UNIVERSITA' DEGLI STUDI DI PARMA

Dottorato di Ricerca in Scienze Economico Aziendali Ciclo XXVII

Three Essays on the Challenges to New Public Management-Style Reform	ns in an
Age of Multiple Crises: Evidence from the Healthcare Sector.	

Coordinatore

Chiar.mo Prof.: Stefano Azzali

Tutor

Chiar.mo Prof.: Giovanni Fattore

Dottorando: Francesca Ferré

To the people who have influenced this work and to those that will read it and challenge it.

TABLE OF CONTENT

GENERAL INTRODUCTION AND OUTLINE OF THE DISSERTATION	4
CONCEPTUAL FRAMEWORK	
Essay 1 - The challenge and the future of health care turnaround plans: evidence from the Italian experience	
Essay 2 - The fiscal crisis in the health sector: patterns of cutback management across Europe	35
Essay 3 – Unattainable cost efficiency. Interpreting public sector outsourcing decisions: evidence from hospital inpatient service	51
GENERAL CONCLUSIONS	78
REFERENCES	82
IST OF ACADEMIC PUBLICATIONS	86

^{*}References related to each individual essay are listed at the end of each essay. References cited in General Introduction, Conceptual Framework, Methods and General Conclusions, are listed at the end of the thesis.

GENERAL INTRODUCTION AND OUTLINE OF THE DISSERTATION

Public policies and reforms are made at an increasing pace in countries around the world and policy-makers and managers are challenged to take action and evaluate the impact of such trajectories of change. The realm of such reforms are represented by complex and dynamic public administrative systems where scope, organization and culture are different, but often policies and managerial actions are similar or at least convergent in cluster of countries characterized by common social and political culture (OECD, 1997; Kickert, 1997; Torres, 2004). Indeed, since the 1980s a wide and comprehensive reform process transforming the role of governments, introducing managerial practices and quasi-market mechanisms has been the hallmark of public sector evolution among developed countries (Hood, 1991). The main overarching themes often referred to New Public Management (NPM) umbrella have focused on disaggregation, competition and performance-based incentives (Dunleavy et al., 2006).

This is also the case of public healthcare sector reforms occurred during the last decades in the European continental countries under the impulse of NPM influence, where reform trajectories aimed at increasing the level of efficiency, transparency and accountability of healthcare service delivery (Ferlie et al., 1996; Pollitt and Bouckaert, 2011). A large literature in the field has addressed questions about the nature of such a phenomena, the scope, the reasons, and the effects (Hood and Peters, 2004). However, the empirical bases for such studies appears unbalanced (Ongaro, 2009), skewed towards examples from Anglo-Saxon or North European countries and with emphasis on general country-level or cross-country reform trajectories rather than sector specific dynamics.

This work focuses on macro-level analysis of healthcare sector reform trajectories in the Italian National Healthcare Service (INHS) carried out on the basis of NPM principles - or managerial practice. Among others, two basic conceptual frameworks are adopted (Hood, 1991; Dunleavy 1997): the disaggregation or decentralization framework (the extent and forms in which the trajectory is characterized by the redefinition of public sector hierarchies, moving toward administrative fragmentation and decentralization of roles and responsibilities) and the competition and coordination framework (the extent and forms in which the trajectory is characterized by the introduction of purchaser/provider separation into public structures and an increased, or decreased, level of specialization, both in terms of number of tasks and in terms of policy functions - formulation, execution, evaluation - and the set of instruments for coordination and their underlying mechanisms, specifically market-type mechanisms).

More specifically, for the purpose of my dissertation I present three studies: the first essay considers the evolution of Italian healthcare sector through decentralization and re-centralization of action to address inefficient regional financial performance. The case of the introduction of formal financial recovery plans (*Piani di Rientro*) is presented and their effectiveness discussed by conducting semi-structured interviews to informed policy makers and healthcare managers in three extreme regional cases. The second essay describes the additional challenges healthcare sector is facing due to the current economic, financial and fiscal crisis and the cut-back management strategies and tools that were implemented among European healthcare systems. This contribution aims at presenting what

measures (i.e., strategic and managerial approaches) during the crisis were adopted in order to meet stricter budgetary constraints in publicly funded healthcare systems by surveying top managers across ten European countries. Finally, the third essay analyses inpatient hospital outsourcing decision as a cost-containment strategy to influence public healthcare service provision, where emphasis is placed on the scale of public organization actions. Using a longitudinal panel-data set of Italian hospital inpatient service the essay supports and advances previous literature about the costly mix of public and private provision of public services, thus partially contradicting the general NPM statement of enhanced system performance after the inclusion of competition among providers.

