and emphasizes that traditional bureaucracy has virtues (clear accountability, probity, predictability, continuity, close attention to the law) that should be preserved and combined with more efficient procedures, so as a more flexible and responsive stance is towards the needs of an increasingly diverse citizenry. In this context, performance indicators were used more to assess impacts and guide administrative behaviour by the formulation of precise laws and regulations, rather than by giving more discretion and then measuring results (Pollitt and Bouckaert, 2011). These conditions have led to a high degree of bureaucratisation of the public sector, which became inward-looking and emphasised procedural rather than substantive rationality, with attachment to procedural equity and due process. Some of these Weberian elements are substituted by 'neo' ones as part of the shift from internal orientation and bureaucratic rules to an external orientation towards meeting citizens' needs. In HE, it means outward-looking service planning and quality assurance system mechanisms, which have academic ownership but also refer to students' needs and preferences. It entails a professionalization of the public service so that the bureaucrat is

not just a legal expert, but a professional manager oriented to meeting needs of citizens and students. Other 'neo' elements are the supplementing (not replacement) of representative democracy by a range of devices for consultation with stakeholders, and a modernisation of laws to encourage a greater orientation on results, rather than on processes, through a shift in accountability and audit from ex ante to ex post control systems (Ferlie et al., 2008).

Each of the preceding narratives tells a policy and management story, which in each country has been more or less influential and differently combined one with another (Ferlie et al., 2008). Scholars of public management in Mediterranean countries have shown that reforms in these countries have some elements borrowed from the NPM toolkit, but a focus on them alone gives a very distorted picture because states with Napoleonic traditions have followed NPM in only limited and selective ways (Kickert, 2007; Ongaro, 2009). Consequently, in this paper, rather than choosing one of the narratives as framework, we preferred to describe the main changes that occurred in the Italian HE system and finally to identify which perspective better explains the Italian HE reform.

Models and Coordination Mechanisms in Higher Education Governance

The literature on HE reform (Braun and Merrien, 1999; Gornitzka and Maassen, 2000; Kehm and Lanzendorf, 2006; de Boer et al., 2007, 2010; de Boer and File, 2009; Huisman, 2009; Paradeise et al., 2009a; Amaral et al., 2013) widely reports how HE systems have been transformed in European countries since the early 1980s. These studies mainly present a country focus, because each national system is embedded in its own regulations and has nuances and peculiarities. Moreover, different interpretive frameworks provide different lenses through which the reform trajectories are assessed. Among the latter, two main approaches are evident: the actor-centred and structure models (Orr and Jaeger, 2009).

Most publications emphasize the state-university relationship, focusing on public policies and instruments by public authority to qualify the role of the state (Olsen, 1988; Neave, 1988; van Vught, 1989; Neave and van Vught, 1991; Kickert, 1995). Other studies evaluated different relationships in the sector, such as that between the state and the academic profession (Musselin, 2013). Although presently the state remains the most influential actor and retains a substantial amount of influence, government's role has evolved from that of 'lone coordinator' (Huisman, 2009) towards one of market engineer

('meta-government'; de Boer and Jongbloed, 2012). In addition, policy implementation depends on cooperation and negotiation involving other actors as well. Consequently, the actor perspective, focused on the role of the state, appeared limited, and a more holistic approach was needed.

Thus, another stream of research identified the (collective) actors involved in HE governance and described their relationships, taking into account fundamental potential tensions, in order to qualify the prevailing mode of regulation. The seminal framework for the structure model of governance was Clark's (1983) 'triangle of coordination'. According to Clark, the market, state, and academic oligarchy were the basic dimensions/mechanisms of coordination to study in evaluating the institutional balance of power in the HE system. The triad was further developed by different authors. Clark himself identified hierarchical and entrepreneurial leadership of HEIs ('organization') as a fourth basic mechanism (Clark, 1998), while Braun and Merrien (1999) suggested the state dimension could be further split into two different dimensions: regulation and guidance.

Accordingly, Schimank (2002) identified five governance dimensions as relevant and proposed the 'Governance Equalizer Model' based on the ensuing five dimensions (Kehm and Lanzendorf, 2006; Schimank and Lange, 2009):

- 1. External regulation: Refers to the strict determination of processes which academics and universities must observe with respect to the organization of their activities. External regulation is typically exercised by the state through traditional top-down authority. It regulates by directives, with the promulgation of an authoritative set of rules, usually legal rules, through which the government prescribes detailed behaviours.
- 2. External guidance: Relies on the setting of overall development goals and general objectives, leaving universities room to manoeuvre. These goals may be prescribed or agreed upon by the actors involved. Therefore, external guidance is exercised by either the state, intermediary institutions, or other societal actors outside the science system (representatives of industry or non-for profit organizations) to which certain power to guide has been delegated. Government remains an important stakeholder, but how and by what means goals are achieved is left to universities and academics.
- 3. *Competition*: Refers to the distribution of scarce resources (primarily public funds, but also students and academic staff) through competitive processes among and within universities. The success or failure is determined by either quantitative

performance indicators measured in terms of outputs (performance-related funding) or the quality of proposals (tenders) with respect to a given project (i.e., research project or overall planning objectives in the sector) for which money is available. The latter type of 'qualitative performance' can be evaluated by peers or other experts.

- 4. Academic self-governance: Constituted by professional communities (i.e., by academic discipline) and their mechanisms of consensus building, based on strong egalitarianism balanced by the authority of reputation, as well as on self-evaluation and control of activity through peer review. The peer review-based self-steering of the academic community is manifested, for instance, in decisions of funding agencies. Within universities, this mechanism has been institutionalized in the form of collegial decision-making bodies.
- 5. *Managerial self-governance*: Characterized by formal hierarchical leadership positions within universities. The role of university leadership in internal goal setting, regulation, and decision-making is at stake. This means that the roles of the executive head (top-level of managerial self-governance) and middle management (intermediate-level) are re-defined by strengthening their capacity to make decisions with a series of hierarchically well-distinguished roles. The leadership commitment is focused on reaching certain objectives and power is exercised as either intra-organizational regulation or intra-organizational guidance.

The weight of individual governance dimensions varies across countries, time, and policy fields. The particular strength or weakness of the individual mechanisms of coordination in a specific system of rules forms a power parallelogram, representing a 'governance regime'. In the following sections, we will use them to analyse the Italian reform trajectory.

Bridging Governance Equalizer Model and Public Management Reform narratives

Before analysing the Italian reform, we link the Governance Equalizer Model to the three aforementioned public management reform narratives.

According to the *NPM* narrative, competition is the main coordination mechanism, but to attain competitiveness, the prerequisites are deregulation, the establishment of an organisational leadership able to effectively act on behalf of the university as a corporate actor, and greater external guidance to give broad long-term orientation to the university's competitive strategy (Schimank and Lange 2009). Indeed, management skills, markets,

and incentives become the key mechanisms of coordination. According to the Governance Equalizer Model, it means strong competition, external guidance by stakeholders, and empowered managerial self-governance.

The Network Governance narrative instead relies on decentralisation of powers, outsourcing the direct responsibility for educational service and research production to HEIs and steering the HE system through networks. The concept of 'multi-level governance' is prominent, which means a strong external guidance by the state together with the regional and non-governmental stakeholders such as firms and civil society. The emphasis is on softer leadership skills and a network-based approach, where competition and market-type coordination mechanisms have little emphasis, while the coordinating power is shared between social actors. Indeed, in the Governance Equalizer Model, the dominant coordination mechanism is external guidance both by the state and the external stakeholder, but in the network even state regulation, academic, and managerial self-governance interact.

Finally, the Neo-Weberian narrative reaffirms the role of the state and administrative law as well as representative democracy as central in the steering of HE sector. Therefore, external regulation and academic self-governance are the dominant governance dimensions. However, even external guidance by both the state through ex post control systems and external stakeholders through consultation processes which feed into strategy making is relevant, while there is a rejection of the top-down leadership, hence of the managerial self-governance dimension.

Table 5.1.1 summarizes the main coordination mechanisms in HE governance according to each public management reform narrative.

 Table 5.1.1 Bridging the Governance Equalizer Model and Public Management Reform narratives

	New Public Management	Network Governance	Neo-Weberian State
External regulation	Low	Medium	High
External guidance	High	High	Medium
Competition	High	Low	Low
Academic self-governance	Low	Medium	High
Managerial self-governance	High	Medium	Low

University Governance in Italy: Historical Context

The Italian university system was a typical example of a centrally managed Napoleonic model, wherein HE and research were seen as part of the public service, and universities as public agencies. Administrative action tended towards uniformity. Laws and decrees defined detailed rules for institutions, and thus the university organizational culture of governance was highly legalistic and procedural (Reale and Potì, 2009). Academics were professionals with civil servant status, teaching and research operations were centred around academic disciplines, and recruitment was assisted by prominent academics representing the national community in the particular discipline (Paradeise et al., 2009b). Thus, Clark (1983) described Italian HE governance as combining the authority of state bureaucracy and that of faculty guilds, while Braun and Merrien (1999) defined the Italian governance as an example of the 'bureaucratic-oligarchic' governance model typical of the European continental tradition. Collegial decision-making bodies, composed mainly of professors, dominated internal university governance, while institutional leadership was weak: the rector was an academic elected as a *primus inter pares*. His/her main roles were internal consensus building and mediating among different, often divergent, interests of internal groups (Capano, 2008). Administrative personnel's main function was to check that universities respected the law.

Law 168/1989 introduced structural changes and greater autonomy and accountability as the new principles for regulating the relationship between the state and universities. However, the Ministry preserved the same professional powers and duties: rules for recruitment, status of personnel, level of salaries, ceiling on personnel expenditure and student taxes, and basic rules for the composition of HEIs' governing bodies remained centrally established. Indeed, external regulation by the state through a large number of detailed rules and academic self-governance remained the dominant dimensions of governance.

In the 2000s, the ineffectiveness and inefficiency of governance structure was clearly perceived as a problem. The inherited governing structure led to a situation whereby internal governance ranged from an assemblearistic state, where the Academic Senate and Administrative Board, who officially held power, simply satisfied the requirements of the most important internal interests, to a situation in which the rector prevailed, despite having little official power (Boffo and Dubois, 2005; Capano, 2008). The two collegial governing bodies presented large-scale isomorphism in their composition. Further institutional decision-making was characterized by seemingly bi-

cameral dynamics (Paletta, 2004) with unclear responsibilities (Capano, 2010) and work overload on central decision-making bodies (Reale and Potì, 2009). Consequently, academic decisions were too slow (Moscati, 2012) and tangled up in the internal red tape: each issue that arose was scrutinized in some way even by the collegial body that did not exercise formal power over it (Capano, 2008). Moreover, the elected leaders, beholden to the electorate, could not usually act strategically or decisively in focusing resources on strategic research areas. By contrast, a rather distributive approach to internal policymaking was generally adopted (Capano, 2010). Therefore, the former Minister of Education, University, and Research Letizia Moratti, and some highly regarded think-tanks established advisory committees for reforming internal university governance (Capano, 2008).

At the rhetorical level, general discourse about reforming the HE system was deeply influenced by the NPM narrative. The old public administration was regarded as no longer suitable to govern the increasing complexity. In its place a model able to reduce wasteful public expenditures, to establish greater transparency, accountability, and responsiveness as the main driving principles, and to develop management capacity and management for results, in place of management for processes, should be favoured as a way towards efficiency and effectiveness in the use of public resources (Reale and Potì, 2009). At the same time, a climate of distrust towards the HE system emerged. Media headlines referred to professors as baroni ('barons', privileged class). From a political viewpoint, HE was not seen as an important issue (Capano, 2010). Universities were perceived as a financial burden, despite Italy being the OECD state with the lowest percentage of public expenditure on tertiary education as a share of overall national state public expenditure (OECD, 2015). Moreover, in recent years, due to the financial problems arising from the large public debt, the pressure to reduce public spending has been perceived as more and more urgent, and has put even more pressure on HEIs for efficiency. In this context of financial distress, the Parliament passed Law 240 to reform the governance of universities.

Coordination Mechanisms in the Italian HE Governance

This section discusses the consequences of the on-going policy changes deriving from the enforcement of Law 240, by analysing the five coordination dimensions pinpointed by Schimank (2002).

Ministry of Education, University and Research (MIUR) Internal Evaluation Unit **Board of Auditors** Performs internal evaluation of Checks accountability, financial, and administrative management, economic management didactics, and research Rector 3 external Executive leader members Majority of external members Administrative Board Body of administrative management (responsible for finance and strategy) Academic Senate Max 11 members Body of academic management Min 2-3 externals (responsible for teaching and research) Legends General Director Max 35 members Responsible for management and Governing body organisation of services and PTA Auxiliary, evaluative, and internal control body Departments Affiliation structure of academics; management of teaching and research Chair, elect, define objectives Min 35-40 members Regulate, check, give directions Connection structures (not required by law) Dimensional and composition Coordination of teaching and research activities requirements between more departments

Figure 5.1.1 Organization chart of 'standard' institutional governance after the ratification of Law 240

External regulation

External regulation by the state was the traditional method of governing the HE sector in Italy. Like the previous framework law (Law 168/1989), the Gelmini reform allows HEIs to draw their own statutes but, at the same time, it governs the constitution, attributions, organization, duties, and powers of various bodies. In fact, it established internal organizational uniformity for Italian state universities. The new 'standard' framework for institutional governance (Figure 5.1.1) provides for six central bodies: three governing bodies (Rector, Academic Senate, and Administrative Board), two auxiliary, evaluative and controlling bodies (Internal Evaluation Unit and Board of Auditors), and one managerial body (General Director). Main tasks and changes imposed by the Gelmini reform to the governing bodies and internal structures of Italian universities are summarized in Table 5.1.1.

To comply with the new legal regulation, the reform forced for the first time the concurrent rewriting of all Italian state university statutes by a dedicated committee nominated in every institution according to guidelines set by law. Both central collegial governing councils were required to ratify alterations to the statutes with an absolute majority vote.

Table 5.1.2 Key tasks for and changes to the new main bodies and structures of Italian universities

Body	Key tasks	Changes
Rector	Main decision-making body	Term of office set by law (6 years)
	Legal representative	Term not renewable
	Responsible for political and strategic orientation Fulfil operational and managerial	Major role in the governance
	tasks	
	Residual competences	
Academic Senate	Responsible for teaching	Size cap (proportional to institutional dimension; maximum 35 members)
	Responsible for research	Can dismiss the Rector by a motion of no confidence
	Responsible for services to students	
Administrative Board	Main decision-making body	Size cap (11 members)
	Responsible for strategic decisions	Professionalism of members: managerial competences (previously elected)
	Responsible for financial sustainability	Presence of a minimum number of lay members
General Director	Management and organisation of services	Not only administrative tasks but also managerial ones
	Management and organisation of non-academic personnel	Responsible for non-academic personnel management
Internal Evaluation Unit	Evaluation of teaching	Professionalism of members
	Evaluation of research Evaluation of personnel	Majority of lay members
	Link internal and external evaluation	
Board of Auditors	Responsible for accountability and financial regularity	
Departments	Responsible for both teaching and research	Unification into a single structure of responsibility for teaching and research
		Composed of a minimum number of academic staff members

Major innovations regarding the rector office included the requirement that s/he be elected for a non-renewable six-year term (formerly, each institution freely determined the length and renewability of the mandate). S/he is no longer required to come from the university where s/he candidates: the rector can be elected from among full professors working at any Italian university and is then appointed by the Minister of Education,

University, and Research. S/he is an *ex-officio* member of both the Academic Senate and Administrative Board and can chair both collegial bodies, but the latter requirement is no longer binding by law.

Internal governance retains the dual collegial governing structure of both the Consiglio di Amministrazione (Administrative Board) and Senato Accademico (Academic Senate). Law 240 imposes restrictions on their composition and dimension. The Administrative Board becomes the main decision-making body, made smaller and capped at 11 seats. It includes, by law, the rector, student representatives (at least 15% of members, elected from among the student body), and a minimum number of external stakeholders. The once compulsory representation of different academic staff status (full professors, associate professors, researchers) and of technical and administrative staff is now optional, while Law 240 introduces the concept of professionalism for appointed board members, who are selected based on individual skills, either 'managerial experience' or 'cultural-scientific competencies'. The Academic Senate is the other collegial governing body. Its members are elected from among the academic community, and each university estate (academics, non-academic staff, and students) votes for its own representatives. The senate may be larger than the board, but is now capped at 35 members, proportional to the university size. Gelmini reform prescribes that, the rector aside, at least 15% of the senate members are elected from among the student body, and at least two-thirds from among the academic staff (at least one-third of them from among department heads), respecting institutional differentiation by scientific disciplines. Among the latter group, not all middle-management executives must be included (faculty deans were *ex-officio* senate members under the former legislation).

Law 240 profoundly affects even university internal structures. Previous legal guidelines specified faculties and departments as internal organizational units, detailing their competencies, but without restricting their size. Gelmini reform establishes a single internal scientific structure (the department) though providing for the possibility of a maximum of 12 'connection structures', optional for institutions with fewer than 500 academic staff members, to coordinate and rationalize teaching activities and manage common services. The new departments are responsible for both teaching and research activities, previously assigned respectively to the faculties and (old) departments. Every department has to be composed of a minimum of 35 academic members (40 if the university has more than 1000 academic staff members) from homogenous disciplines and is headed by an elected director.

Moreover, the Ministry still prescribes detailed regulation in certain areas such as degree structure, academic working conditions, rules for recruitment, and tuition fees. Egalitarian principles and the strong drive towards homogeneity, aimed at granting citizens an equal footing when applying for public employment jobs, are fundamental to the structure of the Italian public sector. Thus, the quality of educational programs offered by different universities should be considered equal throughout the nation, justifying the attribution of the legal value to university academic qualifications, which persists to safeguard the homogenous value of the degree even when institutional performance differs.

Legislative restrictions also impose a high level of standardization on the structure of academic degrees. Ministerial guidelines (ministerial decree 47/2013) and the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) define educational objectives to be fulfilled, contents, duration, and a long list of minimal requirements to be met in order to obtain the accreditation such as composition (number of examinations) and minimum number of academic staff from specific subjects and levels (full, associate, and assistant professors) per each bachelor and master degree programme ('Requirements of lecture'). Quality assurance policy and institutional evaluation are thus a set of formal rules to comply with, and ministerial rules and ANVUR assume thus an increasingly regulatory aim with the effect of re-centralizing the governance of the system (Capano 2014; Capano and Turri forthcoming).

The state's regulatory role is evident even in Human Resource Management (HRM). By law, personnel expenditures should not exceed 80 per cent of the sum of FFO (Fondo di Finanziamento Oridinario, institution basic funding) allocated by the Ministry and tuition fees (legislative decree 49/2012). Furthermore, academic staff salaries are fixed nationally; institutions are not allowed to introduce performance-based contracts and, since 2011, scientific staff wages have been frozen. Even academic staff turnover has been limited by law since 2009 (Law 133/2008; Law 1/2009; Law 122/2010; Law 126/2011; legislative decree 49/2012) and has been limited at 50 per cent up to 2015 (with further restriction at 20 per cent in the years 2012 and 2013), to 60 per cent in 2016 and 80 per cent in 2017 (Law 135/2012; Law 98/2013). Due to these restrictions, academic staff in Italian state universities is rapidly declining (Table 5.1.3) and aging due to the low level of young recruitment. Moreover, since 2012, the turnover limitation does apply no longer at each institution depending on the ceasing staff, but at the systemic level (Law 135/2012). Since then on, yearly the Ministry assigns to each university the maximum

number of available credits for new positions by ministerial decree (ministerial decree 297/2012; ministerial decree 713/2013; ministerial decree 907/2014; ministerial decree 503/2015).

Table 5.1.3 Academic and non-academic staff in the Italian state universities on 31 December of each year

State universities	2008	2009	2010	2011	2012	2013	2014	2015	Δ	Δ%
Academic staff	60.558	58.715	55.931	54.946	54.226	53.324	52.122	51.045	-9.513	-15,7%
Tenure Academic staff	60.254	58.307	55.199	53.901	52.456	51.008	49.348	47.785	-12.469	-20,7%
Full Professors	18.218	17.174	15.169	14.532	13.841	13.219	12.564	12.124	-6.094	-33,5%
Associate Professors	17.547	16.858	16.229	15.884	15.435	15.106	16.736	19.081	1.534	8,7%
Tenure Researchers	24.489	24.275	23.801	23.485	23.180	22.683	20.048	16.580	-7.909	-32,3%
Non-tenured Researchers	304	408	732	1.045	1.770	2.316	2.774	3.260	2.956	972,4%
Non-academic staff	69.916	61.873	58.966	57.459	55.810	55.932	54.756	54.037	-15.879	-22,7%

Source: Reprocessing data from Statistica MIUR and CINECA databases

Law 240 introduced another main change regarding HRM: it replaced the status of tenured researcher with that of non-tenured researcher. The new status applies only to new entrants and the overall maximum duration in the new position is eight years.

Clearly, the state is still concerned with the preparation, promulgation, and enforcement of laws and decrees, with a tendency towards uniformity of administrative action. The bureaucratic stance tends to be of rule following, with actions based on legal control. Indeed, the hegemonic administrative paradigm and principle of legality (law as the basis of administrative action) persist as dominant in the Italian HE system.

External guidance

External guidance entails authority devolving from the state to other actors who become involved in university development planning and defining objectives and priorities. Concurrently, state authority is practised by setting general objectives, while institutions are given autonomy in how they reach them.

Law 240 increased the role of external stakeholders in institutional governance and decision-making process through the compulsory involvement of lay members in the Administrative Board. While the former law allowed institutions to decide their representation, Gelmini reform requires a minimum number of lay members, dependent on the board size: two if the board has fewer than 11 posts, three if it has exactly 11 seats. However, including external actors in institutional governing bodies is not seen by

scientific community as an important steering mechanism and accountability measure, but rather as an undue interference in internal university affairs. Thus, lay representation will not likely be increased from the minimum to a majority of seats, as happens frequently in other European countries.

Funding policy is instead a powerful steering mechanism by the state for the exercise of external guidance. The government has tried to introduce competitive mechanisms in institutional funding through the 'performance-based component' of FFO since 2008 (Law 1/2009) and most recently with 'standard cost' component (see fourth paper of the collection). However, the main portion of funds is still allocated according to actual and historical expenditures. The performance-based component is limited to a small amount of basic funding (910 million euros in 2012, about 13 per cent of the total of 7 billion), and the formula to allocate it consists also of indicators tied to institutional dimension. In addition, the law provides for a threshold level which restricts losses of the worst performing institutions to prevent financial problems, further limiting the efficacy of steering by funding policy (see paper four on the 'standard cost reform' for further details and following updates).

Finally, Law 43/2005 mandated that every university formulate a three-year development plan, but these are not used as steering mechanisms to select congruent performance indicators or for setting targets tied to institutional strategic objectives.

Competition

Worldwide competition among and within universities for resources, students, and academic talent is increasing, reflecting the belief in the market as an effective regulating force and the idea that competition provides a mechanism for allocating resources efficiently.

In the Italian HE system, the competition for students is limited by legal regulations and minimum standards for all courses, which constrain opportunities for innovation and differentiation among institutions. On the student side, the legal value of university academic qualification strongly limits students' interest in selecting the best university. Choice of university is also restricted by costs, particularly if the university is far from home, because of the lack of student accommodations (Minelli et al., 2012). Consequently, the mobility of Italian students is generally quite low (more than 85% of enrolled students study in their home area, a percentage relatively constant over the last decade; CNVSU 2011), and only geographically close universities compete with each

other for students (Rossi 2009; Cattaneo et al., 2016). In addition, tuition fees, as well as the fact that the FFO assigned to every university partially depends on the size of the regular student base (see paper on the public funding allocation reform for further details), have contributed to making increasing enrolment a priority for all institutions.

Even competition for academic staff at the institutional level is limited by tight regulation and academic civil servant status. Academic staff continue to be hired according to public administration rules, salaries and working conditions (i.e. minimum teaching duties) are defined by law at the national level, and institutions are not allowed to offer performance-based contracts.

Only competition for funds has increased. Public research grants (PRIN) have shrunk and the distribution of scarcer resources has raised competitive pressure among individual researchers and projects.

In summary, the modifications introduced by Law 240 and ensuing ministerial decrees did not substantially affect competition in the sector. Competitive pressures at the institutional level remain modest, limited by state regulation. On the contrary, they are high at the individual level, for both obtaining research grants and academic positions, and are furthered by the shrinking of public funds and suppression of tenure privilege for newly entering researchers.

Academic self-governance

Academic self-governance, together with state regulation, was formerly the strongest coordination mechanism. Collegial bodies at the central and internal levels made decisions regarding general academic matters, as well as financial and strategic aspects of university development.

Law 240 attempts to improve inefficient decision-making in institutional governance by including external members on governing councils to limit academic self-governance, but external members' minority status on the board makes it unlikely that consensus-based decision-making will disappear. Moreover, universities can keep the old representative method, in which all three university estates have the right to elect their own representatives (for further details about institutional choices see next paper).

Gelmini reform establishes a clearer separation of authority between academic and administrative affairs, but does not break the structure of co-determination through two governing bodies: academic senate functions are not limited to advisory roles, it retains responsibility for teaching and research matters. One of the most important innovations

to the senate is that the reform allows it to propose a motion of no confidence in the rector, with a two-thirds majority. If the motion is approved by the rector's electorate, composed of three university estates, s/he is dismissed. This choice, by which the rector remains accountable to the electorate, is a clear reaffirmation of the principle of academic self-governance.

Academic self-governance also stays prominent in the allocation of research grants and recruitment procedures. In fact, research grants are allocated based on ex ante evaluations of project tenders by peer evaluation panels, while recruitment, even if the number of disciplinary fields was reduced from 370 to 184 (ministerial decree 159/2012; later they were re-increased to 190 by ministerial decree 855/2015), remains based on an evaluation panel consisting of prominent academics working in the pertinent scientific discipline (for further details see the fifth paper). Hence, academics retain a strong voice in the scientific staff recruitment and selection procedure stays based on a discipline-based focus. Italian recruitment clings to Mode 1 research, whereas international knowledge production is evolving towards to Mode 2 (Gibbons et al., 1994; Nowotny et al., 2001).

Consequently, academic self-governance as a coordination mechanism remains strong in Italy, not only in the institutional decision-making, but also in the allocation of research grants and scientific staff HRM.

Managerial self-governance

In the European continental tradition, managerial self-governance was nearly absent, the rector being a *primus inter pares* whose main role was to build internal consensus across discipline powers. However, HE reforms in many European countries devolved authority to institutional management to speed up decisions and afford universities in operating as complete organization, strengthening their capacity to make strategic choices. This entailed verticalization and centralization of decision-making powers at the institutional level, implementing unitary governance with one person in charge of both academic and administrative matters; the appointment replaced the elective method in the choice of top-leadership and middle management, with opportunities for organizational leadership to act on behalf of the university.

Law 240 does not follow this trend. It does not modify the dual leadership governance, wherein the elected academic leader shares the floor with the head of administration at each organizational level. At central level, the rector shares now the

floor with the General Director, who replaces the Administrative Director. The change of name highlights the assignment to the General Director of not only the overall organization and management of administrative matters, but also of non-academic personnel, according to the board's guidelines.

Rector and department heads continue to be elected from among full professors, and managerial skills are not evaluated as a pre-condition to office: they are still considered as *primi inter pares* rather than as managers. At the internal level, the real decision-making power still lies in department councils, while, at the central level, the rector remains accountable to the academic community, which may distrust him/her. Moreover, s/he returns to being a professor when the term ends, hence it is unlikely s/he wants to make enemies during the rectorship. This may prevent him/her from making decisions that harm colleagues' interests. Finally, the shrinking of public sources limits university management's steering opportunities.

In conclusion, Law 240 did not empower the rector and department heads by giving them greater steering powers. Only the decision to limit the rector's office to one term makes him/her less preoccupied with building internal consensus in order to be re-elected.

Discussion and Conclusions

Historically, Italian governance was comparable to the 'European continental model', wherein state bureaucrats and academics held the major power and dominated internal decision-making processes. However, in the new century, university governance was seen as inefficient. Indeed, the Italian Parliament approved a comprehensive reform of university institutional governance.

Policy rhetoric stressed the introduction of managerial principles and Law 240/2010 was presented as a turnaround in governance. However, instead of following the example of HE policies in other European countries, which adopted a 'steering at a distance' approach, the new Italian legislative framework actually tightened regulation. Competition at the institutional level remains modest, while the managerial approach to institutional governance is not promoted. By contrast, it reaffirms the academic self-governance and the role of rector and middle management as *primi inter pares*.

Rather than the NPM narrative, the Neo-Weberian one better explains the on-going reform in the Italian HE sector. Centralisation of power in the hands of state persists: it retains formal control over funding, curricula, HRM (together with academic oligarchy), and staff turnover, while universities remain conceived as homogenous bodies with

limited autonomy. Such fundamental Weberian principles as the state role in steering the HE strongly, the role of representative democracy, and the idea of a public service with a distinctive status and terms and conditions persist. Furthermore, the role of administrative law (principle of legality) and the retention of the strong notions of due process are reaffirmed: Law 240/2010 established outstanding organizational uniformity for institutional governance and internal structures, eliminating faculties, creating smaller decision-making bodies and bigger departments, setting by law quantitative standards and restrictions, as well as governing their constitution, attributions, duties, and powers. However not all the 'Neo' elements are fully developed. Performance indicators continue to be used more to assess impacts and guide administrative behaviour by the formulation of precise laws and regulations, instead of giving more discretion and then measuring results: accountability and quality assurance policy are more concerned with improving means of ex ante control than pursuing ex post evaluation practices.