The dissertation work is structured as follow. First, I present the conceptual framework of analysis of NPM-style reform trajectories in healthcare sector around which I develop my contributions and situate them in relation to the distinctive features of the INHS. Then I present the methodological section where the research's design adopted in the different essays, including main questions, units and levels of analysis, the approach, the sampling and the data collection or data generation are described. Following this general overview, I provide the full text of the three essays written during the doctoral program and presented to international conferences. I conclude my work by providing general concluding remarks and highlighting avenues for future research.

CONCEPTUAL FRAMEWORK

New Public Management (NPM) has been seen as the way forward to rid the public sector of the inefficiencies of bureaucracies by exposing it to the economic rationalities of the market (Hood, 1991) and simultaneously oblige public bureaucracies to act more responsively towards their citizens (Pollitt and Bouckeart, 2011). The literature recognizes the development of NPM into a theory of managerial change based on importing into the public sector central concepts from modern business practices and public choice theory (OECD, 1995). Indeed, emphasis is placed on emulating the private sector management practices with a focus on continuous quality improvement, strategic management, performance management, and entrepreneurial leadership (Diamond and Liddle, 2012) to obtain improved performance. As a result, it is common that some conceptions assimilate NPM into strongly normative concepts (Dunleavy et al., 2006), where the aspiration is the "well performing organization".

Overall, NPM doctrines entail a radical alteration in public sector organizations culture and structure, impacting on processes, organizational outputs, and overall social, economic and political outcomes. While only a few countries have fully embraced NPM, many of them have tried out specific NPM techniques, applied to different policy sectors. The main overarching themes in NPM can be summarized as the bundle of specific concepts such as disaggregation, competition and performance-based incentives (Dunleavy et al., 2006), or following Ferlie's categorization (Ferlie et al.,1996) managerialisation, markets and quasi-markets mechanisms and performance measurement. In this work the attention is posed to the first two concepts: disaggregation of units in the public sector and competition/coordination through market-type mechanisms.

The general term of disaggregation is used to indicate the redefinition of public sector hierarchies, moving toward administrative fragmentation and decentralization of roles and responsibilities, through the disintegration of vertically integrated bureaucracies with the creation of arm's length

executive agencies (Hood, 1991; Dunleavy, 1997). Indeed, the reforms of the 1980s and early 1990s had tended to fragment public sector organizations, producing fewer larger, multi-purpose forms and more single organizations, each perusing more explicitly defined sets of goals and targets (Bouckeart et al., 2010). Also, the process of fragmentation produced the spread of formal authority from smaller to a larger number of actors creating strong territorial decentralization through the introduction of intermediate levels. A special case of decentralization is devolution of power. We refer to devolution of power when formal authority is given to external legally established organizations run by elected representatives, usually occurring from higher to lower levels of government (Sherwood, 1969; Rondinelli, 1981). In the case of the healthcare sector, decisional power is often transferred to geographic units of local government that lie outside the formal command structure of the central government (i.e., to Regions in Italy or Comunidad Autonoma in Spain) with the aspiration to increase systems' microeconomic efficiency and financial responsibility.

Another slogan that achieved wide circulation among NPM style reform is the promotion of competition in service organization and delivery through outsourcing. More specifically, it refers to the introduction of contracting-out forms with purchaser and provider separation into public structures so as to allow multiple forms of provision to be developed and to create (more) competition among potential providers. This implies that the bureaucratic failure of the public sector in handling particular transactions can be more efficiently organized through the market (Ferlie, 1992). This organizational change also promotes the basis for a broader diffusion of power within public service and thus ensures control over public organizations (Hood, 1998). In the healthcare sector, the call for entrepreneurial government – one that promotes competition between providers – is reflected by the development of quasi-market mechanisms through large-scale contracting-out and market-testing or contractual appointments to purchase and/or deliver medical and non-medical inputs. More specifically, contracting-out in the public sector is often conceptualized as the process through which the production and/or delivery of healthcare services are transferred outside the boundaries of direct public provision but the government retains control over the specification of the service, the management of the contract and the evaluation of the service provider's performance (Jensean and Stonecash, 2005).

The two abovementioned reform trends are peculiar to several healthcare system across Europe, especially Beveridge-based health systems described by National Health System taxation, centrally organized and relying predominantly on public providers such as the British NHS and the Italian NHS (INHS) (Saltman and Figueras 1997), even though their outcomes are a mixture of overarching intentional design and localized adaptation (Painter, 2001). In general, the move towards decentralization and contracting-out are justified by increased level of organizational and financial responsibilities at lower levels (more close to citizens) coupled with better response to local healthcare needs, and greater efficiency gains due to induced competition in public service provision (Torres, 2004). The expected results of such reforms are believed to contain public expenditures, while maintaining quality of service provision and increase citizen satisfaction. The emphasis on cost-containment is great. However, the literature also provides evidence of potential downturns of decentralization and contracting-out arrangements, such as rapid organizational change and lack of adequate information, over regulation and slow implementation of new market mechanisms are pinpoint to hamper the potentials of decentralized decision-making and competitive

relationships between providers (Bennett and Ferlie, 1996; Vininga and Globemanb, 1999). Notwithstanding these limitations the example of decentralization or devolution of responsibilities and contract based competitive provision are well documented in the Italian NHS.

¹The INHS was established in 1978 by replacing a system based on multiple social health insurance funds and was modelled after the British NHS with provision of universal coverage largely free of charge at the point of service. However, despite full implementation in early 1980s, some major weaknesses of the health system were evident, namely the lack of financial control by the central government over expenditure, the over-politicization of system organizations, the frequent conflicts between the three political tiers of government and the lack of specific management systems and expertise to run health care organizations (Ferrera 1995; Mapelli 1999; Fattore 1999; Borgonovi, 2001; France and Taroni, 2005). During a critical political juncture in 1992 the government had the opportunity to design and approve major changes to the system (Law N. 421/92; Decree Law N. 502/92; Decree Law N. 517/93). This legislative reform included managerial components and efforts to devolve health care powers to lower organizational level (the regions) reflecting major NPM principles. More specifically, the system first started a process of regionalization or devolution of power by virtually eliminating the role of municipalities and reducing the powers of the national tier in favour of the 19 regions and 2 autonomous provinces; second, managerialism or private sector style of management practice were put in place (e.g., appointed politicians were substituted by professional managers as heads of INHS organizations and use of performance-based payments); and third, quasi-market or contracting-out of service provision were established (see Annex 1 for a detailed historical summary of background and recent reforms in the INHS).

As a result, the 1992 reform introduced regionalization as the new institutional arrangements that reshaped hierarchies and power in the healthcare arena. The model envisaged was that the national level would define equal level of public service throughout the county and would ensure that regions received adequate resources to deliver it. Conversely, regions were mandated to provide the nationally guaranteed services, and would have to use their own resources if they were unable to do so due to inefficiencies or if they wanted to provide additional services beyond those specified in the national basic package. Accordingly, regions are free to reallocate the funds received within different programmes, and assign spending duties to local health authorities (*Aziende Sanitarie Locali* – ASL)² or hospitals enterprise (*Azienda Ospedaliera* AOs). The regionalization or disaggregation of care to 21 different regional contexts aimed at increase regions' competencies and responsibilities over healthcare organization/planning and delivery. In fact, different regions have made different choices on how to use their increasing autonomy.

For instance, most regions decided to keep an "ASL-centred template", with most hospitals remaining under ASL control and few becoming AOs while, a few smaller regions in northern and central Italy (i.e., Valle d'Aosta, Provincia Autonoma di Bolzano / Trento and Molise) adopted a "Region-centred template", where the region directly control the provision of services. Moreover at one extreme, Lombardy region opted for a full-fledged experiments in which all inpatient and outpatient services are delivered by AOs or other providers (private or private accredited) while the

7

¹ The description of the organization of the INHS and major reforms draws on the work published in the Italian Country HiT Profile 2014 written for the WHO/ European Observatory on Health System and Policy together with De Belvis A.G., Valerio L., Longhi S., Lazzari A., Fattore G., Ricciardi W. and Maresso A.

²Local health authorities are funded mainly through capitated budgets.

ASL acts as solo purchaser of services and provider of preventive and territorial care. Because of these regional differences in organization and delivery, a large vertical fragmentation exists in the extent and the quality of such strategies between regions or ASLs of excellence, which are mainly found in the northern part of the country, and areas where self-directed initiatives are scant.