Therefore, the relationship between the state and universities in Italy remains linked to a command-and-control policy scheme. The state did not cede power and responsibilities linked to key aspects of the HE system (i.e. institutions are not given autonomy to hire or manage their own academic staff and the inability to act strategically is not dealt with). The reform reveals a position in which the state wants to play the role of controller of public action rather than that of supervisor or facilitator. Rather than a turnaround in governance, granting autonomy to universities, the reform's major intent seems to be to reduce state expenditures (Law 240/2010 declares in fact several times that policy changes have to be enforced 'without new and further burden on public expenditures'), leaving almost intact the existing governance regime. The classic Weberian scheme of values and rule observance persist and bureaucracy remain thus dominant for Italian universities.

Gaps, contradictions, and inconsistencies between the rhetoric of the reform and its enforcement are clear. As stated also by Capano and Turri (forthcoming), the capacity to pursue a coherent strategy by the Italian government regarding the higher education sector is weak. The coherence of the regulation design is negatively influenced both by the way the legislative process works in Italy -wherein the Parliament issues laws that determine the general content of the regulations, decentralizing detailed recommendations to ministerial decrees promulgated by the MIUR as well as to buffer organizations- and by the climate of political instability. In fact, the legislative decrees that enforced Law 240/2010 in the period analysed have been enacted by four different government

executives, and thus by four different Ministers of Education, University and Research⁶ (the fifth executive, together with fifth different Minister since approval of Law 240/2010 just took the office on 12th December 2016). A more coherent regulation design could be obtained by increasing political continuity -at least for the Minister in charge of the higher education sector- and strengthening the coordination between policy makers in the different phases (i.e. between government and buffer organizations). In this regard, the development of white papers with a strong function to guide and align policy makers' action, which define clear and coherent systemic goals linked to consistent policy tools, would increase the governmental steering capacity (for a further analysis on this issue see also paper in the section 5.5). Still, whatever the proclamations, a reform aiming to provide more autonomy to the universities is not possible unless a change in the organizational form and culture of the Italian state takes place.

Finally, this paper's research contribution draws attention to the fact that a perspective considering a single public management reform narrative on HE policy in European countries is very limited. Different paradigms can be used to assess HE reform policies. A natural future development of this stream of research could focus on comparative studies among states with similar governance traditions but different reform trajectories (as the third paper of this collection does), in order to shed light on which reform path and governance regime is better suited to improve the university system as a whole.

References

Amaral, A., Tavares, O. and Santos, C. (2013) 'Higher Education Reform in Portugal: A Historical and Comparative Perspective of the New Legal Framework for Public Universities', *Higher Education Policy* 26(1): 5–24.

Boffo, S. and Dubois, P. (2005) 'Changes in University Governance in France and in Italy', *International Review of Administrative Sciences* 71(1): 35–54.

Braun, D. and Merrien, F.-X. (1999) *Towards a new model of Governance for Universities? A comparative view*, London: Jessica Kingsley.

⁶ When Law 240/2010 was enacted, the Minister of Education, University, and Research was Mariastella Gelmini (Berlusconi government); from 16 November 2011 to 28 April 2013 the Minister was Francesco Profumo (Monti government); then the Minister became Maria Chiara Carrozza (Letta government); and from 22 February 2014 to 12 December 2015 the Minister of Education, University, and Research is Stefania Giannini (Renzi government).

- Capano, G. (2008) 'Looking for Serendipity: The Problematic Reform of Government within Italy's Universities', *Higher Education* 55(4): 481–504.
- Capano, G. (2010) 'A Sisyphean Task: Evaluation and Institutional Accountability in Italian Higher Education', *Higher Education Policy* 23(1): 39–62.
- Capano, G. (2014) 'The Re-Regulation of the Italian University System through Quality Assurance. A Mechanistic Perspective', *Policy and Society* 33(3): 199-213.
- Capano, G. and Turri, M. (forthcoming) 'Same Governance Template but Different Agencies: Types of Evaluation Agencies in Higher Education. Comparing England, France, and Italy', *Higher Education Policy* 1-19.
- Cattaneo M., Malighetti M., Meoli M., Paleari S., (2016), 'University Spatial Competition for Students: The Italian Case', *Regional studies*, DOI:10.1080/00343404.2015.1135240.
- CHEPS (2009) The Extent and Impact of Higher Education Governance Reform across Europe. Final report to the Directorate-General Education and Culture of the European Commission, Brussels: European Commission.
- Clark, B. (1983) *The Higher Education System. Academic organization in Cross-national perspective*, Berkeley and Los Angeles: University of California Press.
- Clark, B. (1998) Creating the Entrepreneurial University: Organizational Pathways of Transformation, Oxford: Pergamon.
- Cohen, M.D., March, J.G. and Olsen J.P. (1972) 'A Garbage Can Model of Organizational Choice', *Administrative Science Quarterly* 17(1): 1–25.
- Cohen, M.D. and March, J.G. (1974) *Leadership and ambiguity: the American college president*, New York: McGraw-Hill.
- Comitato nazionale per la valutazione del sistema universitario (CNVSU) (2011) *Undicesimo Rapporto sullo Stato del Sistema Universitario*, Roma: MIUR.
- de Boer, H.F., Enders, J. and Schimank, U. (2007) 'On the ways towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria and Germany' in D. Jansen (ed.) *New Forms of Governance in Research Organizations: Disciplinary Approaches, Interfaces and Integration*, Dordrecht: Springer, pp. 137–152.
- de Boer, H.F., Enders, J., File, J. and Jongbloed, B. (2010) *Governance reform: Progress in higher education reform across Europe. Volume 1: Executive summary report*, Brussels: European Commission.

- de Boer, H.F. and File, J. (2009) *Higher education governance reforms across Europe*, Brussels: ESMU.
- de Boer, H.F. and Jongbloed, B. (2012) 'A Cross-National Comparison of Higher Education Markets in Western Europe', in A. Curaj, P. Scott, L. Vlasceanu and L. Wilson (eds.) *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms*, Dordrecht: Springer, pp. 553–571.
- Ferlie, E., Musselin, C. and Andresani, G. (2008) 'The steering of higher education systems: a public management perspective', *Higher Education* 56(3): 325–348.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994)

 The New Production of Knowledge: The Dynamics of Science and Research in

 Contemporary Societies, London: Sage.
- Gornitzka, Å. and Maassen, P. (2000) 'National Policies Concerning the Economic Role of Higher Education', *Higher Education Policy* 13(3): 267–285.
- Huisman, J. (ed.) (2009) International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination, London: Routledge.
- Kehm, B.M. and Lanzendorf, U. (eds.) (2006) *Reforming University Governance:* Changing Conditions for Research in Four European Countries, Bonn: Lemmens.
- Kickert, W. (1995) 'Steering at a distance: a new paradigm of public governance in Dutch higher education' *Governance: An International Journal of Policy and Administration*, 6(1), 135–157.
- Kickert, W. (2007) 'Public Management Reforms in Countries with a Napoleonic State Model' in C. Pollitt, S. van Thiel, and V. Homberg (eds.) *New Public Management in Europe: Adaptation and Alternatives*, Basingstoke: Palgrave Macmillan, pp. 26–51.
- Maassen, P. and Olsen, J.P. (eds.) (2007) *University Dynamics and European Integration*, Dordrecht: Springer.
- Minelli, E., Rebora, G. and Turri, M. (2012) 'Waiting for the Market: Where is the Italian University System Heading?', *Higher Education Policy* 25(1): 131–145.
- Mintzberg, H. (1979) *The structuring of organisations: A synthesis of the research*, Englewoods Cliffs: Prentice Hall.
- Moscati, R. (2012) 'University Governance in Changing European Systems of Higher Education', in A. Curaj, P. Scott, L. Vlasceanu and L. Wilson (eds.) *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms*, Dordrecht: Springer, pp. 599–611.

- Musselin, C. (2013) 'Redefinition of the relationships between academics and their university', *Higher Education* 65(1): 25–37.
- Neave, G. (1988) 'On the Cultivation of Quality, Efficiency and Enterprise: An Overview of Recent Trends in Higher Education in Western Europe, 1986–1988', *European Journal of Education* 23(1/2): 7–23.
- Neave, G. and van Vught, F.A. (eds.) (1991) Prometheus Bound. The Changing Relationship Between Government and Higher Education in Europe, Oxford: Pergamon.
- Nowotny, H., Scott, P. and Gibbons, M. (2001) *Re-Thinking Science. Knowledge and the Public in an Age of Uncertainty*, Cambridge: Polity Press.
- OECD (2015) Education at a glance 2013, Paris: OECD.
- Olsen, J.P. (1988) 'Administrative reform and theories of organisation', in C. Campbell and B.G. Peters (eds.) *Organizing governance: governing organizations*, Pittsburgh: University of Pittsburgh Press, pp. 233–254.
- Ongaro, E. (2009) Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain, Cheltenham: Edward Elgar.
- Orr, D. and Jaeger, M. (2009) 'Governance in German Higher Education: Competition Versus Negotiation Of Performance', in J. Huisman (ed.) *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*, London: Routledge, pp. 13–32.
- Paletta, A. (2004) Il governo dell'Università, Bologna: Il Mulino.
- Paradeise, C., Reale, E., Bleiklie, I. and Ferlie, E. (eds.) (2009a) *University Governance:* Western European Comparative Perspectives, Dordrecht: Springer.
- Paradeise, C., Bleiklie, I., Enders, J., Goastellec, G., Michelsen, S., Reale, E. and Westerheijden, D.F. (2009b) 'Reform Policies and Change Processes in Europe', in J. Huisman (ed.) *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*, London: Routledge, pp. 88–106.
- Pollitt, C. and Bouckaert, G. (2011) *Public Management Reform. A Comparative Analysis: New Public Management, Governance, and the Neo-Weberian State*, Oxford: Oxford University Press.
- Reale, E. and Potì, B. (2009) 'Italy: Local Policy Legacy and Moving to an 'In Between' Configuration' in C. Paradeise, E. Reale, I. Bleiklie and E. Ferlie (eds.) *University*

- Governance: Western European Comparative Perspectives, Dordrecht: Springer, pp. 77–102.
- Rossi, F. (2009) 'Increased Competition and Diversity in Higher Education: An Empirical Analysis of the Italian University System', *Higher Education Policy* 22(4): 389–413.
- Schimank, U. (2002) Governance in Hochschulen. Vortrag im Rahmen der Veranstaltung "Professionelles Wissenschaftsmanagement als Aufgabe "des Zentrums für Wissenschaftsmanagement, Speyer: ZWM.
- Schimank, U. and Lange, S. (2009) 'Germany: A Latecomer to New Public Management' in C. Paradeise, E. Reale, I. Bleiklie and E. Ferlie (eds.) *University Governance:* Western European Comparative Perspectives, Dordrecht: Springer, pp. 51–75.
- van Vught, F.A. (ed.). (1989) Governmental Strategies and Innovation in Higher Education, London: Jessica Kingsley.
- Weick, K.E. (1976) 'Educational organizations as loosely coupled systems', *Administrative Science Quarterly* 21(1): 1–20.
- Westerheijden, D.F., de Boer, H.F. and Enders, J. (2009) 'Netherlands: An 'Echternach' Procession in Different Directions: Oscillating Steps Towards Reform' in C. Paradeise, E. Reale, I. Bleiklie and E. Ferlie (eds.) *University Governance: Western European Comparative Perspectives*, Dordrecht: Springer, pp. 103–125.

5.2. Institutional Governance Reform: What Role for new governing bodies?⁷

"I have spent the last two months analyzing what all these guys do, and I still can't figure it out"

(Gordon Gekko, Wall Street 1987)

Abstract

In 2010, a comprehensive reform required Italian state universities to restructure their institutional governance by revising their statutes. This interpretative paper aims to evaluate whether the Italian reform is congruent with its declarations, the variations in the implementation within the same country of a unitary national regulation by looking closely at new governing bodies, and whether Italian state universities have incorporated the principles of the new law coherently with its political aims. Our analysis shows gaps both in the decision stage, wherein state regulation is in contrast with the declared intent to increase autonomy, and in the implementation stage. In our view, Law 240 aimed to change Administrative Board role from a democratic to a partnership model, while the dominant board model, according to the new statutes' content analysis, is the stakeholder model (or, in several cases, even a quasi-democratic one).

Keywords: Governance; Management; Organisation structures; National systems of higher education; Higher education policy/development.

Introduction: Institutional governance reforms

The last three decades were characterised by many reforms in higher education systems across Europe. The reforms were intended to transform university practice and governance, and consequently their organization and structures, that were considered poorly adapted to contemporary settings and in responding to social and economic needs that universities are now expected to fulfil (de Boer et al. 2010; Meek et al. 2010; Paleari et al. 2015). The changes share an emphasis on adopting a greater economic and managerial focus in the internal decision-making process of higher education institutions (Musselin & Teixeira 2014) by strengthening internal hierarchies and the role of leadership (the rector/president/vice-chancellor and dean positions) within the university;

_

⁷ A version of this chapter co-authored with Stefano Paleari and Michele Meoli has been published on *Tertiary Education and Management* (2015), 21(1), 16-28, with the title 'The new institutional governance of Italian state university: What role for the new governing bodies?'. In the published version, the sections 'Methodology and Data, and two sections 'The reform of Italian institutional governance...' are fully my contribution; 'Introduction' and 'Discussion and Conclusions' are written together with the co-authors. Instead, I am responsible for all the changes in this chapter with respect to published version.

introducing the concept of shared governance (Shattock 2006) giving greater role to the external stakeholders by the mandatory participation of lay members into decision-making bodies; weakening the collegial model by reducing the size of university governing bodies; and changing the traditional forms of governance based on rules and controls in favour of greater institutional autonomy. Indeed, existing university governing bodies were modified and new ones established (de Boer et al. 2010). In the reconfigured institutional governance, European reforms provided a body akin to the board of directors of business companies, empowering university board, which now is expected to be key actor, ideally on par with the university leadership, formally involved in decision-making at the central university level. Collegial decision-making bodies (academic senates), meanwhile, play a subordinate role, gradually losing powers and frequently serving an advisory function, especially in strategic decisions on structural planning, university development and budgetary allocation (Kretek et al. 2013).

In December 2010, the Italian Parliament also approved a comprehensive reform (Law 240/2010 or 'Gelmini reform', from the name of the former Minister of Education, University and Research, who was in office when it was designed and approved) of the institutional governance and internal organisation of Italian state universities, in which more than 90% of Italian university students are enrolled. The new law proclaims autonomy and accountability as its basic principles (Article One) and allows universities to draft their own statutes. Nevertheless, the Gelmini reform defines details of governance bodies, governing constitutions, attributions, organisation, duties, and powers of university boards and internal structures, so that internal governance structures of Italian universities are largely shaped through national legislation. To comply with the new legal framework, Law 240 forced for the first time the concurrent revision of all Italian state university statutes, which contain local adaptations of higher education laws, but sometimes provide for local interpretation of certain provisions.

This paper addresses how Italian universities modified their statutes and reorganised their internal formal government and management structures, stressing the variations in the implementation of a unitary national regulation into different universities within the same country and the same HE system. Moreover we evaluate whether institutions incorporated the new legal principles into their operational practice coherently with the political aims. For this purpose, we first analyse whether the reform is congruent with the declarations. Secondly, we address how the Italian state universities revised their own statutes, with a focus on the expected role for the Administrative Board, which is

crucial for the well-functioning of the Italian state university since it is the main collegial governing body in the revised institutional governance, being responsible for the strategic orientation and financial decisions (Donina et al. 2015 or first paper of the collection).

Our analysis is based on the taxonomy of organisational governance models proposed by Cornforth (2003), who identified six theoretical perspectives from different literature streams to understand the role of boards in the public and non-profit sectors and how these perspectives affect board composition and governance patterns.

The remainder of the paper is organised as follows. In the next section we address the literature on policy implementation gaps, while focusing on the higher education sector. Then the taxonomy on organisational governance, as well as our methodology and data, are presented. Afterwards, we focus on the Italian law: first general aims and changes imposed by the reform are presented and discussed, according to the theoretical perspective on organisational governance; secondly we analyse the variations in the implementation by developing the content analysis of the new Italian state university statutes. We conclude by discussing whether the implementation of the law mirrors the aims of the policy-makers.

Literature review: policy implementation gaps

The literature on public management reform shows many gaps, diversions and outright failures that stand between the announcement of a reform and its successful implementation. It is not uncommon that officially announced reforms only partly reach their objectives, or completely fade away (Pollitt & Bouckaert 2011).

The reasons for policy divergence are various. There could be gaps between the claims made and solutions advocated by reformers (Maassen & Olsen 2007). Bounded rationality theory (March & Simon 1958) underscores the limited capacity to deal with complex systems. Path dependency might constrain what is possible. Indeed, historical and cultural traditions come into play and the reform approach might reflect historical legacies and sector-specific trajectories. The decision-making process could result from negotiations and compromises between actors with different interests (March & Olsen 1983). Institutionalised norms and values could interact with reforms. Finally, characteristics of the focal organisations might influence reform trajectories, as well as the effectiveness of changes (Enders et al. 2013). As a result, reform outcomes depend on a blend of factors and a gap may arise between the intention and organisational capacity

to get things done in a coordinated and consistent way, making the road from political declarations to implementation uncertain (Maassen & Olsen 2007). Consequently, changes in practice cannot be a perfect copy of formal and intended transformations.

In the higher education sector, mostly in southern European countries, practical implementation of regulations and university governance reforms is a key challenge due to internal difficulties linked to organisational structure of institutions (Estermann et al. 2011). Particularly in Italy, several authors (Reale & Potì 2009; Rebora & Turri 2009; Capano 2011) identified a systematic gap between publicly expressed ideas (the rhetoric of reforms) and actual actions and behaviour (effectiveness of their implementation). Past Italian government action had failed to match announced goals and plans (Capano 2011), with a minimal capacity of the state to implement what it decided (Reale & Potì 2009). As a result, formal and practical reforms in the Italian higher education sector have frequently diverged.

Theoretical framework: perspectives on organisational governance

Universities have always be seen as specific (Musselin 2006) organisations: Weick (1976) defined them as loosely coupled organisations. Recent reform efforts have attempted to turn them into organisational actors (Krücken & Meier 2006), tightening up the internal hierarchies and forcing higher education institutions to strengthen their corporate identity (Braun 2014). However, in contrast to private companies, most European universities are still not free to choose their own governance and management structures because higher education laws define details of governance bodies, decision-making processes and other relevant procedures for public universities (Kretek et al. 2013; Musselin & Teixeira 2014). As a result of the different regulatory frameworks, university board functions and tasks in Europe differ considerably from country to country (de Boer et al. 2010) and their roles and those of their members are thus still framed more by the context of a public, non-profit and specific organisation (Kretek et al. 2013).

The governance of public and non-profit organisations is relatively under-theorised in comparison to the governance of business corporations (de Boer et al. 2010). The two bodies of academic literature have developed largely separately from each other (Hung 1998; Cornforth 2003). In the corporate world, a variety of competing theories has been proposed to understand the role of boards. However, governance is a complex and multifaceted phenomenon and the main theories that have been put forward to explain

organisational governance just give a partial and limited account, having been criticised for illuminating only one particular aspect of the board's work. This has led to calls for a new conceptual framework that helps integrate the insights of the different perspectives (Hung 1998; Tricker 2000).

Consequently, Cornforth (2003) suggested a new multi-paradigm perspective, which focuses on the paradoxes and tensions of governance and provides a taxonomy for analysing the diverse forces and ideas that shape governance practices in public organisations. He identified six theories and models from different literature streams to explain the role of boards in the private sector and scrutinised whether they shed light on the public and non-profit boards. While these perspectives are meant as different theoretical angles and ways of looking at boards, they can also be characterised as different models about the board role and that of board members, which are defined by predominant patterns of behaviour. Different theories can lead to conflicting role expectations and sometimes to role conflict and ambiguity. The basic ideas of the six theories, summarised in Table 5.2.1, are as follows (Cornforth 2003, p. 7 ff.):

Table 5.2.1 Comparison of theoretical perspectives on organisational governance

	•	· ·	<u> </u>	
Theory	Interests	Board members	Board Role	Model
Agency theory	Owners and managers have different interests	Owners' representatives	compliance/conformance: safeguard owners' interests, oversee management, check compliance	
Stewardship theory	Owners and managers share interests	Experts	Improve performance: add value to top decisions/strategy partner/support management	Partners hip model
Resource dependency theory	Stakeholders and organisation have different interests	Chosen for influence with the key stakeholders	Boundary spanning: secure resources, maintain stakeholder relations, being external perspective	Co- option model
Democratic perspective	Members/the public contain different interests	Lay representatives	Political: represent constituents/ members, reconcile conflicts, make policy, control executive	Democra tic model
Stakeholder theory	Stakeholder have different interests	Stakeholder representative: elected or appointed by stakeholder groups	Balancing stakeholder needs: make policy/strategy, control management	Stakehol der model
Managerial hegemony theory	Owners and managers have different interests	Owners' representatives	Largely symbolic: ratify decisions, give legitimacy, managers have real power	'Rubber- stamp' model

Source: Cornforth 2003 (p. 12)

Agency theory - Compliance model

Agency theory, or principal-agent theory (Fama & Jensen 1983; Keasey et al. 1997), assumes that owners of an enterprise (the principals) and those who manage it (the agents) have different interests. Hence, the stakeholders face a problem, because managers are likely to act in their own interests rather than in that of stakeholders. Corporate governance arrangements are means to ensure that management acts in the stakeholders' best interests. The main function of the board is indeed to control and monitor behaviour of management and ensure managerial compliance in furthering the organisation's objective. Therefore, board members should be independent of management. One difficulty in applying an agency perspective to public and non-profit organisations is that there is much more potential ambiguity over who the principals or owners are.

Stewardship theory - Partnership model

Stewardship theory (Donaldson & Davis 1991; Muth & Donaldson 1998) is grounded in the human relations perspective. The theoretical assumptions are the opposite to that of agency theory: managers want to do a good job and will act as effective stewards of an organisation's resources. As a result, senior management and stakeholders are seen as partners. Hence, the main function of the board is to improve organisational performance. Its role is primarily strategic: to work with management to improve strategy, add value to decision-making, sustain the vision of the organisation and relations with stakeholders. Board members should be selected on the basis of their expertise and contacts so that they are in a position to add value to the organisation's decisions.

Resource dependency theory - Co-option model

Resource dependency theory (Pfeffer & Salancik 1978) stems from organisation theory and views organisations as interdependent with their environment, depending for their survival on other organisations and actors for resources. According to this theory, they need to find ways of managing this dependence and ensuring they get the resources and information they require. The board is seen as one mean of reducing uncertainty by creating influential links between organisations. Its main function is to maintain good relations with key external stakeholders to ensure the flow of resources into and from the organisation, and to help it to respond to external changes. The board is part of both the organisation and its environment, and its role is one of boundary-spanning. Board members are selected for the important external links and knowledge they can bring to

the organisation, and to try to co-opt external influences.

A democratic perspective - Democratic model

Key practices of democratic government include open elections on the basis of one person one vote; pluralism, i.e. representatives embody different interests; accountability to the electorate; and the separation of elected representatives, who make policy, from the executive, which implements policy decisions. Democratic ideas and practices have influenced thinking about the governance of public organisations. For universities in particular, the organisation's constitution provided that the governing body should be elected and represented the membership somehow (Amaral et al. 2002; de Boer & Stensaker 2007). Indeed, the democratic perspective on governance suggests that the job of the board is to represent the interests of one or more constituencies or groups that the organisation serves. Its role is to resolve or choose between the interests of different groups and set the overall policy of the organisation, which is implemented by the staff. Board members' expertise is not a key requirement. Central to this view is that any member of the electorate can put him/herself forward for election as a board member.

Stakeholder theory - Stakeholder model

The premise of stakeholder theory is that organisations should be responsible to a range of different groups in society (Hung 1998). By incorporating different stakeholders on boards, it is expected that organisations will be more likely to respond to broader social interests. This leads to a political role for the boards, negotiating and resolving the potentially conflicting interests of different stakeholder groups in order to determine the objectives of the organisation and set policy. Board members consist of representatives of broader social groups.

Managerial hegemony theory - 'Rubber stamp' model

Managerial hegemony theory relates back to the thesis of Berle & Means (1932) that, although stakeholders may legally own and control large corporations, they no longer enjoy effective control, having been ceded it to a new professional managerial class. From this perspective, the board serves as little more than a 'rubber stamp' for management decisions, and its function is essentially symbolic to give legitimacy to managerial actions.

In what follows, we will use these models to conceptually explore the changes in the expected role for the central collegial governing bodies of Italian state universities after the enforcement of Law 240.

Methodology and data

Law 240/2010 defines general rules about the size and compositional requirements of the collegial governing bodies of Italian state universities. Basing on the selection method of university board members suggested by the reform, we judge how the Gelmini reform attempts to modify the role of collegial governing bodies in the internal government and management structures of Italian state universities.

Once we have identified what should be the collegial decision-making bodies' role under the legal guidelines, we focus on the 61 Italian state universities that had to adapt their bylaws accordingly - we excluded from the analysis five state universities specialised in doctoral training because Law 240 allows them to organise their internal government and management structures according to their own rules (Article 2, comma 3 of Law 240) - and we develop a qualitative study based on content analysis (Weber 1990; Bardin 2009) of their statutes. We pinpoint the variations in the reform implementation, addressing how decision-making councils are composed, the decisions about the composition of the rector's electorate, and whether s/he is mandated to chair the governing bodies. Grounding on the procedure for selection of the members of governing councils as defined in every university statute, we interpret the role Italian state universities gave to their own collegial governing bodies and cluster them in groups that made similar choices. Finally, we evaluate whether the new state university bylaws have been rewritten according to the political aims.

In order to perform the analysis, in collaboration with the Conference of Italian University Rectors (CRUI), we collected data on the formal governance structures chosen by Italian universities, as published in the 'Official Journal of Italian Republic', and we built the 'synoptic table of the governance choices of Italian universities'. The revision of constitutional rules by all Italian state universities was accomplished by November 2012, though further modifications were implemented after the first statute release. Our data collection included also the following modifications, so that analysis is carried out on the final version of the university statutes.

The reform of Italian institutional governance: Law 240/2010

In 1989, for the first time in modern history, Law 168 granted Italian universities the freedom to set their internal policies and regulations, according to general guidelines that determined some compulsory contents of the statutes. However, only 13 out of the then 56 state universities had issued their own statutes by 1994. Accordingly, in 1995, the government issued a decree obliging Italian state universities to approve their own 'autonomous' statutes, in a curious case of 'imposed' autonomy (Capano 2008). By 1997, all Italian universities had done so. The university bylaws were mainly devoted to designing the internal system of government of the universities, the distribution of power and competences among different organs, and the basic rules for internal performance assessment (Reale & Potì 2009). By law, internal governance was based on a dual collegial governing structure. The members of both the Senato Accademico (Academic Senate) and Consiglio di Amministrazione (Administrative Board) were elected from among the academic community to represent internal disciplines and constituencies. As a result, a high level of compliance with the governance model recommended by the state ('vertical isomorphism') and by imitative processes between different universities ('horizontal isomorphism') generated strong homogeneity of Italian state university statutes (Fassari 2004). In several institutions, even members designated by local authorities (Boffo et al. 2008) and representatives of financial resource providers could be appointed to the Administrative Board.

According to Cornforth's (2003) taxonomy, the democratic model was the main reference: both the Academic Senate and Administrative Board members were elected, even if lay members chosen according to the stakeholder and co-option models could serve. Indeed, the main role of both governing councils was political, representing constituencies, reconciling conflicts and mediating among different interests. Finally, the rector, elected from the academic community among full professors of the university, chaired both collegial governing bodies. This led to a situation whereby internal governance ranges from a decision-making process wherein senate and board, who officially held power, simply satisfied the requirements of the most important internal interests, to a situation in which the rector prevailed, despite having little official power (Boffo & Dubois 2005; Capano 2008). In this sense, organisational governance was compatible even with a 'rubber-stamp' model whereby governing bodies' role was largely symbolic, confined to ratifying decisions.

As it was in the previous regulatory framework, Law 240/2010 allows universities to draft their own statutes, but governs constitution, duties, and powers of central governing bodies (for a comprehensive overview of Law 240, see Donina et al. 2015 or first paper of the collection on systemic governance), forcing all state universities to rewrite their bylaws. Therefore, in every institution, a dedicated committee nominated according to legal guidelines has managed the task. Subsequently, the new statutes were approved by both internal governing bodies by absolute majority vote and sent to the Ministry of Education, University and Research (MIUR), which could ask for changes only once. University governing councils judge the ministerial requirements and may decide not to conform. Finally, the new statutes are published in the 'Official Journal of Italian Republic'. Eventually, the MIUR may appeal to the Regional Administrative Court (TAR) against requested changes not accepted by the universities. It happened in several cases, but the Court was in favour of university claims in most of them.

According to Law 240, the rector is elected from among the full professors and is then just formally appointed by the MIUR Minister. The electorate is composed of the three university estates (academic staff, non-academic staff, and students), whose votes may be weighted differently by every university in its own statute. Major innovations of the rector's office are that s/he is elected by law for a non-renewable six-year term (formerly, every institution freely determined the length and renewability of the mandate), can be dismissed, not earlier than two years from his/her assignment, by a motion of no confidence from the senate, which has to be approved by the rector's electorate, and it is no longer compulsory that the rector comes from the university where s/he is appointed; now s/he may come from any Italian university. As under the previous legal framework, s/he is *ex-officio* member of both governing councils, may chair both, but it is no longer mandatory: alternatively, the senate can be chaired by a department head, and the board by a lay member.

The institutional governance model clings to the dual collegial governing structure, maintaining a decision role for both the Academic Senate and Administrative Board, even if it distinguishes their tasks. 'Purely' academic issues are under senate's authority, but whenever they have an impact on resources, decisions made by the senate are subject to approval by the board. Moreover, Law 240 imposes composition requirements and a size cap on the governing councils. The Academic Senate is capped at 35 members, proportional to the university size, and follows a democratic model: at least 15% of the members have to be elected from among the student body, and at least two-thirds from

among the academic staff (at least one-third of them from among department heads), representing internal disciplines and different academic staff statuses. According to organisational governance taxonomy, the senate members represent constituents; hence its role is still political.