However, the underline idea of the reform was of an "equality of treatment" for all citizens coupled with the traditional emphasis on the coordination of the state action to serve *l'intérêt general* as a common feature to many Southern European countries influenced by structure inherited from the French legal model (Torres, 2004). Thus, the state is still considered to be the main facilitator of solutions to problems, so that the traditional Weberian elements have been preserved (Pollitt, van Thiel and Homburg, 2007). This remained clear even under the major 2001 Constitutional reform (Constitutional Law N. 3/2001), which redistributed legislative competences between the national government and regional governments³ – including fiscal devolution (Law No. 42/2009) – framing a quasi-federal arrangement for the Italian state. In financial terms general taxation pays a complementary role (through an equalization fund⁴) and resources are mainly collected at regional level through regional taxes supplemented by co-payments for pharmaceuticals and outpatient care⁵

From this perspective, there is still a notable trend for the national government to assume an increasing steering role and oversight of regional financial performance, putting the disaggregation component clearly at stake and showing high potential of reversal or roll-back where "the reintegration of government into more coherent public sector or government-wide process" (Dunleavy et al., 2006: 470) is expected. This is well illustrated by a recent development that established compulsory financial recovery plans for regions suffered from severe financial deficits because of their health care spending.

In light of this phenomenon the first Essay included in this dissertation "The challenge and the future of health care turnaround plans: evidence from the Italian experience" provides an overall picture of the evolution of Italian healthcare system through decentralization and re-centralization of action to address inefficient regional financial performance. In the light of NPM principles, a shift to disaggregation of units in the public sector (Hood, 1991) and decentralization is perceived as a mean to increase microeconomic efficiency and financial responsibility. However, the INHS is decentralized in its organizations but not yet fully financial autonomous. Over time, some regional healthcare systems incurred considerable deficits and were not able to individually recover their expenditure balance. Traditionally, the central government would bail out regions that had a negative health expenditure to revenue ratio. But starting in 2006 to address regional financial failures the government introduced a special regime for overspending regions (annual deficits above

•

³ The "right to health" was assigned by Constitution to the joint competence of the state and regions and as a result, regions gained wide legislative autonomy in the field of health and stronger fiscal responsibilities (Law 405/2001), with the national government retaining the authority to define the general framework. Although, in the years following the Constitutional reform, agreements between the national government and regional governments, such as the three-year Pacts for Health agreed upon by the Joint State-Regions Conference, have become the main instrument of health policy, the agenda has been increasingly taken over by the need to better control regional health care expenditure.

⁴ Its main role now is to assure that each Region can count on receiving roughly the same level of adjusted per-capita funding to provide, at minimum, the core health benefit package (LEA). Resources are mainly distributed to Regions with narrower tax bases, i.e. those with lower per-capita income.

⁵ In the INHS, public financing accounts for 78.2% of total health spending, while 21.8% is privately financed, through out-of-pocket (OOP) payments (17.8%), especially for pharmaceuticals, outpatient care and dental services, voluntary health insurance coverage (0.9%) and non-profit institutions serving households (3.1%) (2012 data).

7% of total funding) that requires the adoption and implementation of formal regional financial recovery plans (*Piani di Rientro*). *Piani di Rientro* are negotiated financial recovery plans agreed upon by the central government and the regional administrations instigated to restore financial stability and to address the structural determinants of the organizational failures and cost over-runs. Since 2007, ten⁶ out of the twenty-one regional health systems have adopted these plans, which include actions to address the structural determinants of costs. The overall effect of this regime has been a decrease in the yearly level of overspending and in 2012, the total deficit of the public health care sector was €1.04 billion, declining by 77% since 2006 (Armeni and Ferré, 2013).

This process sets out a new collaborative agenda between national government and the respective regions, with disciplinary consequences for non-compliance. It has also enabled increased governmental interference in regions' autonomy to fund and plan health care services. Based on a qualitative study, we advance an interpretation on the value and effectiveness of *Piani di Rientro*. We propose an interpretative framework to understand the advantages and disadvantages of financial recovery plans, and we apply the findings to the development of policy recommendations for the structure, methods, processes and contexts of the implementation of this tool.

Decoupling policy systems seems to come to a halt especially because of some contextual macroeconomic factors, thus the reform trajectory is slowly reversing and healthcare systems across Europe are restructuring to foster more integrated focus, with relatively high levels of continued central direction (Dunleavy et al., 2006). Indeed, over time in a context of fiscal austerity, the reconfiguration of powers between the national and regional governments has created a shift of power at national level from the health ministry to the central finance ministry. While most policy powers are in the hands of decentralized units, the need for expenditure control strengthens the role of central governments (Mladvosky et al., 2012; Thomson et al., 2014) with reintegration practices that represent an antithetical response to the NPM thesis. These reasons have, of course, redoubled since the advent of the global financial crisis of 2007-2008⁷. For instance, in the Italian context the Ministry of Economics and Finance (MOEF) now directly monitors health care expenditure and has direct powers over regions which overrun their budgets, and, together with the Ministry of Health, establishes contingent cost-containment measures on public health expenditure level (e.g., caps on specific spending areas) and higher co-payments for outpatient/ambulatory care, diagnostics and, adding to private spending on health⁸.

On this issue, the recent history of health care expenditure among European countries is marked by attempts to place stricter control over health spending for macroeconomic reasons and towards action improving efficiency gains levels. Financial management reforms have been widespread and have led to an expansion of the scope and purpose of budgeting and financial management with a shift towards a New Public Management model, where the emphasis is on savings and efficiency (Pollitt and Bouckaert, 2011). However, the reforms which have served the savings objectives have not always fitted well with the reforms that would be required to encourage performance improvement. For example, the case of governmental "cheese-slicing" expenditure approach, or

_

⁶ Piedmont, Liguria, Abruzzo, Molise, Lazio, Campania, Puglia, Calabria, Sicily and Sardinia.

⁷ A decline of 3.3% in gross domestic product (GDP) per person PPP in 2009 (WHO, 2014).

⁸ Since 2009, under pressure from the international financial crisis and amid increasing political instability, government interventions in the INHS have taken the form of either urgent decrees or entries in the annual state budget law rather than systematic reforms, and have mostly consisted of cuts to public expenditure (de Belvis et al., 2012).

across-the-board tactics, as a reaction from central cabinets to evenly cut programme and service from the top down (Mladvosky et al., 2012). Among the variety of approaches to manage austerity and fiscal stress in public sector, Pollitt (2010) and Pollitt and Bouckeart (2011) identify additional basic measures besides opportunistic cheese-slicing, such as strategic cuts and productivity or efficiency gains. The most basic distinction is between across-the-board and productivity gains, where the former are interpreted as the "traditional" response of linear cuts across sectors and programs, while at the opposite efficiency gains require deploying a consistent reform strategy, often including a mix of provisions, such as setting priorities in services provision and user needs, using non-service approaches, building new relationships and creating alliances, exploiting technological innovation, and others. Another route to savings, perhaps more compatible with performance improvement, is the adoption or increase the use of block-budgeting and the application of strategic or targeted cuts. Here the central ministry sets polices and broad ceilings (frames), but within those delegates responsibility for allocation to particular services, programmes, or projects to local politicians and/or manager. This approach somehow permits the local determination of priorities.

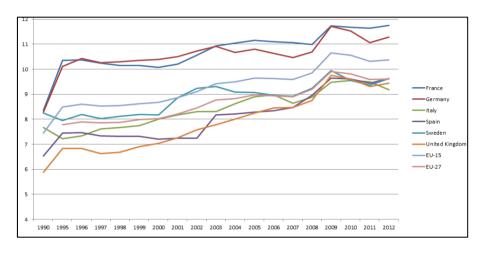
However, it is important to bear in mind that the cutback tactics described above may differ across countries, depending on government structure and organizational priorities, general level of economic development of the country and other environmental factors (like the severity and duration of fiscal distress)⁹ (van de Walle and Jilke, 2012; Raudla, Savi and Randma-Liiv, 2013). In addition, contemporary behaviours are often constrained and structured by the aggregation of past actions and decisions even though past circumstances may no longer be relevant ("the power of past decision"). Thus, selection of cut back policies has multiple explanatory factors and the existing empirical studies point to mixed evidence (Raudla, Savi and Randma-Liiv, 2013), suggesting that decision-makers tend to cut those parts of the budget that are more controllable and where public opposition are minimized (Bartle, 1996; Pammer 1990).