On the other hand, Administrative Board composition varies greatly. It is capped at 11 seats and must include, apart from the rector, student representatives (at least 15% of the members elected from among the university student body), and a minimum quota of lay members: two external members if the board has fewer than 11 posts, three if it has exactly 11 seats. Moreover, Law 240 introduces the concept of professionalism for nonelected board members, who should be selected according to their individual skills, either 'managerial experience' or 'cultural-scientific competencies'. In Cornforth's taxonomy, new board composition no longer reflects the democratic model, since the compulsory representation of different internal disciplines and constituencies has been removed. Board members should be experts, selected for their skills to add value to top decisionmaking. Consequently, the board role becomes that of improving the performance of the institution and supporting management. According to Law 240/2010, the new Administrative Board model is the partnership one based on the stewardship theory, maintaining a democratic perspective only for rector and student representatives. However, the rector may chair both collegial governing bodies, having the power of setting the agenda of the meetings, keeping asymmetric information with respect to other council members, and being legally accountable for the decisions taken by the university, so governing councils could have only a 'rubber-stamp' role for management decisions.

The reform of Italian institutional governance: statute revision

This section evaluates the impact of Law 240/2010 by analysing the new constitutional rules that every state university provided in its own statute, according to the requirements of the new legislation. The analysis focuses on the choices and variations in the implementation of Law 240 regarding rector and collegial governing bodies.

The rector's election is made according to a weighted voting system in all universities, but the weight of the vote assigned to different university estates varies among institutions. Nevertheless, some common choices are recognizable: all institutions gave full voting privileges to full and associate professors, and all but four even to tenured researchers. The majority of universities gave full voting privileges to non-tenured

researchers too, but sometimes differentiated among different subgroups, allowing only some of them to vote or weighting differently the vote of various subgroups. The non-academic staff cast their vote for the rector's election in all institutions, but it is always weighted. In some universities, only the tenured non-academic staff or those who have been serving from a minimum number of years are allowed to vote. The vote by non-academic personnel is weighted differently by institutions, being 2-33% of the total. Finally, representatives of the students in different collegial bodies (in only one case all students) cast a vote for the rector's election, which is weighted again according to many different methodologies. The weight given to the student vote is typically lower than that of the non-academic staff.

The rector, even after the enforcement of the new statutes, typically chairs both governing councils. Academic Senate is not chaired by the rector only at the University of Catanzaro, where the senate's president can be either a department head or a full professor elected from among the council. Rector chairs even the Administrative Board by statute in all institutions, apart from the University for Foreigners of Perugia, where chairperson is elected with absolute majority vote from board members among full professor (including the rector) or external members, and the University of Trento, where the chairperson is chosen among the three lay members appointed by the Province.

The average size of both governing bodies declines. The dimension of the Academic Senate decreases from an average of 25.6 to 22.9 voting members, while the downsizing of the Administrative Board has been much steeper: from an average of 19.5 to 10.0 members. Also, the standard deviation of the size of governing bodies declines considerably, particularly for the Administrative Board (Table 5.2.2). Consequently, the governing councils of all Italian state universities are now more similar in size.

 Table 5.2.2 Average and standard deviation of the size of governing councils before and after the reform

Chaha Universities	Before-La	w 240	After-Law 240		
State Universities	Average Size Std. Dev.		Average Size Std. Dev		
Academic Senate	25.6	10.5	22.9	7.5	
Administrative Board	19.5	7.3	10.0	1.1	

The selection method for the members of the Administrative Board varies greatly among institutions. Typically, a dedicated committee is formed (otherwise the senate) for the evaluation of applicants' profiles and to propose a pool of candidates from which the nominees are chosen. All but four universities exactly defined the quotas of internal and

external representatives. In 29 institutions, academic staff can have the absolute majority on the board, while they can have half the seats in a further 14 universities. Most institutions abandoned the election of internal board members in favour of an appointment-based system, whereby the choice is performed by either the rector, academic senate or through the involvement of both bodies. However, 11 universities maintained the involvement of internal staff through the election of internal representatives. Moreover, about a dozen institutions in each case established that academic representatives should be selected to reflect discipline differentiation and/or different academic staff statuses. Finally, 32 out of 61 institutions assigned a clear-cut number of seats also to non-academic staff, while five universities chose not to give them any representation on the Administrative Board. In the remaining cases, the appointment of non-academic staff is possible, but it depends on the selection procedure.

Looking at external representation, the share of lay members on the board has increased from an average of 16.9% to 25.6%. Despite this rise, the choice made by the majority of Italian state universities is to reduce lay representation to the minimum allowed by Law 240 (in one case even below the minimum). Out of the 61 universities considered, only six established a compulsory minimum presence above the threshold fixed by the Gelmini reform, even if four institutions allow to increase external representation during selection procedure for board members (Table 5.2.3). Only in the University of Trento, do lay members, all selected as experts, occupy the majority of board seats by statute, with no representation of internal staff, apart from the rector.

Table 5.2.3 Board size and lay members in the Administrative Board of Italian State universities

Size \ Lay members	2	3	4	7
7	4 ^a			
9	10 ^b	1	1 ^c	1
10	19	1		
11	1	21	2	

a) Including Venezia IAUV where lay members can be increased up to four.

As a result of the content analysis of the new statutes, the composition of the Academic Senate remains based on a democratic model, while the Administrative Board composition in most of the institutions is consistent with the stakeholder model. However,

b) Including Brescia and Roma Foro Italico where lay members can be increased up to six.

c) Venezia Ca' Foscari, where lay members can be increased up to six.

there are universities where board members are elected and/or selected as representatives of internal disciplines and academic status constituencies. Indeed, in those cases, a more democratic model remains operative, notwithstanding the preliminary selection of candidates that precludes some staff from board member appointments. Instead, just few institutions select their own board members as experts, independently of who they represent, as we would expect from legal guidelines. Finally, the possibility of a 'rubber-stamp' model endures: in all but three universities, the rector chairs both collegial governing bodies by statute.

Discussion and conclusions

The Gelmini reform was presented as an instrument to increase the autonomy of Italian state universities. However, Law 240 defines details and compulsory contents of the new institutional rules; specifies mandatory quotas for lay members on Administrative Boards; sets size requirements for central collegial governing councils and internal structures. Hence, the coercive pressures (di Maggio & Powell 1983) imposed by state regulation are in contrast to the ministerial intent to increase autonomy. Starting from the ministerial decision stage, gaps between the claims made and the solutions advocated by policy-makers are evident: policy statements promoting institutional autonomy are at odds with the reform project, which reduced university leeway about internal organisation. Government does not appear willing to weaken its control and Italian state university statutes are changing from a status of 'imposed autonomy' to one of 'regulated autonomy'.

Even if Italian universities are not completely free to choose their own governance and management structures and their statutes contain mainly local adaptations of higher education law, Law 240 allows institutions some discretion and provides for local interpretation of certain provisions. Focusing on governing councils, this paper explored the selection procedures for board members and identified their conceptual roles. Regarding the Administrative Board, Law 240 aimed to change its role from a democratic to a partnership model. However, analysing the variations in policy implementation into the statute revision, many universities defined membership by class of appointment, maintaining a representative principle in composition. Therefore, the dominant Administrative Board model, according to new statutes, is the stakeholder model (or in several cases even a quasi-democratic one): few universities totally incorporated the principles of the reform, selecting board members based purely on the candidates'

expertise and not on what stakeholder they represent. Consequently, Law 240 failed in the attempt to create a partnership model for the Administrative Board in most Italian state universities because institutions did not incorporate the policy-maker aims into their operational regulation. However this is not necessarily a gap of the policy, since Law 240 defines details of governance bodies and decision-making processes for different kinds of state universities in Italy (i.e., comprehensive universities, technical universities, universities specialized in a particular field or targeting particular groups of students). Consequently institutional differentiation, even in internal formal government and management structures, could be sought by the government to diversify institutions in order to respond to the different requests and needs of society.

A more in-depth look at new board composition requirements as provided by the new statutes reveals a mimetic isomorphism (di Maggio & Powell 1983) among institutions: most universities limited lay representation to the minimum level allowed by law, leaving most seats to academic staff. Therefore, institutions did not differentiate board composition, converging towards a council with similar size, because of state regulation, and lay representation, because of university choices. Indeed, even after the enforcement of Law 240, a high level of organisational compliance with the governance model recommended by the state (coercive or 'vertical isomorphism') and imitative processes between universities (mimetic or 'horizontal isomorphism') are causing statutes and governance arrangements to become strongly homogenous. Italian state universities responded to reform requirements by simply adapting their statutes to comply with the minimal objective requirements of the new government regulation. The characteristics of the organisations, path dependency, historical and cultural traditions, and institutionalised norms and values are the likely causes of resistance to changes and have strongly influenced institutional decisions, limiting the extent of change.

Finally, this paper opens avenues for future research. Future development could focus on whether different selection procedures for board members affect institutional choices and whether different institutional governance clusters differ in performance. Moreover, future research could study the governance practices of universities to draw explicit comparisons among the roles that university boards and their members take in similar governance arrangements. In fact, even if the board roles are strongly influenced by the formal position designed by higher education law and university statutes, governance practice can be decoupled from the formal structures: board members' roles are not only shaped and constrained by formal organisational context and regulatory

structure, but also by conformable, appropriate and legitimate role expectations (Kretek et al. 2013). Consequently, factors beyond the legal framework, such as board members' personality, experience and attitude towards the multi-faceted nature of university governance; mixture of board members; and time constraints can have a decisive impact on the effectiveness of governance practice (Meister-Scheytt 2007). Another future development could focus on the identity of the candidates appointed as board members in the Italian higher education system and whether the presence of lay members with different expertise affect the profile of the institution (e.g., whether the selection of lay members with entrepreneurial experience gives the university a more entrepreneurial approach). Lastly, new Italian institutional governance can be compared to the models operating in other countries (as done in the next paper) to understand the reciprocal strengths and weaknesses.

References

- Amaral, A., Jones, G.A., & Karseth, B. (eds.) (2002). *Governing higher education:* National perspectives on institutional governance. Dordrecht: Kluwer.
- Bardin, L. (2009). Análise de conteúdo. Lisboa: Edições 70.
- Berle, A.A., & Means, G.C. (1932). *The Modern Corporation and Private Property*. San Francisco: Jossey-Bass.
- Boffo, S., & Dubois, P. (2005). The weakness of university legislative bodies: the cases of France and Italy, *International Review of Administrative Sciences* 71(1), 35-54.
- Boffo, S., Dubois, P., & Moscati, R. (2008). Changes in University Governance in France and in Italy, *Tertiary Education and Management* 14(1), 13-26.
- Braun, D. (2014). Governance of Universities and Scientific Innovation. In C. Musselin
 & P.N. Teixeira (eds.), *Reforming Higher Education. Public Policy Design and Implementation*. Dordrecht: Springer, 145-173.
- Capano, G. (2008). Looking for Serendipity: The Problematic Reform of Government within Italy's Universities, *Higher Education* 55(4), 481-504.
- Capano, G. (2011). Government continues to do its job: A comparative study of governance shifts in the higher education sector, *Public Administration* 89(4), 1622–1642.
- Cornforth, C. (2003). Introduction: the changing context of governance emerging issues and paradoxes. In C. Cornforth (ed.), *The Governance of Public and Non-Profit Organisations*. What do boards do?. London: Routledge, 1-19.

- de Boer, H., & Stensaker, B. (2007). An Internal Representative System: The Democratic Vision. In P. Maassen & J.P. Olsen (eds.), *University Dynamics and European Integration*. Dordrecht: Springer, 99-117.
- de Boer, H., Huisman, J., & Meister-Scheytt, C. (2010). Supervision in 'modern' university governance: boards under scrutiny, *Studies in Higher Education* 35(3), 317-333.
- Di Maggio., P.J., & Powell, W.W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields, *American Sociological Review* 48(2), 147-160.
- Donaldson., L., & Davis, J. (1991). Stewardship Theory or Agency Theory: CEO Governance and Stakeholder Returns, *Australian Journal of Management* 16(1), 49-64.
- Donina, D., Meoli, M., & Paleari, S. (2015). Higher Education Reform in Italy: Tightening Regulation Instead of Steering at a Distance, *Higher Education Policy* 28(2), 215-234.
- Enders, J., De Boer, H.F., & Weyer, E. (2013). Regulatory autonomy and performance: the reform of higher education re-visited, *Higher Education* 65(1), 5-23.
- Estermann, T., Nokkala, T., & Steinel, M. (2011). *University autonomy in Europe II: The scorecard*. Brussels: European University Association.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control, *Journal of Law* and *Economics* 26(2), 301-325.
- Fassari, L. (2004). L'autonomia universitaria tra testi e contesti. Milano: Angeli.
- Hung, H. (1998). A Typology or Theories of the Roles of Governing Boards, *Corporate Governance* 6(2), 101-111.
- Keasey, K., Thompson, S., & Wright, M. (eds.) (1997). *Corporate Governance: Economic and Financial Issues*. Oxford: Oxford University Press.
- Kretek, P.M., Dragšić, Ž., & Kehm, B.M. (2013). Transformation of university governance: on the role of university board members, *Higher Education* 65(1), 39-58.
- Krücken, G., & Meier, F. (2006). Turning the University into an Organizational Actor. In G.S. Drori, J.W. Meyer, & H. Hwang (eds.), *Globalization and organization*. *World Society and Organizational Change*. Oxford: Oxford University Press, 241–257.
- Maassen. P., & Olsen, J.P. (eds.) (2007). *University Dynamics and European Integration*. Dordrecht: Springer.

- March, J.G., & Olsen, J.P. (1983). Organizing political life. What administrative reorganization tells us about government, *American Political Science Review* 77(2), 281–296.
- March, J.G., & Simon, H.A. (1958). Organizations. New York: Wiley.
- Meek, V.L., Goedegebuure, L., Santiago, R., & Carvalho, T. (eds.) (2010). *The changing dynamics of higher education middle management*. Dordrecht: Springer.
- Meister-Scheytt, C. (2007). Reinventing Governance: The Role of Boards of Governors in the New Austrian University, *Tertiary Education and Management* 13(3), 247-261.
- Musselin, C. (2006). Are universities specific organisations?. In G. Krücken, A. Kosmützky, & M. Torka (eds.), *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: Transcript Verlag, 63-84.
- Musselin, C. & Teixeira, P.N. (2014). Introduction. In C. Musselin & P.N. Teixeira (eds.), *Reforming Higher Education. Public Policy Design and Implementation*. Dordrecht: Springer, 1-17.
- Muth, M.M., & Donaldson, L. (1998). Stewardship Theory and Board Structure: A Contingency Approach, *Corporate Governance* 6(1), 5-28.
- Paleari, S., Donina, D., & Meoli, M. (2015). The Role of the University in Twenty-First Century European Society. *Journal of Technology Transfer*, 40(3), 369-379.
- Pfeffer, J., & Salancik, G.R. (1978). *The External Control of Organisations: A Resource Dependence Perspective*. New York: Harper & Row.
- Pollitt, C., & Bouckaert, G. (2011). *Public management Reform. A comparative analysis:*New Public Management, Governance, and the Neo-Weberian State. Oxford: Oxford University Press.
- Reale, E., & Potì, B. (2009). Italy: Local Policy Legacy and Moving to an 'In Between' Configuration. In C. Paradeise, E. Reale, I. Bleiklie & E. Ferlie (eds.), *University Governance: Western European Comparative Perspectives*. Dordrecht: Springer, 77-102.
- Rebora, G., & Turri, M. (2009). Governance in Higher Education: An Analysis of the Italian Experience. In J. Huisman (ed.), *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*. London: Routledge, 13-32.
- Shattock, M. (2006). *Managing Good Governance in Higher Education*. Berkshire: Open University Press.

- Tricker, B. (2000). Editorial: Corporate Governance: The subject Whose Time Has Come, *Corporate Governance* 8(4), 289-296.
- Weber, R.P. (1990) Content analysis. In (Eds.), *Basic Content Analysis* (pp. 117–124). Thousand Oaks, California: Sage.
- Weick, K.E. (1976). Educational organizations as loosely coupled systems, *Administrative Science Quarterly* 21(1), 1–20.

5.3. Convergence or Divergence in university institutional governance reforms? Comparing Napoleonic states⁸

The fact that an opinion has been widely held is no evidence whatever that it is not utterly absurd (Bertrand Russell)

Abstract

This paper fills in the debate about convergence or divergence in higher education organizational change, analysing university institutional governance reforms and their implementation in two Napoleonic states (Italy and Portugal), a cluster of countries under-researched in comparative perspectives in HE governance literature. We develop a multi-level analysis, first addressing how international concepts have been translated into national laws ('Gelmini' reform in Italy and RJIES in Portugal); second assessing how all state universities in both countries implemented them by analysing their new statutes. Our findings show that both states preserve traits of their previous institutional governance model. Past features shape the way countries respond to the transnational model of legitimized university governance thus policy alternatives that prove feasible at a given point in time are limited by the historical-institutional context. Consequently, the concept of organizational allomorphism explains the current pattern in HE institutional governance reform better than both convergence and divergence.

Keywords: Higher education reform; Organizational change; Allomorphism; Italy; Portugal.

Introduction

Higher education (HE) in Europe has undergone remarkable transformations over the last two decades. Common ground for the reforms was the idea conveyed by governments and international organisations that higher education institutions (HEIs) were ineffective, inefficient and over-bureaucratised (Enders et al. 2011). Consequently, the traditional European continental model of governance based on strong state regulation and academic self-governance has been put into question.

Reform trajectories seem inspired by a common archetype which entails a shift from universities being loosely-coupled organizations (Weick 1976) into being 'more complete' strategic organizational actors (Krücken and Meier 2006; Whitley 2008;

⁸ This paper was developed with Sofia Bruckmann and Stefano Paleari for conference presentations. In the conference version, sections on 'Theoretical perspective', 'The internal institutional governance archetype', sub-section on 'Italy', and 'Comparing Italian and Portuguese HE Governance Reforms' are fully my contribution. 'Introduction' and 'Discussions and Conclusions' were jointly written with the co-authors. Instead, I am responsible for all the changes in this chapter with respect to previous version.

Seeber et al. 2015) endowed with autonomy linked to greater accountability. Accordingly, many of the same ideas crop up repeatedly in European HE governance reform (Degn 2015). Nonetheless, national HE systems receive the same inputs very differently, leading to dissimilar interpretations and implementation (Bleiklie and Kogan 2007; Paradeise et al. 2009). Thus, while some scholars argue that HE policies and systems are becoming more similar over time (i.e. Krücken and Meier 2006; Pinheiro and Stensaker 2014), others point towards complex mixture of convergence and divergence (i.e. Vaira 2004; Dobbins forthcoming). Advocates of the convergence thesis stress diffusion of international scripts such as New Public Management (NPM) -usually promoted by international institutional carriers (OECD, IMF, and World Bank)-, Europeanization, and concepts such as policy transfer and policy learning. On the other side, supporters of divergence thesis consider more relevant local translations, path dependence, and complexity of HE change. This paper fills in into this debate, analysing how HE reforms in Italy and Portugal redesigned internal power distribution and reshaped university institutional governance and management structures.

Though several comparative studies have already been published on this topic, they compared reforms mainly against what is happening in English-speaking countries and early-reformer nations in North-Western Europe such as the Netherlands (e.g. Kehm and Lanzendorf 2006; de Boer, Huisman, and Meister-Scheytt 2010). Instead HE governance structures in South Europe are still under-researched in comparative perspectives. These countries are identified under the cluster of 'Napoleonic states' due to the common features of their public administration traditions, being largely based on a bureaucratic organization model and on formal regulations which require compliance and are difficult to modify even when they become obstacles to change (Ongaro 2009; Pollitt and Bouckaert 2011). Such features distinguish them from other clusters of countries with common administrative tradition (Anglo-American, Germanic-continental, or Scandinavian countries).

Given the distinctive features of their public administration traditions and the low representation of Napoleonic states in HE institutional governance reform comparative studies, this paper fills the gap assessing whether there is convergence among national HE policies and university organizational responses in two Napoleonic states: Italy and Portugal. They present a unitary national regulation of their own HE system and reformed

_

⁹ Similar administrative traditions may be defined as 'a historically based set of values, structures, and relationships with other institutions that define the nature of appropriate public administration within society' (Peters 2008).

the regulatory structure for state university institutional governance just few years distance each other (Law 62/2007 or RJIES in Portugal and Law 240/2010 or Gelmini reform in Italy). We develop a multi-level analysis: first addressing the decision-making at country level, namely how international concepts have been translated into the new national laws by policy-makers, since national policy still plays a relevant role in shaping university governance structures (Kretek, Dragšić, and Kehm 2013); second we analyse how individual state universities within both countries translated the HE law requirements since the university statutes, besides being local adaptations of HE laws, provide for local interpretations of certain provision (Kretek, Dragšić, and Kehm 2013; Donina, Meoli, and Paleari 2015a or previous paper). The focus will be on the strategic apex of university institutional governance: the university leadership (rector) and the main governing bodies (Administrative Board in Italy; General Council in Portugal).

Our findings evidence that both Italy and Portugal preserve traits of their previous institutional governance model, suggesting that past features shape the way Napoleonic countries are responding to the current transnational model of legitimized university governance. The historical-institutional context influences indeed policy alternatives feasible or acceptable at a given point in time. Therefore the concept of organizational allomorphism (Vaira 2004), which points out that though there is a common archetype to aim to, institutions adapt and translate it in different declarations, explains the current pattern in international HE institutional governance reform better than both convergence and divergence.

The remainder of the paper is organized as follow. Next section presents the theoretical perspective on HE organizational change and the theories supporting them. Then the international institutional governance archetype is presented, detailing common trends in European governance reforms. Following sections present the sample and methodology employed and how the institutional governance model has been modified in all state universities of both countries, highlighting convergent and divergent features. Lastly, the discussion and conclusion section assesses whether convergence or divergence is in HE organizational change both within Napoleonic countries and with respect to the international archetype.

Theoretical perspective on Higher Education Organizational Change

University organizational change is an issue highly debated in the HE literature (Vaira 2004; Jungblut and Vukasovic 2013; Pinheiro and Stensaker 2014). Worldwide reforms

demand universities to take up new tasks to respond to the new global social, political, economic and demographic challenges (Pinheiro and Stensaker 2014; Paleari, Donina, and Meoli 2015). However, at the same time, they are deeply infused with values inherited from their history, and are still embedded in a national regulative system, which shapes their governance and organizational arrangements (Vaira 2004; Kretek, Dragšić, and Kehm 2013). Consequently, national contexts deserve particular attention when influence and impact of global concepts are investigated since common ideas are exposed to local translations.

In this context, institutional theory and its various branches evidence two main and opposed interpretations concerning the direction of changes. On one side, convergence thesis stresses homogenization processes and isomorphic change; on the other side, divergence thesis emphasises different, pluralistic, and localised responses. The former is based on a narrow vision of organizations as passive recipients of external ideas within a field, while the latter sees organizations as more active players, which absorb selectively institutional pressures from the external environment (Pinheiro and Stensaker 2014). Among these two mutually exclusive explanations of responses to supra-national institutional pressures, Vaira (2004) provides a third theoretical framework that accounts for both homogenization and heterogeneity: organizational allomorphism. This section presents the theoretical perspectives supporting the three directions of organizational changes within the HE sector.

Convergence

Convergence thesis identifies a homogenization trend among HEIs in the different countries. Its roots are in neo-institutional theory (Vaira 2004) and core concept is organizational isomorphism (DiMaggio and Powell 1983). The most important assumption of this vision is that institutions converge to similar responses when they are subject to the same institutional pressures. As both internationalization and Europeanization processes (i.e. Bologna process) and changes in world polity toward neoliberalism create a common operative framework for the HE sector, supporters of convergence vision state that a tendency to isomorphism is among universities.

In this context, international institutional carriers develop supranational polity, establishing and legitimizing particular concepts, strategies, and recipes for HE and university organizational structures, which affect nation-state policy. This process is pointed out also by the branch of neo-institutionalism labelled as ideational

institutionalism (Hay 2001). It focuses on the role of ideas as source of influence in the policy-making process and its assumption is that ideas function as a filter through which policy-makers set their preferences, strategies, goals, and spaces for action (Degn 2015). Consequently, a process of travelling, diffusion, transference, and borrowing of the same policy ideas occurs across national borders. In the HE sector, mainly NPM ideas have been influential. They were initially developed in the Anglo-Saxon context, but international supporters (OECD, World Bank) spread them, assuming that the same reform agenda could be used to improve HE sector performance almost everywhere.

Notwithstanding the virtues of neo-institutional perspective and institutional isomorphism to explain the macro-structural process influencing the pathways and contents of ongoing changes, they present also drawbacks. Ongaro (2009) evidences that NPM ideas sometimes are not well-adaptable to other administrative traditions and they pose significant challenges in particular to Napoleonic states. These countries borrowed some elements from the NPM toolkit, but they have followed NPM ideas only in limited and selective ways (Kickert 2007; Donina, Meoli, and Paleari 2015b or first paper of the collection). Moreover the neo-institutional perspective is founded on a linear, top-down, and sometimes deterministic causal explanation (Vaira 2004), which neglects other important factors such as organizational context and actors' action. Consequently, convergence thesis has been put under scrutiny and criticized, as explained below.

Divergence

According to divergence scholars, neo-institutional theory underestimates local responses, which reshape the global trends in the face of cultures, histories, needs, practices, and institutional context (Christensen, Laegreid, and Wise 2002; Howlett 2014). Consequently, both countries and individual organizations can differ in how they respond to the same institutional pressures. Hence several theories questioned convergence thesis, accounting the relevance of national and local-organizational agencies in adapting international concepts into national reforming policies and institutions' organizational restructuring. This section presents the main theories which account for policy divergence: historical institutionalism and institutional theory from policy sciences, translation theory and strategic approach from organization analysis.

Historical institutionalism considers that policy formulation usually occurs within the confines of the existing governance mode and policy legacy. Hence policy designers face an already existing policy mix and new policy must take into account these legacies

(Thelen 2003) which both restrict the number of options considered feasible and influence the choices that can be made (Howlett and Rayner 2013). The leeway that policy designers have is influenced indeed not only by institutional pressures, but also by the specific historical and institutional context (Christensen, Laegreid, and Wise 2002). Institutional theory presents the same concepts labelling them as path dependency, incremental change and layering. According to institutional scholars, change is typically limited and incremental (unless 'punctuated change', namely when a major external shock or the accumulation of significant pressures provide possibilities for an abrupt radical change; Baumgartner and Bryan 1993). Though the possibilities of change other than limited, gradual, and incremental are scarce, Pierson (2004) observes that the slow accumulation of small changes over time may lead to a more profound type of change even in the absence of strong external pressures. Streeck and Thelen (2005) identify indeed several mechanisms through which change may occur even within path dependency: layering (creation of new policies and structures without eliminating the old ones), drift (unplanned adaptation), replacement (discovering and activating alternative institutional forms that did exist before, but were considered deviant), conversion (formal reform, with replacement or elimination of an existing policy), and exhaustion (institution gradually loses its purposes and, though formally still in place, it ultimately breaks down). In brief, historical institutionalism entails not that change is absent, but only that institutional past constraints the range of possibilities given the resiliency of policy arrangements. Thus national institutional arrangements, specific cultural features, and policy legacies shape HE policy decisions and organizational structures.

Two further perspectives from organizational analysis challenge isomorphic change and stress divergence: translation theory and strategic approach. They point out that isomorphic change overshadows and underestimates the degrees of freedom and strategic manoeuvring that organizations enjoy in the face of institutional constraints. Thus, even if countries and organizations share and face the same institutional and environmental pressures, they respond in different ways, of which isomorphic response is only one of the possibilities. While strategic theory emphasises the centrality of agency, which can cause different responses in organizational behaviour, structures and pathways to change, translation theory, originating from ideational institutionalism, presents human sensemaking, interpretation, and translation as core concepts (Latour 1987; Czarniawska and Sevòn 2005), which replace diffusion and transference to highlight the dynamic travel and transformation of ideas. In accordance with historical institutionalism also,

translation theory suggests that ideas construct some forms of path dependence, which influence the possible trajectory of any new idea that is inserted or emerges into a policy field. Therefore, analysing the process by which ideas spread and travel over space and time, Czarniawska and Sevón (2005) suggest a dynamic relationship between old and new ideas, where new ones derive meaning from already existing concepts. Thus, even if organizations face isomorphic pressures, the adaptation and subsequent diffusion (institutionalisation) of a specific structural design are influenced by the translation process, namely by the way the organization and its actors in an active and creative manner receive, select, make sense of, interpret, combine, re-construct, implement, discard parts of, and combine the new ideas with the cultural repertoires available in the context of action. The local translation process gives rise to unique combinations that can be related to the original ideas only in a very loose way.

In summary, according to divergence thesis, localization processes are at work and drive to heterogeneity both across and within national boundaries inasmuch both national law and local-organizational agencies (universities) adapt the supra-national model.

Allomorphism

Divergence theories are well-suited to analyze the micro-level dynamics, and useful to address the way countries and individual organizations relate to environmental and institutional pressures. However they have the drawback to blur wider dynamics, which neo-institutionalist approach fruitfully tackles. Consequently, Vaira (2004) proposes the concept of organizational allomorphism as a framework of analysis to account for both isomorphic pressures and local responses, blunting their mutual exclusivity. This concept points out that, though organizations adapt or translate the same institutional archetype in different declarations, a common pattern which structures the organizational arrangements and behaviour is recognizable.