On this debate the second Essay - "The fiscal crisis in the health sector: patterns of response by public managers across Europe" - systematically presents the results of a European-wide survey on the pro-cyclical approaches adopted by public managers to tackle the shrinkage of funds buffeting the health care sector, as a consequence of the ongoing financial, economic and fiscal crises. Since 2009 health spending trends across European countries has slowed markedly or fallen in many countries after years of continuous growth. On average in European OECD countries, per-capita health spending over the period 2000-2009 is estimated to have grown, in real terms, by 4.1% annually, in stark contrast over the subsequent two years (2009-11) where expenditure grew at only 0.2% as the effects of the economic crisis (OECD, 2013). The extent of the slowdown has varied considerably across countries, with some affected harder than others given their pre-existing macroeconomic conditions (Greece, Ireland and Estonia). In the Italian context, total health

⁹ On this point, the literature suggest that the longer-lasting and the more severe fiscal distress is, the more likely it is that the authorities start imposing targeted cuts rather than across-the-board measures (Levine, 1979, 1985; Hood and Wright, 1981). Levine (1979, p. 182) argues that at the beginning of the austerity, across-the-board cuts are more likely (as the "sharing the pain" option is likely to be perceived as more equitable and hence to generate less conflict and resistance), but if these measures are not sufficient, more targeted cuts on the basis of prioritization will be adopted (Hood and Wright, 1981; Pollitt, 2010). Similarly, in their "administrative response model" of cutback budgeting, Levine, Rubin and Wolohojian (1981) predict that governments would respond to fiscal stress in a systematic way, depending on the duration and severity of fiscal stress. They conjecture that in initial phases of revenue-decline, the cutbacks would be decremental, but the larger and longer-lasting the revenue declines are, the more likely the adoption of targeted cuts becomes (see also Klase, 2011).

expenditure (public and private) grew at a yearly average of 4.7% from 2000 to 2009 and by only 0.9% from 2009 to 2012. Also, the ration of Italian total health expenditure over country GDP has increased by 1.3 percentage points of GDP since 2000 (from 7.7% in 2000 to 9% in 2010), mainly because the public component has experienced rates of increase that are substantially higher than GDP. Only in the last three years (2010-2012) has the increase in public health care expenditure been radically contained; thus, the ratio of total health care expenditure to GDP has been stabilized (Figure 1)¹⁰. In 2012, the country's health spending (9.2%) was almost on par with the EU average (9.6%) after being one of the lowest spenders between 1900 to 2012, along with Spain and the United Kingdom among Europe, but from 2009, most of the countries in this group have seen a decline in expenditure and have converged around the EU average.

Figure 1 Trends in health expenditure as a share (%) of GDP in country and selected countries, 1990 to latest available year (2012).



Source: WHO Health For All, 2014

To cope with decreasing level of resources, during the last five years, governments across Europe adopted pro-cyclical approaches to the global financial crisis advocate reducing public spending and achieving savings in times of financial constraints, in contrast to counter-cyclical approaches that advocate public spending to boost the economy (Armingeon, 2012). Specifically, interventions have taken the form of urgent decrees in the annual state budget law and have mostly consisted of hiring freezes, cuts to existing programs and postponing or cancelling new healthcare programmes. From the data collected the study highlights how some policy tools turned out to be more frequently deployed than others: targeted cuts and proportional cuts were the two more popular approaches, followed by productivity and efficiency savings. Using multinomial logistic regression, the empirical analysis suggests to what extent respondents organizational characteristics, the healthcare institutional arrangements (whether Bismark or Beverlide-like model) and trend of available public healthcare resources are predictors of selecting one of the possible alternative cutback approaches. Moreover, the study include the descriptive analysis of what concrete measures and tools countries introduced in the healthcare sector to cope with the crisis.

Considering the case of the Italian healthcare sector and its cut back strategies during the current economic crisis, we acknowledge that, already during 2007-2009, the central government had

_

¹⁰ It is important to highlight that since the early 1990s Italian GDP has grown substantially less compared to the rest of Europe. Consequently, important increases in the share of GDP for healthcare were driven by moderate increases in absolute spending.

increased its efforts to contain costs, especially by strengthen control over total expenditure and make use of sanctions to ensure that regions do not overspend. More recently, more stringent cost-containment measures have been introduced and they directly operate on the sources of regional spending (input costs) through measures on the payment of personnel, recruitment, standards for hospital care (e.g., minimum size of hospitals). Also, decremental policy on the overall public healthcare funding have been approved (e.g., Decree Law n. 201/2011 reduced total public health financing by €00 million in 2012, €1.8 billion in 2013 and a further €2 billion in 2014) and this reduction in central funding was compensated for primarily by higher co-payments and cost-saving measures to reduce pharmaceutical expenditures. Cost-containment measures also targeted the expenditure side: the government decreased expenditure for goods and services (primarily targeting drugs and purchasing of medical equipment)¹¹ and outsourcing expenditures to accredited private providers.