Applying this concept to HE organizational change means that, while international institutional carriers exert pressures over national policy-makers to incorporate the same archetype and imperatives regarding university governance structures, they are combined with national and local policy and governance arrangements (localization process). This entails an articulation and adaptation of the broad institutional archetype, first, in the coercive pressures exercised by nation-state via policy-making and, second, in the local governance structures by individual universities, which in turn decline the national archetype in variants of the same pattern. Since the international archetype is adapted and

articulated into both national reforming policies and the latter into institutions' organizational restructuring, three different levels of embeddedness are co-present: international, national, and local-organizational.

The International Institutional Governance Archetype

HE reforms across Europe re-arranged public university internal governance structures and redesigned power distribution according to a new organizational archetype. It envisages that institutional leadership and university board play a stronger role in university governance. Consequently, reforms gave more authority in central decision-making to the rector and university board with respect to the tradition collegial governing bodies (academic senates) (Kretek, Dragšić, and Kehm 2013), modified existing university board, in some cases establishing new ones (de Boer, Huisman, and Meister-Scheytt 2010), and prompted the development of HE management as a distinct profession. The new institutional governance archetype features are indeed (Kretek, Dragšić, and Kehm 2013; Donina 2014):

- Verticalization of decision-making powers
- Professionalization of HE leadership and managerial positions
- Replacement of elective method with appointment for managerial roles
- Introduction or empowerment of governing boards' formal decision-making powers
- Weakening and subordination of academic senate
- Reduction in board size to streamline the decision-making process
- Mandatory and majoritarian participation of lay members into the main decisionmaking bodies

We detail below the patterns in European HE reforms regarding the dimensions that are considered in the analysis of Italy and Portugal.

1. Decision-making power allocation: Rector and University Board powers

Formal powers/authority are of utmost importance for governance framework since it affects the role of university leadership and governing bodies. In some countries, HE laws provide for detailed description of governance bodies, assign decision-making powers to university leadership and governing bodies at every level of public universities, establish recruitment procedures, frame the composition of collegial governing bodies and

appointment practices for leadership and management, while other legislations are rather vague (e.g. Norway) (Kretek, Dragšić, and Kehm 2013; Musselin and Teixeira 2014). However, even when decision-making powers are defined by law, roles and functions may differ considerably from country to country (de Boer, Huisman, and Meister-Scheytt 2010). Despite dissimilarities, common reform patterns across countries are recognizable and scholars identified some core functions which HE laws assign to university leadership (rector) and university governing board in the majority of the cases.

Rectors in the traditional collegial governance model had little official powers. New policy design strengthened university leadership giving them greater formal authority to act with freedom from central steering, so as being able to adapt institutions to the changing needs and expectations more rapidly (Krücken 2014). Among the strengthened powers devolved to university leadership, in some governance configurations, rectors are involved in the selection of organizational unit heads (faculty deans; de Boer, Huisman, and Meister-Scheytt 2010) and/or university board members (Kretek, Dragšić, and Kehm 2013).

Reforms increased also the formal authority of university boards, which now are expected to perform tasks formerly Ministry's prerogative, being ideally key actors on par with the university leadership. Kretek, Dragšić, and Kehm (2013) identify core functions that HE laws assign to university boards in the majority of cases. They are usually involved in decisions regarding structural/developmental/strategic planning as well as budgetary allocation, and in the selection/appointment and supervision of university leadership, though in the most of the cases they cannot dismiss the rector or any member of the rector team. The degree of involvement in the various tasks varies from the right to comment on a plan or a proposal made by the rector or the Senate, to full authority, to veto. Formal authority of university boards in Europe is instead low or non-existent in decisions related to the appointment of academic staff, on teaching programmes, and on regulations related to student admission.

Simultaneously to the strengthening of formal decision-making powers of university boards, academic senates are losing their authority and frequently are being subordinated just to advisory functions, especially in strategic decision on structural planning, university development, and budgetary allocation. However, in some governance configurations, they are still involved in the board members selection process.

2. Rector: Selection method

In the traditional continental European governance model, institutional leadership was weak. S/He was an academic elected as a *primus inter pares* from among university academic community. In the new international organizational archetype, appointment replaces election as selection method for university leadership and university board is often involved in the selection process. However, in most cases, university leaders are not accountable to their board as the latter cannot dismiss them as a consequence of poor performance or misbehavior (Kretek, Dragšić, and Kehm 2013). Moreover, a professionalization of university managerial position occurred in some countries such as England (Taylor 2006; Kim 2008) and the Netherlands (Donina 2014).

3. University Board: Size, Composition, and Rules for board members selection University board configuration in terms of size, composition and rules for selection of its members matters for university governance practice, affecting the board role (de Boer, Huisman, and Meister-Scheytt 2010; Kretek, Dragšić and Kehm 2013; Donina, Meoli,

and Paleari 2015a or previous paper of this collection).

Collegial governing bodies in the continental governance model were defined according to democratic values and rules. Board members were elected by all academic constituencies (including non-academic staff and students), who were indeed directly involved in university politics. External members were instead not compulsory and, when represented, they were just a minority. Regarding board size, collegial bodies were extensively participated, being countries wherein they reached even more than 100 members (i.e. Portugal; Bruckmann and Carvalho 2014).

Reforms across Europe profoundly redesigned university governing boards, establishing even new bodies in some cases. Nevertheless still today no dominant university board model is recognizable, but common trends are identifiable. University boards became smaller, lay member presence is now mandatory almost everywhere and majoritarian in most HE systems. There are even countries wherein university boards are composed by law exclusively by external members (i.e. the Netherlands and Austria; de Boer, Huisman, and Meister-Scheytt 2010). However there are also cases wherein laws provide for just specific or minimum minority quotas for lay members (and students as well). At the same time, new ways to choose board members were provided for. Again, selection procedures differ noteworthy among countries and universities (see de Boer, Huisman, and Meister-Scheytt 2010; Kretek, Dragšić, and Kehm 2013; Donina, Meoli,

and Paleari 2015a or previous paper). While in some regulations, the university leadership or the Ministry are charged to select and appoint board members, in others cases the academic senates are involved in the selection process. Even election continues to be a mechanism of choice in some regulations, while co-optation is provided for in others. Finally, a professionalization of board members has occurred in several HE systems, being envisaged a preliminary selection of compliant candidates.

Table 5.3.1 New institutional governance archetype

Governance archetype

Verticalization of decision-making powers

Professionalization of HE leadership and managerial positions

Replacement of election with appointment for managerial roles

Introduction/empowerment of university boards' formal decision-making powers

Reduction in board size

Lay members: majoritarian mandatory participation into university board

Weakening and subordination of Academic Senate

The previous analysis, summarized in the Table 5.3.1 New institutional governance archetype, as well as highlighting the presence of common trends across countries, evidence even most European public universities are still embedded in national regulative systems, which considerably differ each other. Consequently, national contexts still today deserve particular attention when university governance and organizational arrangements are investigated.

Sample

Italy

The Italian HE system is a unitary system constituted by both state and private universities, but without vocationally-oriented institutions (those awarding ISCED 5b degrees). State universities are 66,¹⁰ of which 5 small institutions specialized in doctoral training are allowed to organize their governance and management structures according to their own rules, thus they are excluded from this analysis. Private HE sub-system is instead constituted by further 29 universities, 18 traditional and 11 long-distance learning universities.

-

¹⁰ Including i) Polytechnics which in Italy are technical universities -the only difference with traditional university is that they are specialized in fields of engineering and architecture- ii) one university specialized in sports training iii) two university for foreigners and iv) five small institutions specialized mostly or exclusively in doctoral training.

In the academic year 2013/14, students enrolled in state universities were about 1.5 million, while private universities enrolled about 150 thousand students, two third in traditional universities and one third in long-distance learning institutions.

Portugal

Since the 1970s the Portuguese HE system is a binary system, constituted by both universities and polytechnics (vocational track). It comprises both state and private institutions. The public sub-system includes 14 universities (of which one long-distance learning university), 32 polytechnics and 4 military and police academies, while the private sub-system accounts for 29 universities and 42 polytechnic institutes.

In the academic year 2013/14 there were about 300 thousand students enrolled in public institutions, two-third enrolled in the university sub-system and one-third in the polytechnic sub-system. Private institutions account for a total number of 60 thousand students, three-fourth into universities and one-fourth in polytechnics.¹¹

The features of the sample in terms of student size - enrolled students in bachelor and master degree programs - are summarized in Table 5.3.2.

Table 5.3.2 Bachelor and Master students per university in 2014

	Italy	Portugal
Number of institutions	61	14
Average number of students	25,006	12,102
Std. Dev.	21,065	11,541
Max	104,344	42,986
Min	1,090	2,210

Methodology

Considering just those universities which have to comply with the new legal requirements, this paper provides a multi-level analysis of the Italian and Portuguese state university institutional governance reforms by developing intertextual and qualitative content analysis methods (Weber 1990; Bardin 2009). First, we compare the regulations as provided for by the national laws (respectively 'Gelmini' reform and RJIES). Second, since the practical implementation of regulations and university governance reforms is a key challenge particularly in Southern European countries (Estermann, Nokkala, and

86

¹¹ Data retrieved from PORDATA, July 2015.

Steinel 2011), we assess how all state universities in Italy and Portugal revisited their own governance structures complying with the new rules by inspecting every university statute. We cross-check them against the respective national laws going into details of the three dimensions presented in the former section.

Comparing Italian and Portuguese HE Governance Reforms

This section, after a brief introduction on the historical features of the Italian and Portuguese university institutional governance models, presents how they have been reformed and how state universities in both countries revisited their statutes in accordance with the new laws.

Country-level: National regulation

The university traditional governance model in both countries was the collegial model typical of Napoleonic countries. Institutional governing bodies in both systems were by law the rector, the academic senate, and the university board, while a further governing body, the university assembly, was foreseen by the former Portuguese law (Law 108/1988 or university autonomy law). Collegial governing bodies were composed of elected academics (professors and researchers), non-academic staff, and students and officially held powers. In Italy, bi-cameral dynamics between administrative board and academic senate (which presented large-scale isomorphism in composition with absolute majority of academic staff) characterized the decision-making process, while in Portugal the university assembly was in charge of most important decisions. The latter was extensively participated, reaching even more than 100 members in some cases, and with equality between academic staff and student representatives. The rector authority instead was weak. S/He was elected as a *primus inter pares* among university full professors in both systems. In Portugal the general assembly was in charge of the election, while in Italy s/he was elected directly according to a weighted voting system wherein academics (professors and researchers) had the absolute majority of the votes, but also non-academic staff and students cast a vote. His/Her term could be renewed according to the HEIs' statutes in both systems. One difference regarded the academic senate's composition: while Italian academic senates were composed of only internal representatives directly elected from the three university estates (academics, non-academic staff, and students), in Portugal even lay members could be included (up to 15% of senate members), though their presence was not mandatory and rarely they were appointed.

In this context, Law 62/2007 (RJIES) in Portugal and Law 240/2010 (Gelmini reform) in Italy established the new legal frameworks for internal governance and management structures. Both legislations define details of governance bodies, decisionmaking powers, and other relevant procedures for state universities of their own countries. Although literature on HE policy explains the reforms according to different public management reform narratives (Neo-Weberian narrative in Italy [Donina, Meoli, and Paleari 2015b; first paper of the collection]; NPM in Portugal [Bruckmann and Carvalho 2014]), the new regulations present many similarities about institutional governance. Both reforms, for the first time, gave state universities the possibility to choose between two different institutional models (public institute or foundation, where the new foundation model is a hybrid model as it establishes that institutions remain in the public realm but under private law). The rector in both HE systems is the governor and external legal representative of the university, is responsible for institution's political and strategic management, has powers of proposal and coordination about the teaching and research activities, fulfils both operational and managerial tasks, drafts and presents strategic and financial budget plans and the annual reports to the university board. Both reforms weaken the collegial governance model, reducing the powers of the academic senates (not anymore compulsory in Portuguese universities), while empowering the university boards (the reformed Administrative Board in Italy and the new established General Council in Portugal), which are now responsible for university's strategic orientation and financial decisions. Moreover, new regulations impose size and compositional requirements to the university boards (Table 5.3.3): a minority mandatory participation of lay members (20% in Italy, 30% in Portugal) is provided for the first time in both legislations, which also establish the same minimum quota for students (at least 15% of board members). Finally, non-academic staff representation is not anymore compulsory in both countries.

Table 5.3.3 Board size and compositional requirements by law

Compositional requirement	Maximum Size	Minimum Size	Rector	Academic staff	Lay members	Students
Gelmini Reform	11		Yes		≥ 20%	≥ 15%
RJIES	35	15	No	> 50%	≥ 30%	≥ 15%

However, there are even *divergences* between the two legislations. Italian universities present greater leeway regarding board composition, being only minimum quotas for external members and students, while the Portuguese law imposes also a

minimum quota of 50% for academic board members. A second divergence regards board member selection criteria. In Italy the reform introduces the concept of professionalism for board members (they should be selected based on individual skills, either 'managerial experience' or 'cultural-scientific competencies'), while no detailed regulation is imposed about which mechanism should be employed to select them, apart from students who are elected by law. Instead, in Portugal RJIES makes no reference to professionalization of board member, but prescribes the democratic selection method: academics, non-academic staff (when present), and students are elected by their peers using a proportional representation system. Once elected, internal members co-opt the external ones. Another major difference regards university board size. Both legislations make them smaller, but Italian universities are more restricted, being the main governing body limited at a maximum of 11 members. Instead Portuguese institutions have greater leeway regarding board size: it can be composed of from a minimum of 15 to a maximum of 35 members.

Even regarding the other collegial governing bodies there are divergences. Both systems reduce the academic senate powers, but while in Portuguese universities it is not anymore a compulsory body and, when existent, has only advisory functions, in Italy it is still compulsory and maintains by law formal decisional powers regarding academic matters. Moreover in Portuguese HEIs the Management Board becomes a mandatory governing body, responsible for the administrative, asset, financial, and human resources management. It is chaired by the rector and composed of a maximum of five members appointed by the same rector (including the vice-rector and a director). Finally Portuguese universities which choose the foundation model have one extra mandatory board, the Board of Trustees, which is composed by five external members appointed by the government upon suggestion of the institution.

Other major differences regard the rector. While in Italy s/he is *ex officio* a board member and can chair it, as well as the Academic Senate, in Portugal s/he is not anymore board member by law (although s/he can attend the meetings) and general council chairman is elected from the same council among the external members. Another difference regards the rector's selection criteria. S/He continues to be elected in both systems, but according to different procedures. In Italy s/he continues to be directly elected from the whole academic community according to a weighted voting system wherein academic staff hold the absolute majority, while in Portugal an indirect elective system is in place: s/he is elected by the General Council, wherein elected academics are the absolute majority. Moreover both reforms enlarge the pool of potential candidates for

rector office. However, while in Italy s/he can be chosen only from among full professor working at any Italian university, in Portugal s/he can be now elected even from among candidates coming from abroad. Furthermore, a major innovation of the Italian reform regards the rector mandate as now s/he is in charge just for one non-renewable 6-year term, whereas in Portugal s/he continues to be elected for a 4-year term and may run for a second mandate. Finally, the power to dismiss him/her is introduced in both systems. However, while in Italy the motion of no-confidence is proposed by the academic senate and has to be approved by the rector's electorate, keeping in this way him/her accountable to the academic community, in Portugal the General Council has the right to dismiss the rector (the decision taken by the councils needs a two-third majority in both countries).

University-level: Reform implementation

Turning on how individual universities implemented the reforms, most of the universities in both systems rearranged internal governance and management structures in a conservative way, converging towards similar choices. External board members presence into university board was limited at the minimum threshold imposed by law (or even below: only three universities respected minimum law requirements in Portugal, while in Italy one institution is below the law threshold). Within the Italian context, just one university (University of Trento) gave to external members majoritarian representation (rector and students are the unique other board members), but it is a very peculiar governance case even within Italy: it is also the only Italian university wherein the rector cannot chair the board by statute, being the chairman selected from among the lay members appointed by the Province¹² (local authority). Another peculiarity of University of Trento is that it is the only Italian university wherein rector candidates are subject to a preliminary selection by an on-purpose evaluation committee.

Student members presence as well is limited just to meet minimum law requirements in every institution in all state universities of both countries (or again even below in many Portuguese universities: only 8 of the 14 Portuguese state universities respected the minimum threshold). As a result, despite different law prescriptions, universities in both countries present similar choices regarding board composition (Table 5.3.4). Finally, most institutions allow the presence of non-academic staff into the board:

¹² University of Trento is the only state university in Italy wherein the public funding to the institution does not come from the central government, but from the Province (which is granted a special statute within the Italian state).

only two universities in Portugal and four institutions (apart from Trento) in Italy exclude them by statute.

Table 5.3.4 Board size and compositional requirements according to university statute

		Italy		
	Average	Std. Deviation	Maximum	Minimum
Size	10.0	1.1	11	7
Lay members	25.7%	8.4%	77.8%	18.2%
Students	18.1%	3.2%	22.2%	9.1%
		Portugal		
	Average	Std. Deviation	Maximum	Minimum
Size	25.6	6.6	35	15
Lay members	28.1%	2.1%	33.3%	26.1%
Students	15.2%	1.8%	17.4%	12.0%

Regarding board member selection criteria, while in Portugal it is mostly prescribed by law, it varies greatly among Italian universities. Typically, the senate or a dedicated committee makes a preliminary evaluation of applicants' profiles and proposes a pool of candidates from which nominees are chosen. For the selection among eligible candidates, most institutions abandon the elective method in favour of an appointment-based system (for both internal and external members) wherein the choice is performed by either the rector, the academic senate or through the involvement of both bodies. However, there are even 11 Italian state universities which maintained the elective method (see Donina, Meoli, and Paleari 2015a or the second paper of the collection for an in-depth analysis).

Looking at the university board dimension, it converges to smaller size in Italy, ranging from a minimum of 7 (choice made by 4 institutions) to a maximum of 11 seats (adopted from 24 universities), while there is greater divergence in Portugal thanks to the leeway left to institutions by the reform. General council size in Portugal ranges from a minimum of 15 (option taken only by the University of Açores) to maximum 35 members (choice made by three institutions).

Finally, another major difference regards the possibility to become a foundation. While no Italian institution undertook this choice, it was taken by three Portuguese universities (Aveiro, Porto, and ISCTE-IUL; see Bruckmann and Carvalho 2014 for an in-depth analysis). The Portuguese foundation model was expected to give HEIs more autonomy in terms of how they can manage funds, real estate, and human resources, but

autonomy expectations were dashed due to the financial constraints imposed by the government because of the economic crisis.

Discussion and Conclusions: Assessing Napoleonic state reforms against the international institutional governance archetype

Supra-national institutional carriers are pushing countries to adopt a similar institutional archetype in HE governance structures, favouring an organizational isomorphism among universities in Europe. This paper, developing a multi-level analysis which considers simultaneously the three different levels of embeddedness (international, national, and organizational), shows however that Portugal and Italy, two countries belonging to the same Napoleonic administrative tradition, diverge in several aspects with respect to the Anglo-Saxon-driven international archetype (see Table 5.3.5). Both national policy-makers and individual universities adapted it, translating the global pressures into national policy and local institutions' organizational restructuring.

Table 5.3.5 Italian and Portuguese institutional governance model compared to the international archetype

Governance archetype	Italy	Portugal
Verticalization of decision-making powers	In some universities, Rector involved in the selection of Administrative Board members	In some universities, Rector involved in the choice of the directors of organisational units
Professionalization of HE leadership and managerial positions	No. Elected among full professors	No. Elected among full professors
Replacement of election with appointment for managerial roles	Elected from academic community	Elected from General Council
Introduction/empowerment of university boards' formal decision-making powers	Empowerment of Administrative Board	Introduction of the General Council
Reduction in board size	Yes, maximum size: 11 members	Yes, maximum size: 35 members
Lay members: Majoritarian mandatory participation into university board	Minoritarian mandatory participation	Minoritarian mandatory participation
Academic Senate: Weakening and subordination	Decisional power just about academic matters. In some universities, still involved in the selection of Administrative Board members	Not anymore compulsory and just with advisory role

In accordance with the international archetype, both reforms introduced for the first time the compulsory presence of external members into the university board, but contrary to what is typical in the Anglo-Saxon and Northern European countries - lay members are just a minority. Another peculiarity of both Napoleonic countries is that the rector continues to be elected (directly in Italy, indirectly in Portugal) from among the academic community, while the international governance archetype would suggest a topdown selection process through appointment. The governance archetype concepts are indeed blended and combined with the inherited national policy-making and governance structure in a process of local translation and adaptation. As a result, the extent of penetration of the international governance archetype is patchy, it being implemented only selectively in Southern European countries. Due to these peculiarities, governance structures of state universities in Napoleonic countries are a mix of elements drawn from the traditional collegial model combined with a more managerial-like mode of governing universities. Nevertheless our analysis shows that even Napoleonic countries are picking concepts from the organizational archetype prompted by international carriers. As a consequence, the organizational allomorphism perspective with translation and adaptation of global concepts explains better than both convergence and divergence the worldwide HE organizational change.

Focusing just on the two analyzed countries, the traditional governance model looks more resilient in Italy, where academic senates maintain formal decisional powers on academic matters by law, and the rector chairs the Administrative Board in almost all state universities. However, Italy presents a stronger break with the past (in most universities) with regard to how internal board members are selected, being them now appointed by the rector or academic senate rather than directly elected from among university estates, as instead still happens by law in Portugal. Portugal maintains also greater collegiality in decision-making through larger university boards.

Concepts from historical institutionalism and institutional context help to explain dissimilarities in the reform trajectories. In fact, the specific features inherited from the past are shaping the responses both at national and at organizational level. The two countries preserve traits of their own previous institutional governance model (i.e. directly elected rectors in Italy; larger board in Portugal). This 'conservative' approach evidences a resiliency to change of the HE systems due to the necessity of reaching consensus both in the legislative process and in reform implementation. Hence our findings confirm the new policy design theory assertions according to the leeway that

policy designers have is influenced by the historical-institutional features and that the policy alternatives that prove feasible or acceptable at a given point in time are limited by context-dependent features. Implication for policy-makers and global carriers of new policy ideas is that it is not possible to lay down a unique global archetype. The proposed reform trajectories have to be congruent with the governance modes in particular jurisdictions and sectors since the policy mix is slowly built up through a gradual process of incremental changes. Therefore, when global carriers ask for reforms, they should take into account the country-specific historical features since social actors and institutions are resilient to change, try to preserve their traditional characteristics and to resist government efforts to shape their behaviour.

Another important result is that the same global governance archetype develops very differently in different administrative traditions. If public management and HE scholars focus only on states in the same or few administrative traditions, similarities are more apparent, but they could overrate convergence practices just because they leave out from the sample countries in those administrative traditions which do not fit within the proposed 'global' model. A suggestion for future research on HE reforms, institutional governance, and advocates of global convergence thesis in the HE sector is indeed to take into account in their comparative studies also Napoleonic states and Southern European countries to assess whether the convergence is effectively global or just limited to cluster of countries within few administrative traditions.

A potential limitation of the paper is that the analysis is limited just at two Napoleonic states, not the whole sample of countries in this administrative cluster. However, if future research confirms in other Napoleonic states the identified governance peculiarities (elected rector, presence of lay members just as a minority into the university board, etc.), it will strengthen the result that countries in this administrative tradition are following NPM principles only in limited and selective ways regarding HE governance reforms.

References

Bardin, L. 2009. Análise de conteúdo. Lisboa: Edições 70.

Baumgartner, F., and D.J. Bryan. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Bleiklie, I., and M. Kogan. 2007. "Organization and governance of universities". *Higher Education Policy* 20(4): 477–493.

- Bruckmann, S., and T. Carvalho. 2014. "The reform process of Portuguese higher education institutions: from collegial to managerial governance". *Tertiary Education and Management* 20(3): 193-206.
- Christensen, T., P. Laegreid, and L.R. Wise. 2002. "Transforming administrative policy". *Public Administration* 80(1): 153–179.
- Clark, B. 1983. *The Higher Education System. Academic organization in Cross-national perspective*. Berkeley and Los Angeles: University of California Press.
- Czarniawska, B. and G. Sevón. 2005. *Global Ideas: How Ideas, Objects and Practices Travel in a Global Economy*. Malmö: Liber & Copenhagen Business School Press.
- de Boer, H., J. Huisman., and C. Meister-Scheytt. 2010. "Supervision in 'modern' university governance: boards under scrutiny". *Studies in Higher Education* 35(3): 317-333.
- Degn, L. 2015. "Translating Governance Ideas in Danish Higher Education". *Higher Education Policy* 28 (3): 295-313.
- DiMaggio, P.J., and W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields". *American Sociological Review* 48(2): 147-160.
- Dobbins, M. (forthcoming). "Convergent or divergent Europeanization? An analysis of higher education governance reforms in France and Italy". *International Review of Administrative Sciences*, 1-23. doi:10.1177/0020852315580498
- Donina, D. 2014. "La governance delle università. Un inquadramento europeo". In *Il futuro dell'università italiana dopo la riforma*, edited by S. Paleari, 165-212. Torino: Giappichelli Editore.
- Donina, D., M. Meoli, and S. Paleari. 2015a. "The new institutional governance of Italian state universities: what role for the new governing bodies?". *Tertiary Education and Management* 21(1): 16-28.
- Donina, D., M. Meoli, and S. Paleari. 2015b. "Higher education reform in Italy: Tightening regulation instead of steering at a distance". *Higher Education Policy* 28(2): 215-234.
- Enders, J., H. de Boer, J. File, B. Jongbloed, and D. Westerheijden. 2011. "Reform of higher education in Europe". In *Reform of higher education in Europe*, edited by J. Enders, H. d. Boer and D. Westerheijden, 1-10. Dordrecht: Sense Publishers.
- Estermann, T., T. Nokkala, and M. Steinel. 2011. *University autonomy in Europe II: The scorecard*. Brussels: European University Association.

- Hay, C. 2001. "The 'Crisis' of Keynesianism and the Rise of Neoliberalism in Britain:
 An Ideational Institutionalist Approach". In *The Rise of Neoliberalism and Institutional Analysis*, edited by J.L. Campbell and O.K. Pedersen, 193–218.
 Princeton, NJ: Princeton University Press.
- Howlett, M., J. Rayner 2013. "Patching vs Packaging in Policy Formulation: Assessing Policy Portfolio Design". *Politics and Governance* 1(2): 170-182.
- Howlett, M. 2014. "From the 'old' to the 'new' policy design: design thinking beyond markets and collaborative governance". *Policy Science* 47(3): 187-207.
- Jungblut, J., and M. Vukasovic. 2013. "And Now for Something Completely Different? Re-Examining Hybrid Steering Approaches in Higher Education". *Higher Education Policy* 26(4): 447-461.
- Kehm, B.M. and U. Lanzendorf, eds. 2006. *Reforming University Governance: Changing Conditions for Research in Four European Countries*. Bonn: Lemmens.
- Kickert, W. 2007. "Public Management Reforms in Countries with a Napoleonic State Model". In *New Public Management in Europe: Adaptation and Alternatives*, edited by C. Pollitt, S. van Thiel, and V. Homberg, 26–51. Basingstoke: Palgrave Macmillan.
- Kim, T. 2008. "Changing University Governance and Management in the UK and elsewhere under Market Conditions: Issues of Quality Assurance and Accountability". *Intellectual Economics* 2(4): 35–42.
- Kretek, P.M., Ž. Dragšić, and B.M. Kehm. 2013. "Transformation of university governance: On the role of university board members". *Higher Education* 65(1), 39–58.
- Krücken, G., and F. Meier. 2006. "Turning the university into an organizational actor. In *Globalization and organization: World society and organizational change*, edited by G. S. Drori, J. W. Meyer, and H. Hwang, 241–257. Oxford: Oxford University Press.
- Krücken, G. 2014. "Higher education reforms and unintended consequences: a research agenda". *Studies in Higher Education* 39(8): 1439-1450.
- Latour, B. 1987. Science in Action. How to Follow Scientists and Engineers Through Society. Milton Keynes: Open University Press.
- Musselin, C., and P. N. Teixeira. 2014. "Introduction". In *Reforming higher education: Public policy design and implementation*, edited by C. Musselin and P.N. Teixeira,
 1–17. Dordrecht: Springer.

- Ongaro, E. 2009. Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain. Cheltenham: Edward Elgar.
- Paleari, S., D. Donina, and M. Meoli. 2015. "The Role of the University in Twenty-First Century European Society". *Journal of Technology Transfer* 40(3): 369-379.
- Paradeise, C., E. Reale, I. Bleiklie, and E. Ferlie, eds. 2009. *University Governance:* Western European Comparative Perspectives. Dordrecht: Springer.
- Peters, B.G. 2008. "The Napoleonic Tradition". *International Journal of Public Sector Management* 21(2): 118-132.
- Pierson, P. 2004. *Politics in Time: History, Institutions and Social Analysis*. Princeton, NJ: Princeton University Press.
- Pinheiro, R. and B. Stensaker. 2014. "Designing the Entrepreneurial University: The Interpretation of a Global Idea". *Public Organization Review* 14(4): 497-516.
- Pollitt, C. and G. Bouckaert. 2011. *Public Management Reform. A Comparative Analysis:*New Public Management, Governance, and the Neo-Weberian State. Oxford:

 Oxford University Press.
- Seeber et al. 2015. "European Universities as Complete Organizations? Understanding Identity, Hierarchy and Rationality in Public Organizations". *Public Management Review* 17(10): 1444-1474.
- Streeck, W. and K. Thelen. 2005. "Introduction". In *Institutional Change in Advanced Political Economies*, edited by W. Streeck and K. Thelen, 1-40. Oxford: Oxford University Press.
- Taylor, J. (2006). "Big is beautiful. Organisational Change in Universities in United Kingdom. New models of Institutional Management and the Changing Role of Academic Staff". *Higher Education in Europe* 31(3): 251-273.
- Thelen, K. 2003. "How institutions evolve: Insights from comparative historical analysis". In *Comparative historical analysis in the social sciences*, edited by J. Mahoney and D. Rueschemeyer, 208–240. Cambridge: Cambridge University Press.
- Vaira, M. 2004. "Globalization and higher education organizational change: A framework for analysis". *Higher Education* 48(4), 483-510.
- Weick, K.E. 1976. "Educational organizations as loosely coupled systems". Administrative Science Quarterly 21(1): 1–20.

Whitley, R. 2008. "Constructing Universities as Strategic Actors: Limitations and Variations". In *The University in the Market*, edited by L. Engwall and D. Weaire, 23-37. Colchester: Portland Press.

5.4. Public Funding Allocation Reform: The 'Standard Cost'13

We must consult our means rather than our wishes (George Washington, 1780)

Abstract

In December 2014, a reform of the allocative formula of Italian state universities' core budget was put into effect to increase quality and efficiency of the higher education system. The new funding method detaches from the old practice mainly based on historical patterns, so that the 'base component' of annual basic operational grant is now allocated on the basis of a new principle, the so-called 'standard cost per student'. At the same time, the 'performance-based component', already operative in the previous funding formula, is increased. This paper analyses the impact of the new funding allocation method by simultaneously examining the two components, assessing whether the new funding formula leads to a rebalance of state funding among Italian state universities. Results show that the new funding policy produces a redistribution and rebalance of state funding, promoting equity and a fairer allocation of available financial resources.

Keywords: Higher education reform; Budgeting policy; Funding formula; Italy; Gelmini Reform; Standard cost.

Introduction

The global economic downturn and consequent crisis of welfare states have plunged most Western governments into a new era of public-spending cutbacks and austerity (Nelson and Balu 2014). Many Western countries -driven by the pressure to restrain public expenditures and to increase efficiency and effectiveness in the use of public money-reformed the funding system of their public policy sectors (Pollitt and Bouckaert 2011). Among them, higher education (HE) has been one of the most shocked by budget cuts (European University Association 2014), especially in Southern European countries (Paleari et al. 2015). The Italian HE system faced severe cut of governmental funds, about 14 per cent in real term between 2008 and 2014 (reprocessing data from ANVUR 2016) in spite of Italy already was the OECD state (apart from Luxembourg) with the lowest

_

This paper was developed with Mattia Cattaneo, Michele Meoli, and Stefano Paleari for conference presentations. In the conference version, sections on 'Financial management reforms', 'HE Core Budget Reforms…', 'Funding redistribution' are fully my contribution. 'Introduction' and 'Discussions and Conclusions' were jointly written with the co-authors. In the current version, I rewrote extensively 'Introduction' as well as other parts of the paper and I am responsible for all the changes in this chapter with respect to previous version.

public expenditure on tertiary education as a share of overall national state public expenditure (OECD 2015).

Within the Italian HE sector, budget cuts were associated to a reform of the funding formula for the allocation of state funding as of December 2014 (ministerial decree 815/2014; inter-ministerial decree 893/2014 in accordance with Law 240/2010). Rationales for the budgeting allocation reform were to increase quality and efficiency of the Italian HE system (Law 240/2010, Article 5). It establishes that a share of general university funding to state universities (*Fondo di Finanziamento Ordinario*, FFO) – whose total amount covers about 55% of the overall state HE system budget (ANVUR 2016)- is allocated on the basis of the 'unitary standard cost per regular (on-time) student' component¹⁴ (henceforth 'standard cost component'). The 'unitary standard cost per regular student' is the yearly systematic calculation of the cost that an average-efficient state university sustains for its 'average' regular student according to a yardstick competition model. Assumption for the reform was in fact that the previous allocation method -largely based on historical funding patterns- was inequitable and it entailed unjustified differentiation among institutions in the unitary state funding per student.

The reform aims thus to increase equity in systemic state funding, namely to allocate a more balanced amount of public resources per student to every state university, taking into account the differences in the cost of education among macro-disciplinary areas as well as different institutional research performance (considering them in the performance-component funding line within the general university funding). The budget rebalance is to pursue in a gradual manner. According to policy declarations, the formula should progressively detach from the historical patterns until the latter will be out from the formula in 2018.¹⁵

The case study on the introduction of the 'standard cost per student' in the HE sector is crucial in Italy. Though the principle of standard cost was introduced in the Italian legislation in 1997 with the goal to pursue a fairer distribution and a more efficient use of public resources (legislative decree 422/1997, article 17) and discussions about its enforcement are long since in several public policy sectors (i.e. healthcare ¹⁶; public transport), the effective introduction of systematic calculation of the cost has been overall

¹⁴ 'Costo *standard* unitario di formazione per studente in corso

¹⁵ Letter from the former Minister Stefania Giannini to the former President of the Conference of University Rectors Stefano Paleari, accessed at http://www.unipd.it/ilbo/sites/unipd.it.ilbo/files/lettera ministro a paleari 0.pdf

¹⁶ In the healthcare sector, resources made available at the regional level are based on their overall need and past spending, without relying on standard cost criteria (Francese and Romanelli 2014).

limited and patchy (Ongaro 2009). I.e. in public transportation, to the present date, standard costs have not been applied, nor an appropriate methodology for their calculation has been adopted (Avenali et al. 2016). Thus, HE is the first Italian public policy sector that is abandoning historical funding patterns to insert the standard cost approach.

However, a gap can appear between the formal decision to implement a particular reform and the day-to-day practices of government agencies (Pollitt and Bouckaert 2011). In the Italian HE sector, a systematic gap was identified between ideas publicly expressed by the government and actual actions and behaviours (Reale & Potì 2009; Capano 2011; Donina et al. 2015 or first paper of the collection). Therefore funding redistribution cannot be taken for granted. In example, in the past the re-design of budget allocation policy has produced extremely limited redistributive effects in other countries (i.e. Germany, Orr et al. 2007). Thus, grounding on the literature on financial management reforms and on budgeting allocation in HE systems, the paper investigates whether the new Italian funding allocation method is leading to an effective redistribution -namely whether the reform is producing variations in allocation outcomes among institutions- and rebalance of public sources among state universities.

We first map the redistributive effect of the annual basic operational grant of Italian state universities across the teaching and research dimensions pursuant to the allocation reform. Second, we analyse whether the new standard cost component leads to equity and rebalance of the teaching-related component of Italian state universities' core budgets namely whether institutions with lower funding per student comparatively gained financial resources due to the reform. For this purpose, we separate the performance-related component and assess whether 'teaching cost-effectiveness' is significantly correlated to variations in student enrolments in previous years. Findings reveal that the new funding policy leads to an effective redistribution and rebalance of state funding within the Italian HE system, rewarding institutions that were underfunded according to the historical quota, and leading the system toward a more fair and egalitarian allocation. Moreover, the budgeting reform increases the internal competition for students and funding into the HE system, encouraging Italian universities to enhance their commitment to graduating students on time.

The remainder of the paper is organised as follow. The next two sections present the literature on financial management reforms and different approaches to cut-making in times of public-spending austerity, and the budgeting allocation process (as well as its variations) in HE systems. Then, the focus turns on Italy. First, in-depth analysis of the current reform is presented, explaining how the two main aggregate financial lines within the basic operational grant are allocated — the base component, grounded on the new standard cost per student, and the performance-based component. Second, we assess whether the funding reform leads truly to a redistribution and rebalance of the available public resources to Italian state universities. In the discussion section, we discuss the changes to the Italian HE budgeting allocation policy by drawing upon the analytical frameworks of financial management reform and theoretical perspectives to budgeting allocation in HE systems. Finally, findings' policy and managerial implications are discussed.

Financial management reforms

The literature on financial management reforms reveals that, in times of public-spending austerity, the following three strategies are available in making cuts to public expenditure: cheese slicing, efficiency gains, and centralized priority setting (Pollitt and Bouckaert 2011). In this paper, we draw upon these approaches to discuss the recent cuts in the Italian HE sector.

Within the *cheese-slicing* approach, the cuts are homogenous and egalitarian, so operational managers and professional-service delivers are obliged to find ways to reduce their expenditures. In this way, the central authorities are not choosing which services are going to be cut, or what types of reform are to be implemented, 'distancing' the actual cuts from executive politicians while devolving decisions to those people more knowledgeable of practical details. The cheese-slicing approach is common, and provides local managers the opportunity to protect core activities and top priorities. Meier and O'Toole (2009), however, stress that this approach is successful only for short-term cuts, as some of the actions taken would become more damaging and less sustainable if cuts continue over a number of years. Moreover, cheese-slicing generates a highly unpredictable and negative environment for operational managers as they lose part of their budget for reasons unrelated to performance.

A second strategy for budget cutting is *efficiency saving*. This strategy is more compatible with performance improvement and suggests the adoption or increase in use of frame- or block-budgeting. In the past, this meant a change from a system in which central agencies were heavily involved in regulating and controlling individual local services (i.e. through line-item budgets) to a new relationship in which central government introduced frame-budgeting and a formula-determined total. Frame-

budgeting requires a redesign of budgetary procedures: first, the determination of aggregate financial frames; then, the choice of the most appropriate formula and detailed local discussions of allocations to specific programmes.

A third approach is *centralized priority setting*, which envisages strategic cutting and leaves politicians directly in control, often resulting in deep cuts to public spending in the sectors that are not regarded as priorities. Though this is a strategic prioritization, in practice, governments frequently lack the precision-control tools to enable these cuts to be done effectively. With this approach, ministers become visibly and directly responsible for painful choices and take decisions with consequences they could not fully foresee, since they are unlikely to understand the internal complexities of the services being cut.

Some academics have suggested that going from the first to the last budget cutting strategy is a natural order of business, wherein each stage requires a more sophisticated information base, and a more advanced management capacity.

Budgeting allocation in higher education systems

In its simplest way, budgeting can be defined as a decision-making process through which centrally available financial resources are divided among organizational subunits and by type of expenditure (Jongbloed and van der Knoop 1999; Ongaro 2009; Lepori et al. 2013).

In the past, budgets were mainly a process by which annual financial allocations were incrementally adjusted and made accountable to legislatures. Lately, however, fiscal and budgetary constraints on public expenditures have led to an expansion in the scope and purpose of budgeting. It has become a powerful policy instrument through which to achieve goals linked to a specific agenda and more intimately associated with other processes such as planning, operational management, and performance measurement (Pollitt and Bouckaert 2011).

Within HE systems, budgeting is a powerful policy tool, as government funding is one of the central regulatory mechanisms by which steering and governance take place. Consequently, policy-makers in several countries reformed the nature of and rules to assign public funding to universities, making it increasingly subject to growing accountability requirements (Estermann et al. 2011). This happened because European societies have become less confident in the internal working of universities and in the way they spend public resources, conveyed by the governmental sentiment that

universities are largely ineffective and inefficient (Enders et al. 2011). Consequently, university funding in Europe has followed an evolutionary trend by placing greater emphasis on issues such as formula funding criteria, competitive funding, and revenue diversification (Teixeira et al. 2014).

Looking closely at how higher education institutions (HEIs) are financed, in most countries funding is composed by two main streams (Lepori et al. 2007; Jongbloed 2008). The first stream is the *core budget*, in which resources are attributed to universities in a lump-sum and then internally distributed according to organizational priorities. It includes a basic operational grant from the state, supplemented in most cases by fees, donations, and other general revenues. The second stream is third-party funding, namely resources earmarked to specific activities and subunits. It is generally composed of public research grants, private contract funds, postgraduate fees, and other earmarked revenues (Lepori et al. 2013). Existing studies focused mainly on the second dimension, namely research funding and its distribution (Teixeira et al. 2014), which is usually employed by government to 'steer at a distance' the university's research priorities. Nevertheless, in most European countries (including Italy) the basic operational grant constitutes the largest part of the overall HE budget, making it highly relevant to the financial sustainability of universities. Accordingly, this paper focuses on the substantive rules through which the most significant part of the budget is distributed among individual Italian state universities, specifically grounding on the rule-based and material dimensions evidenced by Lepori et al. (2013) in their literature review of existing studies on HE budget allocation. They reveal that, given the centrality of budgeting, the topic has been analysed according to several perspectives: (1) the material side, (2) the relationship of budgeting to actors and their interests, (3) the procedural, rule-based dimension, and (4) the relationship of budgeting to broader cultural dimensions and social norms. In order to analyze the Italian public budget allocation reform, we focus on the proceduralregulative and on the material dimensions.

The *procedural-regulative dimension* focuses on the systems of formal rules constraining actors' decisions, providing the framework to which behavioural actions adhere. For analytical purposes, this can be distinguished between procedural and substantive rules concerning budgeting. The former focuses on the actors involved and steps through which the budget is elaborated, refined, approved, and implemented; the latter, which is the one employed in our analysis, focuses on how budget should be divided among subunits.

The *material dimension* depicts budgeting as a tool to distribute scarce resources, taking into account the rivalry among institutional subunits vying for these resources and their optimal allocation to achieve established goals. According to this perspective, the structure of the resource space and the variations in public HE funding are the central factors to be considered in the analysis. One approach is to highlight the differences in resource composition with respect to countries and individual HEIs related to nationallevel variations in funding composition and ability to attract third-party funds. A second approach focuses on the allocation process. Despite wide national differences, comparative studies display a general shift from soft allocation based on inputs and political negotiations toward more formalized rules, such as funding formula allocation. Nowadays, this is a widespread allocation method used by HE systems (Jongbloed 2008). Reale and Seeber (2013) evidenced how this policy instrument became more sophisticated over time as accountability concerns have had an impact on the relationship between universities and their main financial provider (the state). It evolved from considering only simple teaching indicators such as the number of students and production cost weighted by disciplinary field to encompassing also output criteria in the calculation of funding (Teixeira 2009). Currently, formulas for funding allocation are based on measures of activities (e.g. student numbers) and, to a lesser extent, outputs such as research outcomes and degrees awarded (Jongbloed 2008). In many countries, differences across disciplinary and epistemic communities have also been considered through different levels of state funding per student (Lepori et al. 2013; Reale and Seeber 2013).

Changes to funding formulas are also a way to introduce variations in allocation rules. From a theoretical perspective, budgetary research literature evidences two main theories. The *theory of (process) incrementalism*, developed by Wildavsky (1964), refers to a pattern of marginal change in final allocation outcomes relative to a known base, typically the previous-year's budget. This approach provides stable expectations for budgetary decision makers and reduces the burden of analysis for participants in the process (Davis et al. 1966). An alternative approach is the *theory of serial judgment* (Padgett 1980), which starts with a historically given allocation outcome but then systematically adjusts it by cycling through discrete neighbouring alternatives. The empirical work by Padgett (1980) suggests that process incrementalism is favoured when overall budget levels must be determined, but the greater flexibility of serial judgment gives superior outcomes when the issue is allocation change. Incrementalism was a fair

description of budgetary processes in HEIs until the 1970s. Studies from that period demonstrate that, at least in the short and medium terms, past allocation was the best predictor for current allocation (Pfeffer and Moore 1980). Since then, however, incrementalism has increasingly come under pressure as a budgeting practice that does not enable efficient and strategic allocation of resources (Massy 1996).

The Reform of Higher Education Funding

This section examines the choice of aggregate financial frames by Italian policy-makers, looking comparatively to changes in employees with other public policy sectors, and presents the funding formula reform implemented in 2014.

The overall basic operational grant (called FFO in Italy) amounts to about 7 billion euros, provides approximately 55% of Italian state university system's overall budget (ANVUR 2016), and is assigned by the national Minister of Education, University, and Research (MIUR) to every university as a block grant. Until 2008, FFO was increasing in nominal terms, albeit remaining quite steady from the end of the last century in real terms (CUN 2013).

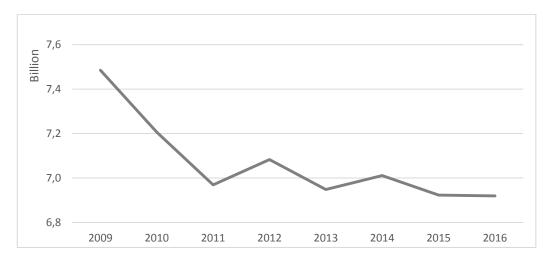


Figure 5.4.1 Institutional basic funding (FFO) in nominal terms in the period 2009-2016 (in billion €)

Due to the crisis of welfare state resulting from the huge public debt, the political disinterest toward the HE sector, and the climate of distrust toward university professor profession (Capano 2010; Donina et al. 2015 or or first paper of the collection), since 2009 the Italian government started to reduce public grants to the HE sector (see Figure 5.4.1). With respect to other public policy sectors, education was subject to deeper public spending cutbacks and reduction in the number of employees: –10.9% in schools and –

9.4% in the universities from 2007 to 2012, while the average for public administration was –5.6% (Fondazione Agnelli 2014). Within the HE sector, the governmental approach to individual university budget cutting was made using safeguard clauses to restrict losses of the worst performing institutions.

Looking at the allocation criteria of public grants to universities, they were modified several times in the last few decades. New funding rules introduced in the mid-1990s (Law 537/1993 and Law 549/1995) established universities' responsibility for the allocation of resources given by the state, replacing line-item with lump-sum budgeting (Capano 2011; Reale and Potì 2009). The new budgeting system allowed greater flexibility to universities, which became responsible for ensuring that funds covered all expenditures linked to their decision-making (e.g. teaching and research activities, personnel salaries, infrastructure, and operational expenses). Generally speaking, this scheme is still in practice with few innovations.

A new funding reform to allocation criteria for Italian state universities' core budget was approved in 1997 (ministerial decree 320/1997). At this time, a share of 60%, which previously was transferred to universities as a basic rate for research, was included in the FFO, while the remaining 40% (previously devoted to funding research), was transformed into the PRIN (Progetti di Rilevante Interesse Nazionale), which became the general method for funding university research. In addition, this reform introduced a funding formula to allocate resources. It was initially composed of simple input parameters and teaching indicators such as the number of students and production cost weighted by disciplinary field, but it has gradually become more complex, including separate and specific parts for research activity (e.g. number and qualification of researchers weighted per disciplinary sector, and external funds attracted in 2003; Reale and Seeber 2013). Since 2008, Law 1/2009 inserted also output indicators through a 'performance-based component' within the formula. It initially weighted about 500 million euros (7% of the basic operational grant), but increased up to 1,385 million euros (20% of FFO) as of 2015. However, indicators used to calculate it were also tied to institutional dimensions and input information, while the most significant portion of the core budget (more than 80% up to 2013) was still allocated according to historical patterns. As a result, the average unitary state funding per student among comprehensive state universities in 2013 ranged from 2.000 € to almost 7.000 € (Table 4.1).

Table 5.4.1 Comprehensive state universities with the highest and lowest average unitary state funding per student in 2013

Total FFO per student in 2013		
Siena	6.697	
Venezia luav	6.041	
Messina	5.830	
Trieste	5.662	
Pavia	5.639	
Genova	5.535	
Sassari	5.412	
Perugia	5.385	
Salerno	3.208	
Urbino Carlo Bo	3.208	
Napoli L'Orientale	3.016	
Calabria	2.987	
Catanzaro	2.852	
Chieti e Pescara	2.748	
Bergamo	2.410	
Napoli Parthenope	2.060	

Source: Reprocessing data from ministerial decree 1051/2013 and Statistica MIUR database

Most recently, the new crucial reform of core budget allocation formula was approved within a comprehensive reform of overall Italian HE governance (Law 240/2010, also called 'Gelmini reform'). Law 240/2010 -regarding systemic funding-prescribes the introduction of the 'unitary standard cost per regular student, calculated according to indexes that take into account different types of degree course and economic context wherein the university operates, to allocate a share of FFO' in order to increase quality and efficiency of the Italian HE system (Law 240/2010, Article 5).

Despite the Law was approved in 2010, the new funding method was enforced only in December 2014 with the issue of ministerial decree 815/2014 and inter-ministerial decree 893/2014. Table 5.4.2 summarizes the variations to aggregate financial lines within the basic operational grant since 2013. New funding allocation criteria detaches thus from the old practice mainly based on historical patterns introducing the 'standard cost' component, and becoming more performance-oriented.

Table 5.4.2 Components of institutional basic funding (in million €)

FFO Figures	2013	2014	2015	2016
Base component	5,433.1	5,085.7	4,910.4	4,679.9
Group A	5,235.8	4,912.6	4,807.9	4,579.2
Standard cost	0.0	982.3 1,201.		1,282.2
Historical (formula)	5,229.3	3,929.1	3,605.1	1 3,297.0
Other funds (ex ETI)	6.5	1.2	1.1	0.9
Group B (and C ^b)	197.3	173.1	102.5	99.8
Performance-based component	819.0	1,215.0	1,385.0	1,433.0
Equalization component	91.0	105.0	105.0	195.0
Others	605.1 ^a	604.9	522.8	611.4
Institutional basic funding (FFO)	6,948.2	7,010.6	6,923.2	6,919.3

^aI added 253.5 million euros among the 'Other funds' in 2013, since the corresponding funding lines were incorporated into the overall FFO in 2014 (Law 98/2013, article 60).

Source: Data from ministerial decrees

The analysis now focuses on how the two main aggregate financial lines within the FFO -the base component and the performance-based component- were allocated in 2014, the first year from the introduction of the standard cost per student.

a) 'Standard cost per student' component

In 2014, 20% of the base component of system basic funding (FFO) began to be allocated on the basis of the standard cost per student principle. 56 Italian state universities participated in the allocation of public resources according to this principle ('Group A' in ministerial decree 815/2014, Table 5.4.2) out of 65 state universities¹⁷ to whom FFO is allocated.18

Formula (1) estimates yearly the cost for every state university of its 'average' regular student according to a yardstick competition model, relying on the costs of academic and non-academic personnel, the number of regularly enrolled (on-time) students by disciplinary macro-areas, local economic environment (by region where the university is located), university infrastructures, and further cost drivers (legislative decree 49/2012) – see below for further details about the formula.

¹⁸ Five state universities specialized in Ph.D. training, two state University for Foreigners, the University of Rome Foro Italico specialised in sports training (Group B, Table 5.4.2), and the University of L'Aquila (Group C, Table 5.4.2) in 2014 received the base component of FFO based on special rules and/or specific agreements with the MIUR.

^b Group C included University of L'Aquila in 2013 and 2014 due to a special funding agreement with the MIUR. From 2015 onward, it is was moved into Group A.

¹⁷ University of Trento does not receive the FFO because it is funded directly by the Province.

Specifically, a regular student is defined as a scholar enrolled for a number of years no higher than the expected duration of his/her degree course. The formula does not consider instead the non-regular students (so-called *fuoricorso*), namely those students who take longer than the nominal duration of their degree course to graduate. Both full-time and part-time regular students - the latter weighted halves of the former in 2014- are counted. The macro-disciplinary areas to group are three: medicine and healthcare (M&H), science and technology (S&T), and humanities and social sciences (H&SS).

(1)
$$Standard\ cost = a + b + c + d + k$$

Where:

- In Italy, academic staff salaries are nationally established and uniform across disciplines but vary depending on career advancement and seniority. This parameter, therefore, considers the standard number of professors and researchers per degree course (according to the accreditation rules established by the Agency for the Evaluation of University System and Research, ANVUR) in relation to the average cost of an equivalent full professor in every university (*Punto organico*). With respect to external teaching contracts, the cost of teaching hours relies on a fixed standard cost for the period 2014–2016 of 132.7 euros per hour.
- b refers to educational, organizational, and technical services, including the provision of technical and administrative staff aimed to support students' education. The standard cost of such services is assumed to be equal to 27.5% of the university average cost of an equivalent full professor multiplied for the expected number of professors.
- c estimates the average cost per student on operation and management of teaching, research, infrastructure and service facilities, calculated according to formula (2), which considers a fixed cost for the university and a differentiated cost per student according to the disciplinary macro-area in which s/he is enrolled. For the estimation of the parameters, the MIUR relies on a range of costs, referring to university balance sheets in the three-years period 2010–2012.

(2)
$$c = \frac{(2,053,582+4,091*StudM&H+1,669*StudS&T+570*StudH&SS)}{(StudM&H+StudS&T+StudH&SS)}$$

- Includes further costs quantified according to the student's macro-field of study. Three different cost sets are considered according to the number of resources employed in the degree courses: the number of collaborators and language experts; of experts in masters or five-years courses (*Ciclo unico*) in primary education sciences and conservation and restoration of cultural heritage; and of tutors in long-distance learning courses. Each group is associated a cost of 10% of the university's average cost of an equivalent full professor.
- * k is an equalization component that accounts for the different local economic conditions of the area wherein the university is located. This parameter is equal for all universities located in the same region and is calculated as the difference between the standard contribution per student in the region according to national rate and the regional maximum students' contribution. Consequently, it weighs 0 euros per student in Lombardy (the region with the highest regional average income), while accounts to more than 300 euros per regular student in regions such as Molise and Calabria, and up to a maximum of 412 euros per regular student in Sicily.

Table 5.4.3 shows the average value for each parameter and its weight over the total estimation of the standard cost. More than half of the total average value (ϵ 6,557) is associated to the cost of teaching and research activities (a), while the costs for educational, organizational, and technical services (b) and for the operation and management of infrastructures and service facilities (c) weigh each more than 22% of the total cost. Finally, parameter (d) accounts for only 0.3%, while the equalization component (k) for 2.4%, even if the latter stands for about 6% of the overall standard cost per student for the universities located in the poorest regions (i.e. Sicily).

Table 5.4.3 Standard cost components value

Standard cost parameters (€)	а	b	С	d	k	Total
Average value	3,296	1,612	1,469	22	158	6,557
Std. Dev.	327	161	314	24	126	721
Max	3,847	1,883	2,149	156	412	7,948
Min	2,493	1,218	798	0	0	4,739
% Average value on Total	50.3	24.6	22.4	0.3	2.4	100.0

Source: Data from inter-ministerial decree 893/2014

Figure 5.4.2 portrays the average unitary standard cost per student for every Italian state university participating in allocation according to the new formula in 2014 (values

are quite steady across years for every institution). A high variability among institutions is observable, ranging from a minimum of 4,739 euros for the University of Macerata, where the student body is entirely in the H&SS area, to a maximum of 7,948 euros for the Polytechnic University of Bari, where all the students are enrolled in the S&T area.

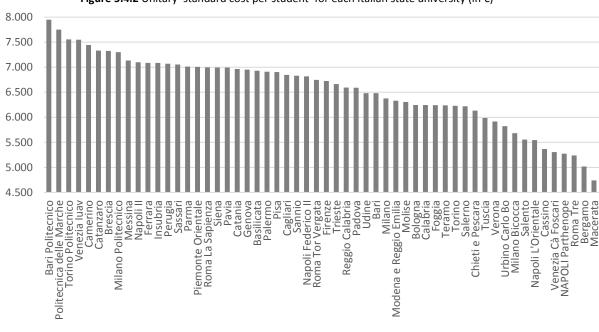


Figure 5.4.2 Unitary 'standard cost per student' for each Italian state university (in €)

Source: Data from inter-ministerial decree 893/2014 (reference year 2014)

A lower unitary standard cost per student does not mean that a university is more efficient. Rather it is mostly due to the distribution of the student body among the three macro-disciplinary areas. This statement is confirmed by the Ordinary Least Square (OLS) regression analysis reported in Table 5.4.4. Model (1) shows that a replacement of one percentage point of regular students enrolled in H&SS with students in M&H (or S&T, respectively) corresponds to an increase of 51.4 (27.3) euros in the unitary standard cost per every student. Instead, Model (2) shows that the university average cost of an equivalent full professor (interministerial decree 893/2014)¹⁹, which mainly depends on the seniority of academic staff, is a further significant determinant of the unitary standard cost per student. A university with an older academic staff is therefore rewarded by the current allocation formula due to the higher salaries of its average equivalent full professors.

_

¹⁹ To make coefficients comparable to Model (1) of Table 3, the average cost of an equivalent full professor at each university has been deducted by the full professor national average cost (118.000 euros) and the difference divided for the same value.

Table 5.4.4 Regression analysis of the determinants of the unitary standard cost per student. Standard deviations are in parentheses. ***p<0.01, **p<0.05, *p<0.10.

OLS model	Dependent variable: Unitary Standard cost per student				
OLS Model					
	(1)	(2)			
% stud M&H	51.435***	51.385***			
	(4.223)	(3.472)			
% stud S&T	27.289***	26.287***			
	(1.890)	(1.566)			
Cost of equivalent full professor		4,179.382***			
		(813.356)			
Constant	4,979.531***	5,110.991***			
	(103.618)	(88.951)			
Observations	56	56			
R-squared	0.837	0.892			

The unitary standard cost per student is then employed to calculate the overall standard cost quota of every university. First, the unitary standard cost per student of each university is multiplied by its own total number of regular students. The resulting total standard cost per university is weighted over the total standard cost of the system (namely the sum of total standard cost of every university in Group A, which amounts to 6,356.7 million euro in 2014, Table 2 attached to ministerial decree 815/2014). The calculated percentage is employed to allocate the share of the base component in the funding line standard cost (982.3 million euros in 2014, Table 1).

b) Performance-based component

A second alteration to the funding lines within the FFO in 2014 with respect to the previous year is that the overall base component was decreased (-330 million euros to Group A in 2014) and replaced by an increase in the performance-based component (+396 million euros). Consequently, the overall performance component in 2014 amounts to 1,215 million euros (18% of total amount of FFO in 2014, Table 5.4.2).

The latter relies on output indicators to address performance issues and was assigned according to the assessment of research quality made by the ANVUR (VQR 2004–2010, 70%), the evaluation of recruitment policies (RP, 20%), and the internationalization (Int, 10%) of every university.

(3) Performance - based component = 0.7 * VQR + 0.2 * RP + 0.1 * Int

Where:

- *VQR* is based on the analysis of research activity in terms of quality, research attraction, internationalization, highly skilled human capital education (e.g. research fellows and PhDs), and the trend of research performance compared to the previous research assessment (VTR 2001–2003). These indicators are weighted with respect to 14 scientific-disciplinary areas (*settori scientifico-disciplinari*).
- *RP* considers the assessment of research outcomes of academic staff recruited by universities between 2004 and 2010.
- Int evaluates the internationalization of universities relying on indicators such as the number of incoming and outgoing ERASMUS students (in the academic year 2012/2013), of European Credits (ECTS) accumulated abroad by on-time students (in academic year 2012/13), and of graduates in the year 2013 who gained at least 9 European Credits in foreign academic institutions.

Similarly to the funding allocation associated with the standard cost component, for every of the above indicators (VQR, RP, Int), the performance-based funding component is allocated among universities considering the weight of each indicator (per university) over the overall funding line.

Analysis of the Redistribution and Rebalance of Higher Education Funding in Italy

This section assesses whether there has been a redistribution of the basic operational grant in the Italian HE system due to the funding reform and whether this is leading toward equity and rebalance of the available resources among Italian state universities.

1. Funding redistribution

This section analyses the impact of the new funding formula, focusing on the redistribution and variations for Italian universities participating in the revised allocation. For this purpose, we built two indicators to split the impact of the two FFO main components: the base component and the performance-based component.

- Teaching cost-effectiveness: Share of institutional base component coming from the standard cost.
- Research performance: Share of the performance-based component within institutional FFO.

Figure 5.4.3 maps the redistribution of financial resources flowing from the national government to individual Italian state universities according to the above-defined indicators. If the change in the allocation formula would not produce any redistribution of state funding among institutions for either the teaching or research components, the universities would be located at the intersection of the axes (respectively at 20% and 18%). Universities in i) the top-right quarter (i.e. Bergamo, Milano Bicocca) receive more funding both by the standard cost and the performance-based components with respect to the average; ii) those in the down-right quarter (i.e. Chieti e Pescara, Napoli Parthenope, and Catanzaro) are awarded by standard cost but disadvantaged by the research performance component; iii) conversely, institutions on the top-left quarter (i.e. Siena, Sassari, Macerata) perform well according to the research component, but receive less funding because of the replacement of historical funding with standard cost formula; finally, iv) universities on the down-left quarter (i.e. Messina, Palermo) are disadvantaged by both components. Figure 5.4.3 illustrates thus an effective redistribution of state funding among institutions.

At a first glance, comparing the ranking of institutions by FFO per student in Table 5.4.1, it is possible to observe that most of the universities with the highest amount of funding per student (i.e. Siena, Messina, Trieste, Pavia, Genova, Sassari, Perugia) are located in the left quarters and thus lose funds from the introduction of standard cost. Instead, all the institutions at the bottom of the rank in Table 5.4.1 (Napoli Partenhope, Bergamo, Chieti e Pescara, Catanzaro, Calabria, Napoli L'Orientale, Urbino, Salerno) increase their public grant due to the standard cost funding line. In addition, a geographical bias in the standard cost formula seems to be: most of the universities poorly performing are located in the Central and Southern regions of Italy, which are comparatively economically disadvantaged with respect to the North.

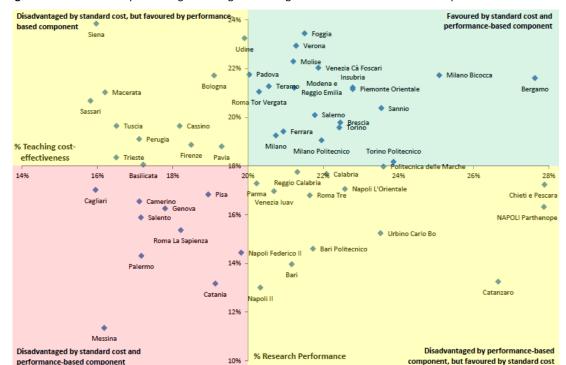


Figure 5.4.3 Institutional positioning according to teaching cost-effectiveness and research performance indicators

2. Assessment of rebalance in state funding

This section investigates whether variations in student enrolment in previous years (since the beginning of the financial crisis) is a determinant of the teaching cost-effectiveness indicator.

Under the previous regulatory framework, the FFO was mostly distributed based on a historical pattern, marginally considering variations in student enrolment for the allocation of public resources. We first argue that, after the introduction of the new standard cost per student, universities registering a growth (decline) in student enrolments should be advantaged (disadvantaged) by the new allocation formula. Second, since Figure 5.4.3 seems to suggest a geographical bias, we test whether university location might affect the standard cost allocation. Finally, we expect that older universities were advantaged by previous allocation mechanism; therefore, older institutions should receive less funding with respect to younger institutions with the reform.

Relying on the sample of 56 Italian state universities participating in allocation according to the new formula in 2014, we implemented an OLS regression model to test whether (1) the percentage variation in students enrolled over the period 2008/09–2012/13 (data from *Anagrafe Nazionale degli Studenti Universitari-Ufficio di Statistica MIUR*); (2) the university location, creating a set of three dummies for universities located in Northern (21 universities), Central (13), and Southern regions (22), as defined by the

ISTAT (Italian National Institute of Statistics) classification;²⁰ (3) the age of the university, measured as the difference (in years) between 2013 and establishment year, are determinants of the teaching cost-effectiveness indicator.²¹

Table 5.4.5 Regression analysis of the determinants of the teaching efficiency indicator. Standard deviations are in parentheses. ***p<0.01. **p<0.05. *p<0.10.

OLS model	Dependent variable: Teaching cost-effectiveness
Δ% enrolled students (2008/09 – 2012/13)	0.163***
	(0.046)
Centre	0.000
	(0.011)
South	0.009
	(0.010)
Age (2013 - Year of foundation)	-3.99e-05***
	(1.18e-05)
Constant	0.226***
	(0.007)
Observations	56
R-squared	0.396

Results of the regression analysis (Table 5.4.5) show that the variation in enrolled students prior to the implementation of the standard cost formula is positively and significantly correlated to the teaching cost-effectiveness indicator²². As expected, this suggests that growing universities took advantage of the standard cost formula, leading to a rebalance in the state-funding allocation. Further, the model shows that older institutions raise less funding associated to the standard cost component (negative coefficient at a 1% significance level), while no significant difference in teaching component is related to university location: taking into account the latest trend in student enrolments, universities located in the Centre and South do not present any difference with respect to Northern institutions in the share of public funding coming from the standard cost component.

²¹ Multi-collinearity is not a concern because the variance inflation factor does not exceed 2, which is below the critical cut-off of 10.

 $^{^{\}rm 20}$ Northern macro regions are used as the reference case in the regression model.

²² Our results are confirmed broadening the period considered for variations in enrolled students (results not shown, available on request).

Discussion

This section discusses the main results of the analysis in the light of analytical frameworks previously presented.

The budget of the Italian HE sector started to be reduced both in real and in nominal terms as of 2009. It was subject to deep cutbacks as revealed by the greater reduction in the number of employees with respect to other public policy sectors. From a financial management reform lens, this governmental choice reflects a centralized priority-setting strategy wherein the HE sector is not a priority. This decision has been eased by the climate of distrust surrounding the HE sector in the public opinion. Within the sector, budget cuts were initially made using safeguard clauses to limit losses of the worst-performing institutions, making resource reduction quite homogenous and egalitarian. This corresponds to a 'cheese slice' approach to university budgets.

The standard cost reform introduced instead a deep change in the public funding allocation criteria. It redesigned the formula to assign the national core budget (distributed by block grants) considering the expected cost per regular student for every university calculated according to a yardstick competition model. The underlying concept is that every Italian state university presents a cost per student mainly influenced by the student body partition among disciplines, since in Italy the other costs, including academic personnel salary (the most relevant cost item), are nationally established and homogeneous across disciplines. The funding policy is indeed more compatible with an 'efficiency gain' strategy, aiming 'to do more with less' and attempting to bring equity into the system, namely to allocate institutions (about) the same amount of public funds for every student enrolled in the same disciplinary group, independently of the university wherein s/he enrols. As a result, the new budgeting formula considers 'quantity' of teaching (namely student demand) as a main driver of public funds allocation and a more balanced amount of public resources per student will be allocated to every state university when 'standard cost' component will totally replace historical funding pattern.

Another important novelty of new funding formula is that it accounts for the number of regular (on-time) students rather than total enrolled students. This aims not only to modernize the financial control system, but it also expresses a broad governmental political and strategic priority through the policy tool of funding. The standard cost reform is in fact a teaching performance-related funding policy that introduces a quasi-market (Le Grand and Bartlett, 1993) into Italian HE sector: competition among institutions for students is driven no longer only by tuition fees, but is now also justified by the possibility

to attract public funds increasing own demand for education. Instead, the cost of non-regular students (*fuoricorso*) is shifted to their own tuition fees (it was possible only after the enforcement of Law 135/2012 that allowed state universities to charge non-regular students greater tuition fees in respect to regular ones).

It is important to highlight that the base component funding line for universities in Group A, namely those participating in the allocation according to the new formula, was equal to just 4,912.6 million euro in 2014 (see Table 5.4.2) despite the expected standard cost at system level for these institutions amounted to 6,356.7 million euro (Table 2 attached to ministerial decree 815/2014). Therefore, state funding related to teaching weights only the 77.3% of the overall 'system standard cost' (and respectively 73.9% and 70.0% in 2015 and 2016). Accordingly, the government implicitly declares that universities have either to collect by themselves the remaining amount (about one fourth of standard cost), i.e. by tuition fees, or to cross-subsidize teaching with performance funding.

This paper also demonstrates that the new funding formula is leading to an effective redistribution and rebalance of funding, flattening the differences originated by the old allocation criteria based on historical pattern. The empirical analysis documents that the standard cost budgeting reform leads to an increase of the block grants assigned to universities that registered a growing enrolment trend in previous years—thus rewarding underfunded institutions according to historical pattern—and promoting equity and a fairer allocation within the system. Another important result is that the new funding formula is not significantly biased by any geographical cluster, as universities located in the poorest regions are not disadvantaged by the new standard cost component.

Looking at the changes in HE funding policy from a budgetary research literature perspective, the Italian reform envisages a profound change in funding philosophy. By adopting the new formula, policy-makers abandon the theory of incrementalism (according to only marginal change in final allocation outcomes occurred compared to the previous year's budget), while embrace the theory of serial judgment. Starting with the historical allocation outcome (the previous year's 'base component'), the MIUR is out to systematically adjust it in the next few years, incrementing the weight of the standard cost component (it was 25% of the base component in 2015 and 27.5% in 2016; ministerial decrees 335/2015 and 552/2016) until the entire base component will be allocated according to the standard cost formula. Although a gradual transition to the new funding criteria is necessary in order to make the new allocation rules sustainable during

the implementation phase, the slow rate of increase makes unlikely that the target to replace historical pattern with 'standard cost' by 2018 will be met. Nevertheless, if the overall design is confirmed, when the transition period is completed Italian state universities will be funded for what they do, no longer for what they were.

At the same time, i) overall available financial resources in the forthcoming years should be at least stable in the base component' not to further penalize under-performing universities; and ii) universities should be provided the managerial tools to manage the shocks (i.e. incentives to staff mobility within the HE system as layoff of tenure staff is not provided for by the Italian public sector law just for financial reasons). An important implication for university management is that, while in its first year the standard cost rewarded mainly underfunded institutions, in the future it will also reward universities with growing enrolments.

Lastly, despite the current reform enforces a huge improvement toward a more fair allocation of public purse among universities, the formula can be improved. For instance, some indicators are questionable and/or improvable. Students could be divided into more disciplinary groups in order to fine-tune the cost calculation; rewards should not only be related to quantity, but also linked to quality of teaching in an effort to avoid a race to become increasingly bigger; might be to employ a standardized average cost even for an equivalent full professor (i.e. the national average cost instead of a differentiated one per institution). In fact, the choice to consider the average cost of an equivalent full professor at each university into the formula, even if it is justified by financial sustainability reasons, disadvantages institutions with younger academic staff, and discourages universities to hire young academics as it would decrease institutional average cost of an equivalent full professor. Given the fast ageing of Italian academic staff (tenure academic staff aged 35 and under decreased from 4,807 in 2008 to 408 in 2015, and under 40 by 64.1% in state universities (see Table 5.4.6). In this way, universities that hire young scholars would be rewarded having a lower cost per professor than the standard one, potentially fostering a rejuvenation of the academic staff in the Italian HE system.

Table 5.4.6 Tenure Academic Staff in Italian state universities by age

	2008	2009	2010	2011	2012	2013	2014	2015	Δ	Δ%
Under 30	567	281	168	152	64	15	2	0	-567	-100.0%
31-35	4,252	3,479	2,988	2,560	1,973	1,273	745	408	-3,844	-90.4%
36-40	7,121	6,819	6,755	6,792	6,393	5,650	4,802	3,879	-3,242	-45.5%
41-50	17,377	17,354	17,400	17,385	17,181	16,980	16,624	16,192	-1,185	-6.8%
51-60	16,907	16,235	15,580	15,292	15,539	15,708	16,091	16,578	-329	-1.9%
Over 60	14,030	14,139	12,308	11,720	11,306	11,382	11,084	10,728	-3,302	-23.5%
Under 40	11,940	10,579	9,911	9,504	8,430	6,938	5,549	4,287	-7,653	-64.1%
Over 40	48,314	47,728	45,288	44,397	44,026	44,070	43,799	43,498	-4,816	-10.0%
Total	60,254	58,307	55,199	53,901	52,456	51,008	49,348	47,785	-12,469	-20.7%

Source: Reprocessing data from Statistica MIUR and CINECA databases.

Conclusions

This paper, grounding on the literature on financial management reforms and on budgeting allocation in HE systems, in-depth investigates the impact on resource distribution stemming from the reform of funding allocation criteria in Italy. Specifically, it evaluates whether the new funding formula leads to an effective redistribution and rebalance of public sources among state universities. Results show that the standard cost budgeting reform produces an increase of the block grants assigned to historically underfunded institutions, promoting equity and a fairer allocation within the system. To this extent, both the introduction of the standard cost formula and the increase in the performance-based component make the Italian HE system (internally) more competitive for students and funding.

Moreover, our analysis raises several practitioner implications. Universities that have gained (lost) from the implementation of the new standard cost formula will likely continue to earn (loss) in the near future (unless a shock in the institutional student body composition and overall dimension). University leadership should take into account this foreseeable budget variation when they draw up financial and strategic plan for university development. A second important practitioner implication is that Italian state universities have now to take into account also the new drivers filled in the funding formula, which are mostly related to the teaching dimension. It should raise attention to didactics and students, being the latter now more important for university financial sustainability. A further managerial implication regards the strategic allocation of available credits for new hiring (so-called *Punti organico*). While up to 2011 every institution had available credits depending on its own ceasing staff, Law 135/2012 relocated the allocation of credits for

new hiring at system level, based on the financial sustainability of university personnel expenditures. Consequently, as of 2012, credits for new hiring are yearly allocated by ministerial decree. The standard cost reform, linking the main funding source to the regular student body size, implicitly relates the availability of new credits for hiring per university to its own student body dimension. It should affect university internal allocation of new hiring among disciplines, making it more strategical and less tied to the historical legacy.

Lastly the article presents policy implications. While the findings are in the context of HEIs, they could also be highly relevant for other Italian public administration sectors. In fact, discussions about the introduction of standard cost criteria in other arenas of public policy (i.e. healthcare) are high on the Italian government's agenda²³. In this respect, the HE sector could become the pilot case study to test new budgeting allocation policy designs and lead to similar patterns of systematic calculation of the unitary cost per 'product' in other public policy sectors.

Finally, this paper opens avenues for future research, as the new funding allocation will likely affect university internal policies. Future studies, filling in the neo-institutional sociology literature, could focus on the link between environmental and institutional pressures and organizational behaviour, exploring which strategies Italian universities will employ and/or analysing the impact of the current reform on internal budget distribution and hiring decisions. Further, exploring how the positioning of Italian universities will change in the race for public resources over time could be another promising research avenue.

References

ANVUR (Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca). Rapporto biennale sullo Stato del Sistema Universitario e della Ricerca (Roma: ANVUR, 2016).

Alessandro Avenali, A. Boitani, G. Catalano, T. D'Alfonso, G. Matteucci, "Assessing standard costs in local public bus transport: Evidence from Italy," Transport Policy *5*2 (2016): 164–174.

Giliberto Capano, "A Sisyphean Task: Evaluation and Institutional Accountability in Italian Higher Education," *Higher Education Policy* 23(1) (2010): 39–62.

122

²³ See the declaration of the Italian Prime Minister Matteo Renzi on 11 April 2015 (see http://www.quotidianosanita.it/governo-e-parlamento/articolo.php?articolo id=27178)

- Giliberto Capano, "Government continues to do its job: A comparative study of governance shifts in the higher education sector," *Public Administration* 89(4) (2011): 1622–1642.
- CUN, Dichiarazione del Consiglio Universitario Nazionale per l'università e la ricerca, Gennaio 2013.
- Otto A. Davis, M. A. H. Dempster, and Aaron Wildavsky, "A theory of the budgetary process," *The American Political Science Review*, 60(3), 529–547.
- Davide Donina, Michele Meoli, and Stefano Paleari, "Higher Education Reform in Italy: Tightening Regulation Instead of Steering at a Distance," *Higher Education Policy*, 28(2) (2015): 215-234.
- Jurgen Enders, Harry de Boer, Jon File, Ben Jongbloed, and Don F. Westerheijden, "Reform of higher education in Europe," in *Reform of higher education in Europe*, eds. Jurgen Enders, Harry de Boer and Don F. Westerheijden (Netherlands: Sense Publishers, 2011): 1-10.
- Thomas Estermann, Terhi Nokkala, and Monika Steinel, *University autonomy in Europe II. The scorecard* (Brussels: European University Association, 2011).
- European University Association, EUA's Monitoring of the Impact of the Economic Crisis on Public Funding for Universities in Europe (Brussels: EUA, 2014).
- Fondazione Agnelli (2014) "Evoluzione recente del personale scolastico," Fondazione Giovanni Agnelli, accessed 20 August 2015, http://www.fga.it/fileadmin/Documenti_Vari/FGA_- Evoluzione personale scuola.pdf
- Maura Francese and Marzia Romanelli, "Is there room for containing healthcare costs? An analysis of regional spending differentials in Italy," *The European Journal of Health Economics* 15(2) (2014): 117-132.
- Ben Jongbloed and Han van der Knoop, "Budgeting at the institutional level: Responding to internal pressures and external opportunities," in *From the eye of the storm. Higher education's changing institutions*, eds. Ben Jongbloed, Peter Maassen, and Guy Neave (Dordrecht: Springer, 1999): 141–164.
- Ben Jongbloed, "Creating public-private dynamics in higher education funding. A discussion of three options," in *Public-private dynamics in higher education funding*, eds. Jurgen Enders and Ben Jongbloed (Bielefeld: Transcript): 113-138.
- Julian Le Grand and Will Bartlett, ed., *Quasi-Markets and Social Policy* (Basingstoke, UK: Macmillan, 1993).

- Benedetti Lepori, John Ushler, and Martina Montauti, "Budgetary allocation and organizational characteristics of higher education institutions: a review of existing studies and a framework for future research," *Higher Education* 65(1) (2013):59-78.
- William F. Massy, "A dynamic equilibrium model for university budget planning," *Management Science*, 23(3) (1996): 248–256.
- Kenneth J. Meier and Laurence J. O'Toole, "The Dog That Didn't Bark: How Public Managers Handle Environmental Shocks," *Public Administration* 87(3) (2009): 485-502.
- Ashlyn Aiko Nelson and Rekha Balu, "Local Government Responses to Fiscal Stress: Evidence from the Public Education Sector," *Public Administration Review* 74(5) (2014): 601-614.
- OECD, Education at a glance 2015 (Paris: OECD, 2015).
- Edoardo Ongaro, Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain (Cheltenham: Edward Elgar, 2009).
- Dominic Orr, Michael Jaeger and Astrid Schwarzenberger, "Performance-Based Funding as an Instrument of Competition in German Higher Education," *Journal of Higher Education Policy and Management*, 29(1) (2007): 3–23.
- John F. Padgett, "Managing garbage can hierarchies," *Administrative Science Quarterly*, 25(4) (1980): 583–604.
- Stefano Paleari, Davide Donina, and Michele Meoli, "The Role of the University in Twenty-First Century European Society," *Journal of Technology Transfer*, 40(3) (2015): 369-379.
- Jeffrey Pfeffer, and William L. Moore, "Power in university budgeting: A replication and extension," *Administrative Science Quarterly*, 25 (1980): 637–653.
- Christopher Pollitt and Geert Bouckaert, *Public Management Reform. A Comparative Analysis: New Public Management, Governance, and the Neo-Weberian State* (Oxford: Oxford University Press, 2011).
- Emanuela Reale, and Bianca Potì, "Italy: Local Policy Legacy and Moving to an 'In Between' Configuration," in *University Governance: Western European Comparative Perspectives*, eds. Catherine Paradeise, Emanuela Reale, Ivar Bleiklie and Ewan Ferlie (Dordrecht: Springer, 2009): 77-102.
- Emanuela Reale, and Marco Seeber, "Instruments as empirical evidence for the analysis of Higher Education policies," *Higher Education* 65(1) (2013): 135-151.

- Gianfranco Rebora, and Matteo Turri, "The UK and Italian research assessment exercises face to face," *Research Policy* 42(9) (2013): 1657-1666.
- Pedro Teixeira, "Economic Imperialism and the Ivory Tower: Economic Issues and Policy Challenges in the Funding of Higher Education in the EHEA (2010–2020)," in *The European Higher Education Area: Perspectives on a Moving Target*, eds. Barbara M. Kehm, Jeroen Huisman, and Bjorn Stensaker (Rotterdam: Sense Publishers, 2009): 43–60.
- Pedro Teixeria, Vera Rocha, Ricardo Biscaia, and Margarida Fonseca Cardoso, "Revenue Diversification in Public Higher Education: Comparing the University and Polytechnic Sectors." *Public Administration Review* 74(3) (2014): 398-412.
- Aaron Wildavsky, *The politics of the budgetary process* (Boston & Toronto: Little, Brown and Company, 1964).

5.5. Inconsistencies in the Governance of Interdisciplinarity: The Case of the Italian Higher Education System²⁴

Borders? I have never seen one. But I have heard they exist in the minds of some people (Thor Heyerdahl)

Abstract

Interdisciplinary research is widely considered pivotal to addressing the grand challenges of modern societies. Accordingly, interdisciplinarity has become prominent in policy discourse for science and higher education. However, little research has explored how interdisciplinarity is considered in governance arrangements of higher education systems. This article aims to contribute to this literature stream. We investigate whether the policy portfolio recognises interdisciplinary as a target, how it supposedly affects interdisciplinarity, and whether interdisciplinarity is addressed consistently. We study the Italian higher education system, focusing on four governance domains: i) universities' internal organization, ii) institutional research assessment exercises, iii) doctoral education, and iv) academic recruitment/careers. We find that although some elements favouring interdisciplinarity have been introduced, a disciplinary rationale still dominates system governance and that the interdisciplinary target is hindered also by policies' inconsistencies within and between governance domains.

Keywords: Interdisciplinarity; Governance; Higher education policy; Policy portfolio; Academic career; Research evaluation.

Introduction

In recent decades, interdisciplinary²⁵ research has emerged as pivotal to addressing the grand challenges of modern societies (Nature 2015). Collaboration across disciplinary boundaries is recognised as crucial for innovation, and for addressing social and economic problems (Frodeman et al. 2010; Clark and Wallace 2015). As a consequence, interdisciplinarity has become a buzzword in the rhetorical and programmatic discourse on research and higher education (HE) (Feller 2002; National Academies 2004; Rhoten

²⁴ A version of this chapter co-authored with Marco Seeber (CHEGG, Ghent University, Belgium) and Stefano Paleari, is under review for publication on the scientific journal *Science and Public Policy*. In the submitted version, the section 'Obstacles to Interdisciplinarity' is fully my contribution, 'The rise of interdisciplinary mantra' is written together with Stefano Paleari, 'Context and Methodology', and 'Empirical analysis' together with Marco Seeber, and 'Introduction' and 'Conclusions' are jointly written with both co-authors. Instead, I am responsible for all the changes in this chapter with respect to submitted version.

²⁵ We use the term interdisciplinarity not only in its sense of integration and fusion among disciplines, but also in that of multi-disciplinarity (coexistence of different disciplines; accumulation of knowledge supplied from more than one discipline), and trans-disciplinarity (non-disciplinary, freedom from disciplinary boundaries) (for more details about definitions see Wagner et al. 2011; Clark and Wallace 2015).

2004; AAU 2005; Brint 2005; Elkana 2012; Woelert and Millar 2013). However, translating policy discourse into policy design and governance arrangements is not straightforward (Howlett 2014). In fact, although interdisciplinary and disciplinary research are not necessarily incompatible, the design of a HE governance that arranges them in a consistent and mutually supportive fashion is complex. Scholars claim that policies have failed to foster interdisciplinarity, and pointed out a 'paradox of interdisciplinarity' in HE research governance, namely the discourse on interdisciplinarity conflicts with the persistence or even reinforcement of modes of governance that almost exclusively rely on rigid discipline-based classification systems (Weingart 2000; Woelert and Millar 2013).

Research on interdisciplinarity has mostly considered Anglo-Saxon contexts (particularly Australia and United States) and focused on the meso- and micro-levels, e.g. on interdisciplinary approaches in specific research fields (Heimeriks 2013; Turner et al. 2015; Albert et al. 2015), on the design of interdisciplinary curricula (Jacobs 1989; Millar 2016), on the evaluation and measuring of interdisciplinary research (Langfeldt 2006; Wagner et al. 2011; Fagerberg et al. 2012; Rafols et al. 2012; Bromham et al. 2016), on the funding of interdisciplinary research proposals (Lyall et al. 2013; Bozhkova 2016; Bromham et al. 2016), and on the strategies to promote interdisciplinarity at the institutional level (Sà 2008; Weingart 2014). Instead, analyses at macro-level have been very rare. To the best of our knowledge, just two articles have studied the governance for interdisciplinarity at system level (Weingart 2000 on Germany; Woelert and Millar 2013 on Australia). Moreover, these studies have considered a single policy instrument²⁶ at a time. Yet, scholars of public policy have stressed that it is the interaction of several policy instruments and governance domains that is crucial for achieving policy goals (Howlett and Rayner 2013).

Therefore, this article fills these gaps by studying the governance of interdisciplinarity at system level and investigating the consistency towards the interdisciplinary target of policy instruments in different governance domains. Also, we consider the Italian HE system, which —differently from Anglo-Saxon systems and alike most continental European HE systems— comprehends a large majority of public institutions, it is funded to a large extent by the public purse, and in which steering occurs

_

²⁶ In this article, we employ a widely used definition of policy instrument as a means, tool, or technique by which a government wields its power in attempting to ensure support, or to effect or prevent social change (Vedung 1998).

mainly via state laws and regulations (Bleiklie and Michelsen 2013; Capano 2014; Donina et al. 2015 or first paper of the collection).

We adopt a definition of governance that covers the whole range of institutions and relationships involved in the process of governing, encompassing mechanisms that do not necessarily rest on authority and sanctions of the state (Pierre and Peters 2000).27 However, given the importance of 'traditional' types of policy instruments in the governance of the Italian system, we focus in particular on policies designed by the state in its different guises (e.g. government, agencies, Huisman 2009). We consider four major governance domains, all of which have been objects of reform in recent years: i) internal organization of universities, ii) assessment of universities' research performances, iii) organization of doctoral training, and iv) regulation of the recruitment and careers of academics.

We explore whether interdisciplinarity is an explicit goal of the reforms, whether the policies are consistent towards the interdisciplinary target both within each governance domain and between governance domains, and we assess how the policy portfolio supposedly affects it. To achieve this, we triangulate (e.g. Eisenhardt 1989) evidence from qualitative analysis of the contents of policy documents and regulations, and evidence from quantitative analysis of universities' internal changes related to these policies.

The article is organized as follows. The following section presents the reasons for the rise of the interdisciplinary 'mantra' in policy rhetoric and the barriers to developing interdisciplinarity in practice. In the third section, we introduce key concepts of the policy design literature, namely the reform trajectories and ex-ante evaluative criteria used to assess the policy portfolios. In the fourth section, the case study, methodology and data for empirical analysis are presented. In the fifth section, we analyze with regard to interdisciplinarity each governance domain, their internal consistency, as well as the consistency between different governance domains. In the conclusion, the main findings and avenues for future research are discussed.

the state (Jordan et al. 2005).

²⁷ Some scholars employ the term 'governance' to identify policy instruments for which the state does not specify the goals or the means, and with the term 'government' the policy instruments whose goals and means are defined by

Interdisciplinarity: between rhetoric and practice

The rise of the interdisciplinarity 'mantra'

The idea of dividing knowledge into discrete categories dates back to Plato and Aristotle (Ledford 2015). Disciplinary categorizations within universities emerged from differences within science regarding—inter alia—ontological and epistemological assumptions, research methodologies, fundamental problems, and goals. Nowadays, academic disciplines are the commonly accepted classification system for the production, communication, acquisition, dissemination, and validation of knowledge (Abbott 2001; Clark and Wallace 2015). However, once established, disciplines also could act as symbolic boundaries (Lamont and Molnar 2002), which formally or informally establish distinct categories that enable objects, people, and practices to be classified into groups (so-called 'academic tribes', Becher 1989) and enhance feelings of similarity and difference (Sokal 1974). In turn, academic disciplines impact on the same objects they classify. They affect the organization and production of new knowledge by creating cognitive boundaries that can limit research practices and their scope, institutionalizing knowledge fragmentation (Clark 1996; Dill 2014), while 'making novel, unorthodox lines of enquiry—such as interdisciplinary ones—appear deviant, counterintuitive, and ultimately errant' (Woelert and Millar 2013, pp. 757).

Within this context, the rise of interdisciplinarity in modern research has been traced back to US military investment in science in the context of the Cold War, which involved technological challenges requiring problem-context research and the combination of disciplinary specialties within interdisciplinary teams. Some authors described this process as giving way to new modes of knowledge production—the so-called 'Mode 2'—characterized by enquiry that is oriented towards contextualized results, in which knowledge flows across disciplinary boundaries and whose assessment depends on its application and usefulness for society (Gibbons et al. 1994; Nowotny et al. 2001). They juxtaposed Mode 2 with Mode 1, which is discipline-based, academic-driven, connected to the Humboldtian notion of science, and in which knowledge is validated by a clearly defined community of (disciplinary) specialists.

While originally driven by funding opportunities, scientists' interdisciplinary orientation gradually became self-sustaining as scholars found collaborations across disciplinary boundaries valuable (Gibbons et al. 1994). In recent decades, science studies have increasingly recognized that single academic disciplines are ill-equipped to address alone the complex 'wicked' problems (Rittel and Webber 1973)—both applied and

fundamental in nature—that modern societies and science face (Metzger and Zare 1999; Rhoten and Parker 2004; Miller 2010; Elkana 2012; Nature 2015; Department for Business Innovation & Skills 2016). Accordingly, heterogeneous (cross-disciplinary) research teams are expected to tackle 'wicked' problems more effectively, by integrating knowledge, methods, and theories (Wagner et al. 2011; Clark and Wallace 2015) and counterbalancing cognitive fragmentation (Lasswell 1970; Klein 1996; Moran 2006).

Obstacles to interdisciplinarity

Scientific arguments and policy rhetoric highlight the need to reconfigure research organization in order to encourage interdisciplinarity and to address complex problems more effectively (Frodeman et al. 2010); moreover, many scholars have found interdisciplinary research intellectually and scientifically rewarding (Edwards 1999; Lyall and Fletcher 2013). However, melding disciplines presents challenges (O'Brien et al. 2013; Clark and Wallace 2015). Science policy literature evidences the presence of barriers and disincentives across different HE *governance domains*, which prevent researchers from engaging in interdisciplinary research (National Academies 2004; AAU 2005; Sà 2008; Boden and Borrego 2011; Weingart 2014).

First, there are organizational barriers to interdisciplinarity that arise from the structure and political organization of most universities (Klein 1990; Lattuca 2001; Feller 2002; National Academies 2004; Chettiparamb 2007; Boden and Borrego 2011; Lyall and Fletcher 2013; Weingart 2014). Since the early 20th century, research into universities has been typically organised around departments (Blau 1994; Clark 1995), which spread for their alignment with the goal of promoting disciplinary knowledge (Clark 1984; Edwards 1999; National Academies 2004; Sà 2008). However, discipline-based departments promote knowledge separation rather than integration, leading to the formation of departmental 'silos' wherein researchers hardly communicate across organizational boundaries (Sà 2008), and scholars are rewarded mainly for the efforts and outcomes within their home discipline (Boden and Borrego 2011). Moreover, departments are remarkably resilient across time and space, limiting organizational adaptability and responsiveness to new challenges (Dressel and Reichard 1970; Hannan and Freeman 1977; Sà 2008). This resiliency to change is known as the 'paradox of success': structures and procedures which previously brought success may become obstacles to change because the organization loses the ability to modify a previously effective strategy, even when this is no longer appropriate (Audia et al. 2000).

Another major obstacle to interdisciplinarity derives from research evaluation procedures. Empirical evidence has shown that assessment mechanisms—both peer review and bibliometric based—act as a deterrent to interdisciplinarity, conversely favouring mainstream disciplinary research (Hopwood 2008; Fagerberg et al. 2012; Rafols et al. 2012). Furthermore, research assessment exercises promoted by ministries and national funding agencies typically organize evaluation around disciplines, so that the assessment of the quality, relevance, and rigour of research outputs occurs within the frame of one specific discipline at a time (Rebora and Turri 2013). Woelert and Millar (2013), for instance, describe the 'disciplinary' frame of the Australian research assessment, wherein research categorizations have become increasingly fine-grained over time, from 12 'subdivisions', 86 'groups', and 486 'classes' in 1993 to 24 'divisions', 139 'disciplines', and 1,238 'subjects' in 2008. In this context, interdisciplinary research products are to be accommodated within various disciplinary components. Similar problems emerge for grant proposal evaluations, as interdisciplinary projects are disadvantaged by assessments that are rooted in disciplinary panels ill-equipped to appreciate theories, methods, and conceptions borrowed from multiple fields (Feller 2006; Lamont et al. 2006; Langfeldt 2006; Fagerberg et al. 2012; Laudel and Gläser 2014; Ledford 2015; Bozhkova 2016; Bromham et al. 2016).

Training doctoral students to deal with a variety of theories, practical methods, and tools is arguably crucial to forming the next generation of interdisciplinary-oriented scholars. Interdisciplinary *doctoral courses* could indeed be effective in building competency in the rigorous application of a problem-oriented and contextual framework, in fostering critical and analytic thinking, and in developing those integrated skills regarded essential to effectiveness in real-world problem solving (Wilkinson et al. 2007; Clark and Wallace 2015). However, organizational structures affect how research programmes are organized, so that doctoral courses are mostly embedded within a well-defined discipline, with its associated priorities, theories, and methodologies.

Interdisciplinarity tends also to be less valued in the *academic labour market*. In fact, recruitment is driven by needs in teaching, which tends to be organized by disciplinary curricula (Weingart 2014), and by assessment of research, which —as previously mentioned— values particularly contributions to mainstream disciplinary lines. Also faculty hiring, promotion, and tenure decisions are usually controlled by departments and disciplinary professional associations. The latter are composed of academics deeply rooted into the disciplinary logic that arguably tend to resist to the

interdisciplinary turn. This lead to a discipline-based academic labour market and career structure that discourage researchers from moving into interdisciplinary endeavours, particularly at early academic career stages (Rhoten 2004; Ledford 2015).

In sum, interdisciplinarity tends to be hindered by established governance arrangements in different domains.

Policy portfolios

Policy portfolios are the combination of multiple means (instruments) to pursue one or more goals (Kern and Howlett 2009; Howlett 2014). Policy studies have traditionally focused on a single instrument at a time, while recently (following Gunningham et al. 1998) policy analysis has become increasingly concerned with 'policy portfolios' (Doremus 2003; Peters 2005; Howlett 2014). Del Rìo (2014) classified the different types of policy portfolios. Type I entails one goal pursued by multiple instruments, while Type II entails at least two goals tackled by a minimum of two instruments.

Policy design literature has identified a set of general principles as evaluative criteria for assessing policy portfolios in order to judge the likelihood to achieve given goals in an efficient and effective way. Coherence is the ability of multiple policy goals to co-exist in a logical fashion and to be achieved simultaneously without any significant trade-off. The second principle is *consistency*, namely the ability for multiple *policy* instruments to work together and reinforce each other in the pursuit of a policy goal. In fact, policy portfolios inherently lead to interactions between the instruments, which can produce synergies, when tools reinforce and complement each other (Hou and Brewer 2010; Del Rìo 2010), as well as conflicts when they evoke contradictory responses from policy targets (Schneider and Ingram 1990; Grabosky 1995; Gunningham et al. 1998). The third principle is *congruence*, namely the ability of *goals and instruments* to work together in a unidirectional and mutually supportive fashion with established policies as a result of the reform effort. In this article, we are particularly concerned with the principle of consistency: whether the policy instruments that regulate the different governance domains affect interdisciplinary in a mutually supportive way or whether they provide conflicting signals. Scholars have identified some characteristics of the policy design that are more or less conducive to consistency in the policy portfolio.

First, del Rio (2014) highlights that conflicts between policy instruments can arise both horizontally (namely between instruments designed at the same administrative level) and vertically (between instruments introduced at different administrative levels, i.e. EU

and national government). He asserts that an appropriate coordination of the instruments is more likely to occur when they are designed just by one administrative level. In a similar vein, we expect that —even within just one administrative level—inconsistencies are more likely to occur when different actors are involved in designing the policy portfolio.

Second, different reform trajectories are used to modify existing policy mixes. Policy design literature has a strong tradition of restricting discussion to policy portfolios designed ex novo ('policy packaging'), which deliberately seek to exploit synergic relationships by promoting integration, coherence and consistency between goals and means (Meijers 2004). Yet in practice they are quite rare, usually resulting from a major external shock or the accumulation of significant pressures that provide possibilities for an abrupt radical change (Baumgartner and Bryan 1993). Conversely, policy portfolios typically develop by 'policy patching', namely the existing portfolio is reformed through incremental changes over many years (Kern and Howlett 2009; Howlett 2014). By using incremental reform trajectories (Thelen 2003; Streeck and Thelen 2005), policy designers face constraints imposed by the existing policy design, and cannot create the desired combination of policy goals and instruments in any circumstance. Instead, they must consider the established arrangements of elements and their policy legacies (Christensen et al. 2002; Falkenmark 2004). The difficulties involved in designing coherent, consistent, and congruent policy portfolios are usually underestimated by policy designers, particularly when policy goals and instruments are added and subtracted from the policy portfolio over time (Howlett and Rayner 2006; Rayner and Howlett 2009). Thus previous works suggest that inconsistencies are more likely to occur in policy portfolios that emerge and evolve through several rounds of revision rather than in those designed ex novo (Tornvlied and Akkerman 2004; Beland 2007; Kern and Howlett 2009; van der Heijden 2010; Carter 2012; Howlett and Rayner 2013).

Context and methodology of analysis

We develop our analysis by taking the Italian HE system as a case study (Yin 2009).²⁸ The importance of interdisciplinarity in Italy is acknowledged into several political documents (e.g. Decree of the Premier of 7th October 2011; Ministry of Education,

_

²⁸ According to the Scimago ranking, Italy is the 8th country in the world in terms of scientific documents produced and number of citations received, and 7th per H index.

University, and Research –henceforth MIUR- directorial decree on national technological clusters).²⁹

The Italian HE system is predominantly public—almost 95% of academic staff work at state universities—and comprises only university-type HE institutions. Until the nineties, Italian HE was governed by a centralized bureaucracy exerting procedural control through state laws and regulations, and by the academic oligarchy, the so-called 'Barons', e.g. powerful chairs, who held substantial power as well as the authority to distribute and manage resources within their disciplinary domains (Giglioli 1979; Clark 1983). From the mid-nineties, reforms loosely inspired by New Public Management principles granted the university level more autonomy and decision-making power, by shifting the funding system from a line-item to a lump-sum budgeting model, and moving recruitment decisions from national to university-selected disciplinary committees (Seeber 2013). At the same time, buffer organizations were established, often led by academics, which support the government in the design and implementation of reforms (Reale and Seeber 2011).

In this context, academic disciplines played an important role. Italian HE was structured into 14 *disciplinary macro-areas*³⁰ and nearly 400 *disciplinary sectors*, the so-called 'settori scientifico disciplinari' (SSDs; Law 127/1997 and ministerial decree of 26 June 2000), which are the smallest units of disciplinary research in Italy. The disciplinary taxonomy was used: i) by the government to create a central regulation scheme for teaching, which was organized in disciplinary curricula in accordance with the so-called 'subject classes of degree'³¹ established by MIUR for each teaching field; these classes – among others- prescribed for each degree course a minimum number of professors from specific disciplinary sectors ('Requirements of lecture') and ii) by academics through the national disciplinary communities and professional associations to exercise their influence over the reward system and career decisions (Paradeise et al. 2009). In sum, Italian universities were a kind of confederation of chair-holders and disciplinary groups (Capano 2014).

²⁹ It has been recently reaffirmed also by the actual Minister of Education, University, and Research Stefania Giannini, who declared that interdisciplinarity should be spurred within academia (ANSA 2016).

³⁰ 1. Mathematics; 2. Physics; 3. Chemistry; 4. Geology; 5. Biology; 6. Medicine; 7. Agricultural Science; 8. Architecture and Civil Engineering; 9. Engineering and Informatics; 10. Humanities; 11. Philosophy, History, Pedagogy, and Psychology; 12. Law; 13. Economics; 14. Social and Political Science.

³¹ The content of bachelor and master degree courses had to keep with general disciplinary curricula established by the MIUR for each teaching field.

In recent years, the Italian HE system -alike many other European systems (Gornitzka et al. 2005; Musselin and Teixeira 2014)- has undergone a comprehensive reform process. Rationales of the reforms were to increase accountability and quality (Reale and Primeri 2014) 'in accordance with the principles of simplification, effectiveness, transparency, and efficiency' (Law 240/2010, Article 2). The reforms introduced indeed more competition in the distribution of resources. For example, the share of core-funding allocated according to the research performance increased from 7% to 17% between 2008 and 2014. At the same time, the reforms occurred in a period of financial constraint, so that the state funding to university system -which covers more than half of overall budget- decreased by 14% in real term in the same period (ANVUR 2016). Moreover, the reform did not change the governance regime of the Italian HE system (Donina et al. 2015 or first paper of the collection). In fact, the government continues to steer HE by rules according to the traditional instruments for legislation (Ongaro 2009, pg. 62), namely the Parliament issues laws that determine the general content of the regulations, decentralizing detailed recommendations to ministerial decrees promulgated by the MIUR, as well as to buffer organizations like the governmentmandated agency for quality assurance (the Italian National Agency for the Evaluation of Universities and Research Institutes, ANVUR), and the elective advisory body representing Italian academics (the Italian National University Council, CUN). The policy instruments introduced in the period considered for our analysis—from 2010 to 2015—have been designed in a similar way.

We investigate the interaction and consistency with respect to the interdisciplinary target of the policies within and between four governance domains: i) the internal organization of Italian state universities; ii) the research evaluation exercise (so-called VQR 2011-2014); iii) the organization of doctoral education; and iv) the procedures regarding academic recruitment and career.

In order to do this, we combine qualitative and quantitative techniques (Eisenhardt 1989). We apply qualitative intertextual analysis of the contents of official policy documents: Law 240/2010 text promulgated by the government, the ensuing ministerial decrees issued by the MIUR (e.g. ministerial decrees 159/2012; 45/2013; 485/2015, and 855/2015), as well as the accompanying regulations issued by ANVUR and CUN. The qualitative analysis of policy documents is triangulated with quantitative evidence on the

changes in universities' characteristics induced by the reforms through the analysis of publicly available database (Cineca³²).

Empirical analysis

In this section, we analyze the governance domains and related policy instruments, considering: i) the extent to which they recognize interdisciplinarity as a target, ii) the interaction and consistency between elements of the same governance domain, and iii) the interaction and consistency between different governance domains.

Internal organization

The reform of the internal organization of Italian state universities has been driven by the 'principle of simplification' and aims to reduce the number of organizational structures within Italian universities. Thus Law 240/2010 replaced faculties (organizational structures in charge of teaching activities that held the power to recruit academic staff) and old departments (responsible only for research, with their own budget but without the right to hire personnel) with new departments. The latter are in charge of both teaching (still organized in disciplinary curricula) and research management, are endowed with their own budget, and have the power to recruit academic personnel (Law 240/2010). While previously each academic staff member was affiliated to both a department and a faculty, they are now affiliated only to a department.³³ The departments became indeed the central organizational units within Italian universities (Bonaccorsi et al. 2014). They must be composed of at least 35 academic staff members³⁴ and should be homogeneous in terms of disciplinary affiliation (SSDs) of their academic staff, while there is no reference to interdisciplinarity.

At present, there are 815 departments in the 66 Italian state universities. The number of departments per university is very diverse.³⁵ Figure 5.5.1 displays the distribution of departments by their number of members, which range from 8 to 231.³⁶ The average size

³² http://sito.cineca.it/

Research activities in Italian universities can also be organized around 'centres' or 'institutes', usually very small and without decision-making power regarding the recruitment of academic staff.

³⁴ Forty if the university has more than 1,000 academic staff members overall.

³⁵ Nineteen universities comprise fewer than 10 departments, 31 universities comprise between 10 and 25 departments, and only 16 universities comprise more than 25 departments.

³⁶ Most of the departments composed of fewer than 35 members are within five institutions that specialize in doctoral training (*Istituti a ordinamento speciale*), which are allowed 'to adopt own organizational arrangements' (Law 240/2010, article 2, comma 3), and consequently to ignore the threshold. These institutions include 16 departments whose average size is 19.5 members (std. deviation: 10.2).

of new departments is now 62 members (median 58), and thus is much larger than preexisting ones (before the reform, there were 2,372 departments of which 998 were composed of fewer than 10 members), but smaller than the previous faculties, which had on average 95 members (year 2010).

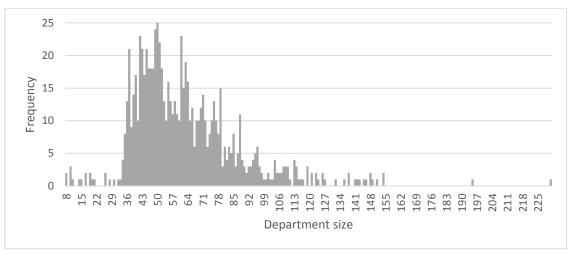


Figure 5.5.1 Frequency of departments by size

Source: Reprocessing data from Cineca (accessed on 18th March 2016)

New departments are substantially more discipline-focused than the old faculties: on average, 74% of members belong to a single disciplinary macro-area (vs. 64% in the old faculties). There is no relationship between size of department and disciplinary homogeneity,³⁷ while larger universities display more disciplinarily homogeneous departments (Figure 5.5.2), arguably because there are more opportunities to pool clusters of academics from the same discipline.³⁸

-

³⁷ Department size (number of academic staff) and disciplinary homogeneity (share of staff belonging to every department main area) are not significantly correlated (corr. 0.04).

³⁸ University size and disciplinary homogeneity are correlated at 0.56** (p-value 0.00).

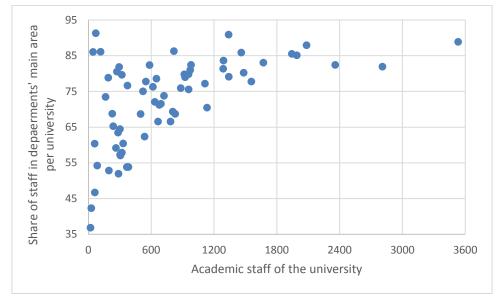


Figure 5.5.2 University size and disciplinary homogeneity of the departments

Source: Reprocessing data from Cineca (accessed on 18th March 2016)

In sum, the policy that restructured the internal organization of Italian universities did not recognize interdisciplinarity as an explicit goal. Nonetheless, the establishment of fewer and larger departments is potentially consistent with respect to the interdisciplinary target and may spur researchers from different disciplines to draw closer within the same organizational unit. However, the prescription of internal disciplinary homogeneity prevents scholars from different disciplines from drawing closer within the new departments, which arguably also reduces the opportunities for interdisciplinarity. Therefore, there is inconsistency between the prescription of larger departments and their homogeneous composition in terms of discipline.

Research assessment of universities and departments

The first assessment exercise of research institutions in Italy took place in 2004, covering the period 2001-2003 (*Valutazione triennale della ricerca*–VTR), and was completed in 2006. A second assessment (*Valutazione Quinquennale della Ricerca*–VQR) followed in 2011 regarding the period 2004-2010, and was completed in 2013. Currently, the third exercise (*Valutazione Quadriennale della Ricerca*-VQR 2011-2014) is under way.

Ministerial decree 458/2015 regulates the actual assessment exercise in accordance with Law 240/2010. The ministerial decree foresees that the assessed units in VQR 2011-2014 are research institutes and universities receiving public funds as well as their

departments, and that evaluation is organized around disciplinary macro-areas³⁹ by a panel of experts (Gruppi di Esperti della Valutazione – GEV), whose members are appointed by ANVUR (ANVUR 2015a). Each panel defines which types of research output are eligible in the evaluation process of its own area, e.g. articles, books, books in Italian, etc., and whether the assessment should be based on a peer review process (usually two referees per product) and/or by employing bibliometric indicators, such as journal impact factors and article citation numbers. ANVUR (2015a) only establishes that at least 50 per cent of all research products must be evaluated by peer review. The assessment of quality for all research output is based on the criteria of originality, methodological rigour, and expected or potential impact. Ministerial decree 458/2015 also establishes that every professor and researcher working within the assessed universities and research institutes must select and submit a specific number of research products (usually two) and must specify for each product the suitable disciplinary macro-area and disciplinary sector for evaluation. GEVs of disciplinary macro-areas that are particularly heterogeneous in terms of disciplinary composition can self-organize into more homogeneous sub-disciplinary panels to manage the evaluation process for selected sub-fields (ministerial decree 458/2015; ANVUR 2015a). Finally, the results of the evaluation will be summarized by performance indicators produced at the level of disciplinary macro-area as well as disciplinary sectors, and related to the university and its departments (ministerial decree 458/2015, ANVUR 2015a).

While the ministerial decree makes no reference to interdisciplinary research outputs, ANVUR guidelines that detail the evaluation procedures do recognize the existence of interdisciplinary research, although as a special case, and establish a specific process to assess it. ANVUR (2015a) prescribes that interdisciplinary products must be signalled by scholars during the submission procedure, eventually specifying a second disciplinary sector that is relevant for the assessment, and in this case the product must be evaluated through peer review instead of bibliometric indicators because of 'the lesser presence [of interdisciplinary fields] in bibliometric database' (Ibid.). In the case that the same product is attributed to different disciplines by different institutions (this can happen when co-authors are affiliated to different universities), ANVUR (2015b) allows either that every macro-area GEV evaluates the product independently, assessing it simply with respect to the scientific contribution to its own discipline, or to create an inter-GEV

_

³⁹ In the VQR, 16 disciplinary macro-areas are established, as area 8 (Civil Engineering and Architecture) and area 11 (Philosophy, History, Pedagogy, and Psychology) are split into two separate sub-areas.

evaluation committee. However, guidelines (ANVUR 2015b) try to avoid the second alternative by advising institutions to select the disciplinary sector that better fits the product (not taking into account the individual disciplinary affiliation of the author).

In sum, interdisciplinary research is approached in a rather ambiguous way. First, the ministerial decree regulating institutional assessment does not recognize interdisciplinary research as an explicit goal nor its existence. Interdisciplinarity emerges instead at later stages as ANVUR guidelines prescribe to signal interdisciplinary products in order to be assesses properly. However since the ministerial decree established a discipline-based procedure of evaluation, interdisciplinary products are assessed by each disciplinary community separately and according to their own criteria.

Doctoral education

Doctoral courses in Italy were introduced for the first time in 1980 (Law 28/1980). In 2013, the organization, criteria for accreditation, and evaluation of doctoral programmes were profoundly reformed (ministerial decree 45/2013 in accordance with Law 240/2010). Ministerial decree 45/2013 established for their accreditation minimum thresholds of six scholarships for newly established doctoral courses and four scholarships per year for those already activated, prompting in this manner university departments to merge doctoral programmes. As a consequence, the number of doctoral courses provided by Italian universities dramatically reduced from 1,531 in the academic year 2012/13 to 910 in 2015/16.

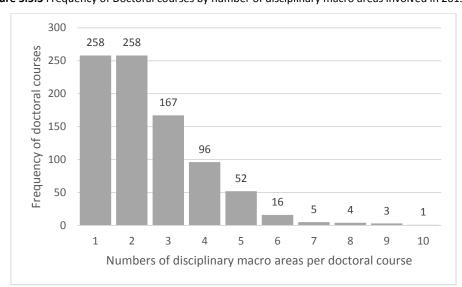


Figure 5.5.3 Frequency of Doctoral courses by number of disciplinary macro areas involved in 2015/16

Source: Reprocessing data from CINECA database

The merging of doctoral courses has been associated with a decrease in the share of doctoral programmes that focus on a single disciplinary macro-area from 35.5% in 2012/13 to 29.9% in 2015/16. Accordingly, most doctoral courses now involve two or more disciplinary macro-areas (Figure 5.5.3), suggesting that in the majority of cases some degree of interdisciplinarity is in place. Moreover, ministerial decree 45/2013 explicitly establishes the possibility of sharing activities between more Ph.D. programmes to provide interdisciplinary training.

Concurrently accreditation rules recommend that doctoral courses should refer to a 'broad, consistent, and clearly-defined disciplinary field', suggest that institutions should 'avoid creating [...] Ph.D. courses which are the mere aggregation of topics very different from each other as regards research targets and inquiry methodologies', and should pay attention 'to the disciplinary and methodological harmony of the doctorate programme' (ANVUR 2014a). Courses with strong multi-disciplinarity are also explicitly requested to 'provide evidence in the research outcomes of the doctorate committee members to guarantee the presence of all the necessary competences' (Ibid.). Finally, evaluation purposes drafted by ANVUR (2014b) prescribe that doctoral courses should supply students with the disciplinary skills related to their research, while there is no reference to interdisciplinarity.

Therefore, inconsistency clearly emerges between the different elements of the organization of doctoral education with respect to the interdisciplinary target. On the one hand, the reform makes doctoral programmes more interdisciplinary by prompting mergers of the old Ph.D. programmes and by promoting interdisciplinary courses in common among programmes. On the other hand, ANVUR assesses doctoral courses only within 'homogenous disciplinary macro-areas'. As a result, the focus of the Italian policy-makers in Ph.D. accreditation and assessment is strongly discipline focused.

Academic careers

Recruitment procedures and careers have also been reformed in recent years. In the background, it is important to remind that the minimum number of professors from specific disciplinary sectors for accreditation of each bachelor and master degree course ('Requirements of lecture') is again into force. Ministerial decree 47/2013 has only modified the thresholds.

First, as previously mentioned, the decision-making power for academic staff recruitment proposals has been transferred from the faculties to the newly-established

departments. The new departments are more disciplinarily homogeneous than the old faculties, so that the shift in recruitment decision-making power will probably not benefit interdisciplinary profiles.

Second, the number of disciplinary sectors for academic careers (recruitment sectors) has been reduced from 370 SSDs to 190 *settori concorsuali*⁴⁰ (SCs; ministerial decree 855/2015 in accordance with Law 240/2010). While fewer and larger recruitment sectors diminish fragmentation, the underlying disciplinary rationale is not affected. The retention of boundaries among disciplinary sectors could be due to the (maybe unconscious) mind-set of discipline-based academics, given their supporting role in design and implementation of reforms. Thus, academic careers typically develop within a single sector.

Third, until 2010, there were three types of permanent academic role, namely 'full professors', 'associate professors', and 'researchers'. Law 240/2010 replaced the permanent 'researcher' position with a 'non-tenured researcher' position, which can last for a maximum of eight years (Donina et al. 2015 or first paper of the collection).⁴¹ Also the reform introduced a two-step procedure for appointment to permanent roles. First, scholars must obtain a national level habilitation (Abilitazione Scientifica Nazionale) whose criteria are defined by disciplinary macro-area and recruitment sector panels under the supervision of ANVUR. These criteria specify thresholds in terms of research productivity and impact (CUN 2011). Following the achievement of the qualification, the scholar can candidate for any position opened by an Italian university in the specific disciplinary field wherein s/he has obtained the qualification. In fact, when the department proposes a new recruitment to university central decision-making bodies and the institution puts out a tender, they must specify the recruitment sector for the new hire. Then, an on-purpose evaluation committee of university-selected academics in the discipline evaluates the applications. Finally, the university can hire the winner. Nontenured researchers are recruited through a similar procedure based on recruitment sectors, but there is no habilitation requirement.

Overall, the governance of academic careers presents inconsistencies among its elements with regard to the interdisciplinary target. The aggregation of disciplinary recruitment sectors reduces the fragmentation consistently with the interdisciplinary

⁴⁰ SCs substituted SSDs for the organization of academic careers by aggregating the latter (Law 240/2010). SCs were initially 184 (ministerial decree 336/2011), but later were re-increased to 190 (ministerial decree 855/2015).

⁴¹ Existing tenured researchers remain in permanent roles, while new recruitment is conducted according to the non-tenure contract.

rhetoric. However, new recruitment procedures and careers are strongly discipline-based: calls are promoted by disciplinarily homogeneous departments and they have to specify the disciplinary recruitment sector for the call (taking into account 'Requirements of lecture' for accreditation of disciplinary degree courses), habilitation criteria for tenure positions are defined by disciplinary panels, and hiring decisions are made by university-selected disciplinary committees.

Analysis of consistency between governance domains as regards interdisciplinarity

The governance domains that we analyzed are oriented to a different extent towards the interdisciplinary target. Ph.D. programmes had been reformed by merging old ones to make them more integrated and by requesting to train even through interdisciplinary courses shared among programmes, suggesting a drive towards transcending the disciplinary boundaries. The ministerial rules regarding institutional research assessment do not even mention interdisciplinarity, while ANVUR evaluation regulations -that enforce the same ministerial rules- aim to manage interdisciplinary research outcomes, albeit in a rather ambiguous and inconsistent manner. The regulation of internal organization does not recognize interdisciplinarity as an explicit goal and the prescription of disciplinary homogeneity limits interdisciplinarity. Finally, changes to academic career regulation have not affected the underlying disciplinary logic.

As a result, inconsistencies emerge not only within, but also between, governance domains, providing conflicting signals to individuals and organizations regarding interdisciplinarity. In fact, after doctoral programmes that are to some extent interdisciplinary, Ph.D. graduates must cope with the fact that their research outcomes are assessed predominantly from the viewpoint of a single discipline, both for the sake of their own career as well as for institutional evaluation, and they are affiliated to departments that are strongly disciplinarily homogeneous. The greater inconsistency is with respect to the governance of academic careers. The criteria for obtaining the national habilitation are designed by disciplinary panels, calls for new hires are made by disciplinarily homogenous departments that must specify the disciplinary recruitment sector of the position, and local selection committees are composed of experts from just one discipline. As a result, academic careers typically develop within a single disciplinary field, while deviating from the disciplinary interests may reduce career prospects. Inconsistencies also emerge between individual research assessment for academic career

purposes and institutional research assessment. While interdisciplinary assessment is not envisaged for individuals' research (CUN 2011), instead it is foreseen (even if as a special case) in the institutional research assessment exercise. Thus evaluation procedures of the same research output could differ.

Overall, incongruences emerge among the interdisciplinary target and established governance practices grounded on a disciplinary taxonomy. Governance arrangements based on disciplinary macro-areas and disciplinary sectors have been redeployed with just marginal changes to serve the interdisciplinary target.

Conclusions

This article analyzed the governance of the Italian HE system with respect to the interdisciplinary target, exploring the extent to which interdisciplinarity is recognized as an explicit goal, how the policies in different governance domains supposedly affect interdisciplinarity, and whether the policy portfolio is consistent towards the interdisciplinary target.

While previous research on interdisciplinarity mainly considered Anglo-Saxon countries and focused on one policy instrument at a time, we studied a continental European higher education system adopting a policy portfolio perspective. By combining qualitative intertextual analysis of the contents of policy documents and quantitative techniques, we assessed public policies regarding four governance domains (the internal organization of universities, the research evaluation exercise, the organization of doctoral education, and the procedures regarding academic recruitment and career) and their effects on dimensions that impact interdisciplinarity. Our analysis evidences that policies have introduced some elements promoting interdisciplinarity, but a disciplinary rationale is still dominant.

In accordance with the expectation that inconsistencies are likely to occur in policy portfolios developed through incremental changes, we find several inconsistencies with respect to the interdisciplinarity target both within and between governance domains. Accordingly, interdisciplinarity is not only hindered by its weak prominence in the policy goals, but also by the inconsistencies existing between policies.

Regarding the internal organization of universities, inconsistency surfaces considering that larger departments have been created, which can potentially increase the diversity of scholars within the same organizational unit, yet the law prescribes internal disciplinary homogeneity. Removing the prescription of departments' disciplinary

homogeneity would leave room for organizational arrangements such as theme-oriented departments, which can better accommodate interdisciplinarity. In example, some American, German, and Dutch universities have set up organizational units centred around specific problems requiring interdisciplinary competences, rather than around disciplines (Sà 2008; Seeber 2013; Weingart 2014). Future research should explore what organizational characteristics favour interdisciplinarity at institutional level, e.g. size and disciplinary composition of organizational structures. For instance, we found that departments of small universities in Italy are more heterogeneous in the disciplinary profiles of their affiliates, leading to the expectation that small universities may be more interdisciplinary also in their outcomes.

The research assessment exercise approaches interdisciplinarity in a rather ambiguous way. The ministerial decree does not recognize interdisciplinary research as a goal nor its existence, while ANVUR guidelines -that detail the same ministerial decree-do recognize interdisciplinary research but approach it inconsistently. Similar ambiguity is observed in doctoral education, which is to a considerable extent oriented to stimulate interdisciplinary training, whereas the accreditation and assessment of doctoral programmes reflect a disciplinary logic. This finding confirms the expectation that inconsistencies are likely to occur when several –weakly coordinated- policy actors are involved in designing the policies. To some extent, inconsistencies appear a 'natural' outcome of the typical legislative process in Italy, which entails a gradual specification of the rules by loosely coordinated actors (Ongaro 2009). A more consistent governance arrangement can be obtained by strengthening the coordination between policy makers in the different phases (i.e. between government levels and shop floor level). Preliminary analysis leading to white papers with a strong function to guide and align policy makers' action in different stages can be beneficial in this regard.

Recruitment and career procedures also remain strongly rooted into disciplinary structures and classifications. The introduction of innovative recruitment procedures that are open to interdisciplinary profiles -alongside the disciplinary ones- could be beneficial. In the United States, for instance, some universities developed innovative forms of academic career track and recruitment procedures more open to interdisciplinary profiles. In *cluster hiring*, an inter-departmental committee is established to recruit scholars based on a research problem. When the candidate is selected, the committee also identifies the department that can adequately provide his/her academic home. In *co-funded dual appointment*, a department and an interdisciplinary research centre share the costs and

align their goals. The hired person is housed within the department, while the research centre periodically evaluates his/her contribution to its own goals (Sà 2008). Moreover, coherently with the idea that a crucial element for improving science policies is to build consistency in the policy portfolio, individual and institutional research evaluation process should properly evaluate interdisciplinary products. A line for further research could investigate the perspective of academic staff towards the openness of these types of interdisciplinary recruitment in order to assess whether the expected resistance of discipline-based academics would be effectively an obstacle.

In the Italian system, creating parallel structures and processes that emancipate from strict disciplinary principles, as well as reducing inconsistencies between policies, can represent a pragmatic way to nudge interdisciplinarity in the short and medium term. In fact, first the current period of financial constraint does not provide the ideal conditions for a 'paradigmatic' change in a HE system governance. Second, the steering by rule approach and the use of disciplinary taxonomy to regulate curricula, organizational structures', assessment, and careers, reinforce each other and they represent a resilient disciplinary 'iron-cage' that is unlikely to melt soon.

Acknowledgements: I thank Martina Vukasovic, the participants to the DREAMT Spring Workshop 2016 and CHER Conference 2016 in Cambridge for their useful comments and suggestions.

References

AAU – Association of American Universities (2005) *Report of the Interdisciplinarity Task Force*. Washington, DC: Author.

Abbott, A. (2001) Chaos of Disciplines. Chicago: University of Chicago Press.

Albert, M., Paradis, E., & Kuper, A. (2015) 'Interdisciplinary Promises versus Practices in Medicine: The Decoupled Experiences of Social Sciences and Humanities Scholars', Social Science & Medicine, 126: 17-25.

ANSA (2016) Giannini, superare l'assetto novecentesco della ricerca. Accessed on http://www.ansa.it/scienza/notizie/rubriche/terrapoli/2016/04/18/giannini-superare-lassetto-novecentesco-della-ricerca_14774429-05ec-4ff2-ae33-6553f51cc9b9.html

ANVUR (2014a) L'Accreditamento dei Corsi di Dottorato. Roma: ANVUR.

ANVUR (2014b) La Valutazione dei Corsi di Dottorato. Roma: ANVUR.

- ANVUR (2015a) Valutazione della Qualità della Ricerca 2011-2014 (VQR 2011-2014). Roma: ANVUR.
- ANVUR (2015b) VQR 2011-2014. Linee Guida dei Gruppi di Esperti della Valutazione (GEV). Roma: ANVUR.
- ANVUR (2016) Rapporto biennale sullo stato del Sistema universitario e della ricerca.

 Roma: ANVUR.
- Audia, P.G., Locke, E.A., & Smith, K.G. (2000) 'The Paradox of Success: An Archival and a Laboratory Study of Strategic Persistence Following Radical Environmental Change', The Academy of Management Journal, 43/5: 837-53.
- Baumgartner, F., & Bryan, D.J. (1993) *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Becher, T. (1989) Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines. Milton Keynes: Open University Press.
- Beland, D. (2007) 'Ideas and Institutional Change in Social Security: Conversion, Layering and Policy Drift', Social Science Quarterly, 88/1: 20-38.
- Blau, P.M. (1994) *The Organization of Academic Work*. New Brunswick, NJ: Transaction Publishers.
- Bleiklie, I., & Michelsen, S. (2013) 'Comparing HE policies in Europe', Higher Education, 65/1: 113-33.
- Boden, D., & Borrego, M. (2011) 'Academic Departments and Related Organizational Barriers to Interdisciplinary Research', Higher Education in Review, 8: 41-64.
- Bonaccorsi, A., Secondi, L., Setteducati, E., & Ancaiani, A. (2014) 'Participation and commitment in third-party research funding: evidence from Italian Universities', The Journal of Technology Transfer, 39/2: 169-98.
- Bozhkova, E. (2016) 'Interdisciplinary proposals struggle to get funded', Nature doi:10.1038/nature.2016.20189.
- Brint, S. (2005) 'Creating the Future: "New Directions" in American Research Universities', Minerva, 43/1: 23–50.
- Bromham, L., Dinnage, R., & Hua, X. (2016). Interdisciplinary research has consistently lower funding success. Nature, 534/7609: 684–7.
- Capano, G. (2014) 'The Re-Regulation of the Italian University System through Quality Assurance. A Mechanistic Perspective', Policy and Society, 33/3: 199-213.
- Carter, P. (2012) 'Policy as Palimpsest', Policy & Politics, 40/3: 423-43.

- Chettiparamb, A. (2007) *Interdisciplinarity: A Literature Review*. Cardiff: Higher Education Academy, Interdisciplinary Teaching and Learning Group, Cardiff University.
- Christensen, T., Laegreid, P., & Wise, L.R. (2002) 'Transforming Administrative Policy', Public Administration, 80/1: 153–79.
- Clark, B. (1983) *The Higher Education System. Academic Organization in Cross-National Perspective*. Berkeley and Los Angeles: University of California Press.
- Clark, B.R. (1984) 'The Organizational Conception'. In: Clark B R (ed.) *Perspectives on Higher Education: Eight Disciplinary and Comparative Views*, pp. 106-31. Berkeley, CA: University of California Press.
- Clark, B.R. (1995) *Places of Inquiry: Research and Advanced Education in Modern Universities*. Berkeley: University of California Press.
- Clark, B.R. (1996) 'Substantive Growth and Innovative Organization: New Categories for Higher Education Research', Higher Education, 32/4: 417–30.
- Clark, S.G., & Wallace, R.L. (2015) 'Integration and Interdisciplinarity: Concepts, Frameworks, and Education', Policy Science, 48/2: 233-55.
- CUN Consiglio Universitario Nazionale (2011) Criteri, Parametri e Indicatori per l'Abilitazione Scientifica Nazionale. Roma: CUN.
- Del Rìo, P. (2010) 'Analysing the Interactions between Renewable Energy Promotion and Energy Efficiency Support Schemes: The Impact of Different Instruments and Design Elements', Energy Policy, 38/9: 4978–89.
- Del Rìo, P. (2014) 'On Evaluating Success in Complex Policy Mixes: The Case of Renewable Energy Support Schemes', Policy Science, 47/3: 267–87.
- Dill, D.D. (2014) 'Public Policy Design and University Reform: Insights into Academic Change'. In: Musselin C & Teixeira P N (eds.) *Reforming Higher Education: Public Policy Design and Implementation*, pp. 21-37. Dordrecht: Springer.
- Donina, D., Meoli, M., & Paleari, S. (2015) 'Higher Education Reform in Italy: Tightening Regulation Instead of Steering at a Distance', Higher Education Policy, 28/2: 215-34.
- Doremus, H. (2003) 'A Policy Portfolio Approach to Biodiversity Protection on Private Lands', Environmental Science & Policy, 6/3: 217–32.
- Dressel, P.L., & Reichard, D.J. (1970) 'The University Department: Retrospect and Prospect', Journal of Higher Education, 41/5: 387-402.

- Edwards, R. (1999) 'The Academic Department: How Does it Fit into the University Reform Agenda?', Change, 31/5: 16-27.
- Eisenhardt, K.M. (1989). Building theories from case study research, Academy of Management Review, 14/4: 532–50.
- Elkana, Y. (2012) 'The University of the 21st Century: An Aspect of Globalization', In: Renn J (ed.), *The Globalization of Knowledge in History*, pp. 527-48. Berlin: Edition Open Access.
- Fagerberg, J., Landstrom, H., & Martin, B.R. (2012) 'Exploring the Emerging Knowledge Base of "the Knowledge Society", Research Policy, 41/7: 1121-31.
- Falkenmark, M. (2004) 'Towards Integrated Catchment Management: Opening the Paradigm Locks Between Hydrology, Ecology and Policy-Making', Water Resources Development, 20/3: 275–82.
- Feller, I. (2002) 'New Organizations, Old Cultures: Strategy and Implementation of Interdisciplinary Programs', Research Evaluation, 11/2: 109–16.
- Feller, I. (2006) 'Multiple Actors, Multiple Settings, Multiple Criteria: Issues in Assessing Interdisciplinary Research', Research Evaluation, 15/1: 5–15.
- Frodeman, R., et al. (eds.) (2010) *The Oxford Handbook of Interdisciplinarity*. New York: Oxford University Press.
- Gibbons, M., et al. (1994) *The New Production of Knowledge: The Dynamics of Science* and Research in Contemporary Societies. London: Sage.
- Giglioli, P.P. (1979) Baroni e Burocrati. Bologna. Il Mulino.
- Grabosky, P. (1995). 'Counterproductive Regulation', International Journal of the Sociology of Law, 23: 347–69.
- Gornitzka, A., Kogan, M., & Amaral, A. (eds.) (2005) *Reform and change in higher education: Analysing policy implementation*. Dordrecht: Springer.
- Gunningham, N., Grabosky, P., & Sinclair, D. (1998). *Smart Regulation: Designing Environmental Policy*. Oxford: Clarendon Press.
- Hannan, M.T., & Freeman, J. (1977) 'The Population Ecology of Organizations', The American Journal of Sociology, 82/5: 929-64.
- Heimeriks, G. (2013) 'Interdisciplinarity in Biotechnology, Genomics and Nanotechnology', Science and Public Policy, 40/1: 97-112.
- Hopwood, A.G. (2008) 'Changing Pressures on the Research Process: On Trying to Research in an Age when Curiosity is not Enough', European Accounting Review, 17/1: 87–96.

- Hou, Y., & Brewer, G. (2010) 'Substitution and Supplementation between Co-Functional Policy Instruments: Evidence from State Budget Stabilization Practices', Public Administration Review, 70/6: 914–24.
- Howlett, M. (2014) 'From the "Old" to the "New" Policy Design: Design Thinking beyond Markets and Collaborative Governance', Policy Sciences, 47/3: 187-207.
- Howlett, M., & Rayner, J. (2006) 'Convergence and Divergence in "New Governance" Arrangements: Evidence from European Integrated Natural Resource Strategies', Journal of Public Policy, 26/2: 167–89.
- Howlett, M., & Rayner, J. (2013) 'Patching vs Packaging in Policy Formulation: Assessing Policy Portfolio Design', Politics and Governance, 1/2: 170–82.
- Jacobs, H.H. (1989) *Interdisciplinary Curriculum: Design and Implementation*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kern, F., & Howlett, M. (2009) 'Implementing Transition Management as Policy Reforms: A Case Study of the Dutch Energy Sector', Policy Sciences, 42/4: 391-408.
- Klein, J.T. (1990) *Interdisciplinarity: History, Theory and Practice*. Detroit: Wayne State University Press.
- Klein, J.T. (1996) Crossing Boundaries: Knowledge, Disciplinarities, and Interdisciplinarities. Charlottesville: University Press of Virginia.
- Lamont, M., & Molnar, V. (2002). 'The Study of Boundaries in Social Sciences', Annual Review of Sociology, 28: 167-95.
- Lamont, M., Mallard, G., & Guetzkow, J. (2006) 'Beyond Blind Faith: Overcoming Obstacles to Interdisciplinary Evaluation', Research Evaluation, 15/1: 43–55.
- Langfeldt, L. (2006). 'The Policy Challenges of Peer Review: Managing Bias, Conflicts of Interest and Interdisciplinary Assessments', Research Evaluation, 15/1: 31–41.
- Lasswell, H.D. (1970) 'The Emerging Conception of the Policy Sciences', Policy Sciences, 1/1: 3–14.
- Lattuca, L.R. (2001) Creating Interdisciplinarity: Interdisciplinary Research and Teaching among College and University Faculty. Nashville: Vanderbilt University Press.
- Laudel, G., & Gläser, J. (2014) 'Beyond Breakthrough Research: Epistemic Properties of Research and their Consequences for Research Funding', Research Policy, 43/7: 1204–16.
- Ledford, H. (2015) 'Team Science', Nature, 525/7569: 308-11.

- Lyall, C., & Fletcher, I. (2013) 'Experiments in Interdisciplinary Capacity Building: The Successes and Challenges of Large-scale Interdisciplinary Investments', Science and Public Policy, 40/1: 1-7.
- Lyall, C., et al. (2013) 'The role of funding agencies in creating interdisciplinary knowledge', Science and Public Policy 40/1: 62-71.
- Meijers, E. (2004) 'Policy Integration: A Literature Review'. In: Meijers E, Stead D, & Geerlings H (eds.) *Policy Integration in Practice: The Integration of Land Use Planning, Transport and Environmental Policy-Making in Denmark, England and Germany*, pp. 9–24. Delft, The Netherlands: Delft University Press.
- Metzger, N., & Zare, R.N. (1999) 'Interdisciplinary Research: From Belief to Reality', Science, 283/5402: 642-3.
- Millar, V. (2016) 'Interdisciplinary Curriculum Reform in the Changing University', Teaching in Higher Education, 21/4: 471-83.
- Miller, C.A. (2010) 'Policy challenges and university reform', In: Frodeman R, Klein J T, Mitchum C, & Holbrook J B (eds.). *The Oxford handbook of interdisciplinarity*, pp. 333-44. New York: Oxford University Press.
- Moran, M. (2006) 'Interdisciplinarity and Political Science', Politics, 26/2: 73-83.
- Musselin, C., & Teixeira, P.N. (eds.) (2014) *Reforming Higher Education: Public Policy Design and Implementation*. Dordrecht: Springer.
- O'Brien, L., Marzano, M., & White, R.M. (2013) "Participatory Interdisciplinarity": Towards the Integration of Disciplinary Diversity with Stakeholder Engagement for New Models of Knowledge Production', Science and Public Policy, 40/1: 51-61.
- National Academies (2004) Facilitating Interdisciplinary Research. Washington, DC: National Academies Press.
- Nature (2015) 'Why Interdisciplinarity Research Matters', Nature, 525/7569: 305.
- Nowotny, H., Scott, P., & Gibbons, M. (2001) *Re-thinking Science: Knowledge and the Public in an Age of Uncertainty*. Cambridge: Polity Press.
- Ongaro, E. (2009) Public Management Reforms and Modernization: Trajectories of Administrative Change in Italy, France, Greece, Portugal and Spain. Cheltenham: Edward Elgar.
- Paradeise, C., et al. (2009) 'Reform Policies and Change Processes in Europe'. In: Huisman J (ed.) *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*, pp. 88–106. London: Routledge.

- Peters, B. G. (2005) 'Conclusion: The Future of Instruments Research'. In: Eliadis P, Hill M, & Howlett M (eds.) *Designing Government: From Instruments to Governance*, pp. 353–63. Montreal: McGill-Queen's University Press.
- Rafols, I., et al. (2012) 'How Journal Rankings can Suppress Interdisciplinary Research: A Comparison between Innovation Studies and Business & Management', Research Policy, 41/7: 1262–82.
- Rayner, J., & Howlett, M. (2009) 'Conclusion: Governance Arrangements and Policy Capacity for Policy Integration', Policy and Society, 28/2: 165–72.
- Reale, E., & Seeber, M. (2011) 'Organisation Response to Institutional Pressures in Higher Education: The Important Role of the Disciplines', Higher Education, 61/1: 1-22.
- Reale, E., & Primeri, E. (2014) 'Public Policy Design and University Reform: Insights into Academic Change'. In: Musselin C & Teixeira P N (eds.) *Reforming Higher Education: Public Policy Design and Implementation*, pp. 39-63. Dordrecht: Springer.
- Rebora, G., & Turri, M. (2013) 'The UK and Italian Research Assessment Exercises Face to Face', Research Policy, 42/9: 1657-66.
- Rhoten, D. (2004) 'Interdisciplinary Research: Trend or Transition', Items & Issues, 5: 6-11.
- Rhoten, D., & Parker, A. (2004) 'Risks and Rewards of an Interdisciplinary Research Path', Science, 306/5704: 2046.
- Rittel, H.W.J., & Webber, M.M. (1973) 'Dilemmas in a General Theory of Planning', Policy Science, 4/2: 155-69.
- Sà, C. (2008) "Interdisciplinary Strategies" in U.S. research universities', Higher Education, 55/5: 537-52.
- Schneider, A.L., & Ingram, H. (1990) 'Behavioural Assumptions of Policy Tools', Journal of Politics, 52/2: 511–29.
- Seeber, M. (2013) 'Efficacy and Limitations of Research Steering in Different Disciplines', Studies in Higher Education, 38/1: 20-38.
- Sokal, R.R. (1974) 'Classification: Purposes, Principles, Progress, Prospects', Science, 185/4157: 1115–23.
- Streeck, W., & Thelen, K. (2005) 'Introduction'. In: Streeck W & Thelen K (eds.) *Institutional Change in Advanced Political Economies*, pp. 1–40. Oxford: Oxford University Press.

- Thelen, K. (2003) 'How Institutions Evolve: Insights from Comparative Historical Analysis'. In: Mahoney J & Rueschemeyer D (eds.) *Comparative Historical Analysis in the Social Sciences*, pp. 208–40. Cambridge: Cambridge University Press.
- Tornvlied, R., & Akkerman, A. (2004) 'Theory of "Soft" Policy Implementation in Multilevel Systems with an Application to Social Partnership in the Netherlands', Acta Politica, 39/1: 31–58.
- Turner, V.K., Benessiah, K., Warren, S., & Iwaniec, D. (2015) 'Essential Tensions in Interdisciplinary Scholarship: Navigating Challenges in Affect, Epistemologies, and Structure in Environment–Society Research Centers', Higher Education, 70/4: 649-65.
- van der Heijden J. (2010) 'A Short History of Studying Incremental Change. Does Explaining Institutional Change Provide Any New Explanations?', Regulation and Governance, 4/2: 230–43.
- Vedung, E. (1998) Policy instruments: Typologies and Theories. In: Bemelmans-Videc
 M, Rist R C & Vedung E (eds.) *Carrots, sticks, and sermons: Policy instruments and their evaluation*, pp. 21-58. New Brunswick, NJ: Transaction Publishers.
- Wagner, C.S., et al. (2011) 'Approaches to understanding and measuring interdisciplinarity scientific research (IDR): A review of the literature', Journal of Informetrics, 5/1: 14-26.
- Weingart, P. (2000) 'Interdisciplinarity: The Paradoxical Discourse'. In: Weingart P & Stehr N (eds.), *Practising Interdisciplinarity*, pp. 25–41. Toronto: University of Toronto Press.
- Weingart, P. (2014). 'Interdisciplinarity and the New Governance of Universities'. In *University Experiments in Interdisciplinarity: Obstacles and Opportunities*, pp. 151–74. Bielefeld: transcript Verlag.
- Wilkinson, K.M., Clark, S.G., & Burch, W.R. (2007) Other Voices, Other Ways, Better Practices: Bridging Local and Professional Environmental Knowledge, New Haven: Yale School of Forestry and Environmental Studies.
- Woelert, P., & Millar, V. (2013) 'The "Paradox of Interdisciplinarity" in Australian Research Governance', Higher Education, 66/6: 755-67.
- Yin, R.K. (2009) Case study research: Design and methods. Thousand Oaks, CA: Sage.

6. Conclusions

The dissertation analysed how HE reforms from 2010 to 2015 have affected governance, funding, and interdisciplinarity into the Italian higher education sector. The papers focused on the thematic areas of organization, governance, management and funding as well as of knowledge and subject related aspects. The first three articles analysed *organization and governance* changes at both systemic and institutional levels, the forth paper addressed the issue of *funding*, while the last article assessed the governance of *interdisciplinarity* into the Italian higher education system.

Adopting a post-positivist stance, through mixed method strategy, combining qualitative and quantitative techniques and using multiple sources of evidence, the dissertation contributes to higher education literature by stressing the value of addressing policy and governance issues in a more holistic manner. Concurrently it presents several policy and managerial implications. Findings provide in fact information and advices to policy-makers in order to design informed and evidence-based policies, as well as to university management in order to improve their planning and decision-making. Research contributions can foster thus the establishment of a research-policy-practice nexus in the Italian higher education sector, nurturing the debate on its future development, anticipating the key challenges in the mid- and long-term, and contributing to the development of the higher education policy research agenda.

Systemic governance paper showed that the new Italian legislative framework tightened regulation, government continues to steer the higher education system strongly with homogeneous rules for all institutions, reaffirming the role of administrative law and the principle of legality grounded on equality. The state preserves thus the established bureaucratic logic and its role remains linked to a command-and-control policy scheme, focused on verifying whether universities' administrative behaviour complies with national regulation (management for processes) rather than evaluating outputs and outcomes. In this respect, there are tensions between theoretical expectations of New Public Management (introduction of managerial principles such as 'steering at a distance' approach, empowered rectors, institutional autonomy and accountability, evaluation of outputs and outcomes) and concrete practices into the Italian HE sector. Therefore, I enlarged the focus of analysis to fill the Italian higher education reforms into the more general public management reform literature. I devised a new analytical framework that bridges public management reform narratives to a model widely employed in higher

education literature to assess governance regime and power sharing arrangement into higher education systems (the Governance Equalizer Model) and I employed it to position the Italian case. Findings demonstrate that it is the Neo-Weberian narrative rather than New Public Management that complies to explain the Italian reform trajectory. The contribution challenges thus the widely shared assumption that the reform trajectory of Italian higher education conforms to a new public management narrative and unveils a gap in current literature about higher education reforms, drawing the attention on the evidence that New Public Management is not the only way forward to reform higher education. Available research in fact typically applies a theory-laden logic of inquiry and takes for granted that European states are changing higher education systems according to neo-liberal policies (namely new public management reform path), making efforts to fill reforms in this theoretical framework. However, by adopting ex-ante new public management assumptions, scholars leave aside and overlook unsolved tensions between theoretical expectations and concrete practices in some context (such as the Italian case). Research implication is that future inquiry should analyse the practical changes without ex-ante taking for granted any heuristic theoretical assumption, but should identify only ex-post, namely after the analysis of practical variations, the reform trajectory that provides the suitable interpretative lens for judging change. In this regard, contextualizing reforms into different public management narratives could benefit higher education research.

The papers on institutional governance (second and third papers of the collection) confirmed findings that emerge from the analysis of systemic governance. The comparative paper with Portugal highlights divergences in organizational choices of universities in both countries with respect to the institutional governance model driven by New Public Management concepts. Different interpretations of supra-national policies arise already at governmental level since national policy designs tend to preserve traits of their previous institutional governance model. The article focused on Italy shows instead that dissimilarities arise even at institutional level when a unitary national regulation is implemented, and clusters Italian state universities into groups that made similar choices. Therefore, the sense making of national policy-makers and individual universities reshaped and adapted the international archetype into both national policy design and institutions' organizational restructuring, so countries and individual institutions receive the same inputs very differently. Accordingly, despite the increasing role of European Commission and supra-national organizations in the higher education field and scholars

increasingly focused on globalization (and Europeanization) as a cause of convergence of higher education worldwide, research contributions stress that international policies are not universal and/or deterministic in their effects. Hence, a country-focused approach is still necessary and national and local dimensions are significant to investigate due to divergent interpretations at both governmental and institutional levels.

The budgeting allocation paper focused on the funding formula reform. The new method detaches from the old practice mainly tied on historical patterns, introducing the 'standard cost per student' funding line and increasing the 'performance-based' component into general core funding of Italian state universities. The article assessed the outcomes of allocation reform by conceiving institutional synthetic indicators of teaching and research performance, pinpointed the main drivers of funding allocation variations, and tested the hypothesis that the 'standard cost reform' has been rewarding institutions that increased student enrollment in previous years. From a public management reform perspective, the budgeting reform conforms to New Public Management narrative as it makes the Italian HE system (internally) more competitive for students and public funds, developing a quasi-market that considers 'quantity of teaching' as a driver of fund allocation. However, Pollitt and Bouckaert (2011) claim that even the neo-Weberian state narrative envisages the modernization of financial control system and resource allocation in order to express political and strategic priorities. From this viewpoint, the decision to consider just the regular students into the formula expresses an important political priority: graduating students on time (an issue not only in Italy, as students into many countries take longer than the nominal duration of their degree course to graduate). The budget allocation reform encourages thus Italian universities to enhance their commitment in reaching this target by deducting students that take longer from the 'quantity' of subsidised students. In this respect, the reform fits even within the neo-Weberian state narrative. Therefore, the article supports the value of taking a more holistic perspective since the analysis of a specific feature alone can be misleading by fitting within more than one public management reform narrative. Findings also have managerial and policy implications. Universities that gained (lost) from the implementation of the new formula will likely continue to earn (loss) in the near future (unless a shock in the institutional student body composition and/or overall number). A second managerial implication is that Italian state universities have now to take into account also new drivers filled in the funding formula, namely the 'quantity of teaching' through the number of (regular) students. This should push institutions to pay more attention to didactics and student learning. Future lines of inquiry should investigate whether and how university policies will change to address the new challenges.

Finally, the last paper investigated how governance arrangements of the Italian higher education system address the interdisciplinary target. While previous research on interdisciplinarity mainly considered Anglo-Saxon countries and focused on one policy instrument at a time, my article studied a continental European system adopting a policy portfolio perspective. Research findings show that interdisciplinarity is not recognized as an explicit goal by Italian higher education policy and a disciplinary rationale still dominates the system governance. Nonetheless, some elements potentially favouring it have been introduced. Overall, the article stresses that the interdisciplinary target is hindered not only by the dominance of a disciplinary rationale, but also by the inconsistencies within and between governance domains. Policy implication is that a more consistent policy portfolio can be obtained by taking into account the interactions between governance domains in the policy design, for instance by strengthening the coordination between policy actors in the different phases of policy formulation (i.e. between government levels and shop floor level). Preliminary analyses leading to white papers with a strong function to guide and align policy makers' action in the different stages can benefit in this regard and could help the Italian government to pursue a coherent strategy for the higher education sector.

References

Pollitt, C. and Bouckaert, G. (2011). Public Management Reform. A Comparative Analysis: New Public Management, Governance, and the Neo-Weberian State. Oxford: Oxford University Press.