On this last point, I have previously introduced how the 1992 reform to the INHS designed also a quasi-market (where markets replace firms) for hospital and specialist care to control spending and ensure value for money (technical efficiency) but also to potentially improve consumer choice (allocative efficiency) (Ferlie, 1992). The quasi-market model envisaged in the Italian context is based on three main principles (Fattore 1999; Anessi-Pessina and Cantù, 2006; France and Taroni, 2005): firstly, patients are given complete freedom to choose any public healthcare provider (even outside their region) without the need for prior authorization; secondly, private organizations are included in this competitive arena provided that they are accredited by the region in which they operated. Indeed, regions have to set accreditation criteria to identify providers (public and private) that respect minimum quality criteria/rules of compliance (accreditation). Thirdly, a fee-for service payment system (for outpatient specialist care) and a DRGs system (for inpatient hospital care) is introduced (Taroni, 1996; Fattore and Torbica, 2006). Therefore, the INHS, at least in theory, established a fair playing field between public and private providers in the healthcare sector. Also, on paper, the quasi-market system designed by the reform was rather radical as it is based on the free choice of providers (including private ones) by patients and strong incentives to increase volumes, fill hospital capacity and reduce length-of-stay. As such, the Italian reform was different to that introduced within the British NHS under Margaret Thatcher which was based on contractual arrangements between purchasers and providers and did not include official tariff systems.

However, the Italian legislation did not make clear reference to a purchasing. Subsequently, a politically driven legislation (Legislative Decree n. 229/1999) introduced measures aimed at regulating and promoting purchasing, where the public sector become primarily a funder, purchasing services from a variety of private, public and voluntary providers, in competition with each other (Ferlie, 1992), thus producing incentives for specialization. Also, funding was no longer to be allocated solely through planning or formula funding, but instead through tariff reimbursement or earmarked budget allocated between competitive providers. As a result, regional healthcare systems could either directly purchase services or delegate the function to their local health

¹¹ A major policy to contain pharmaceutical expenditure includes measures such as redefining the proportions of the total cost pertaining to pharmaceutical companies, wholesalers, and pharmacies; a progressive reduction of the cap on regional pharmaceutical expenditure in primary and community health care; a reduction of the prices of equivalent drugs, along with other measure to promote their use; and the introduction and progressive extension of the claw-back system which requires pharmaceutical companies to pay back increasing amounts of money to regions when the nationally-determined expenditure caps for pharmaceuticals are exceeded. Another example is the significant reduction in the expenditure caps on purchasing medical equipment and services by the INHS (2010 to 2013).

authorities (ASLs) and, depending on regional arrangements and local purchasing strategies, or purchase services from private accredited entities.

It is common to distinguish three main purchaser-provider configurations in the INHS:

- 1. An "ASL-centred template", with each ASL acting as both provider and (to a limited extent) as purchaser of services from a limited number of AOs. This template partly resembles a quasi-market, as ASLs are financially penalized if residents seek care from providers other than theirs, as they have to pay them;
- 2. A "Region-centred template", where most purchasing concentrates at the regional level, while ASLs act mostly as providers. These regions directly control most public providers, and they accredit only a limited number of private providers;
- 3. The case of Lombardy, which is the only region that has carried out a complete purchaser-provider split. Most hospitals have been taken out of ASL control and established as AOs. ASLs purchase services from public and private providers, while the region has a regulatory role. The incentive for ASLs to ensure financial control by limiting provision balances the incentive for providers to increase volumes by attracting patients, who have full freedom of choice. However, inadequate governance of demand makes ASLs act more often as third-party payers than purchasers, and volume-driven profits have led hospitals to increase demand artificially (Cantu`et al., 2010).

As a result, since the introduction of this quasi-market mechanism, there has been a clearer split between the responsibility of buying healthcare i.e. "purchasers" from the provision of services i.e. "providers" within the Italian regional health service, representing a fundamental move away from exclusive public provision and implying profound implications for the preferred organizational form (i.e., make-or-buy). The theoretical foundation of outsourcing decision are rooted in new institutional economics or Transaction Cost Economics (TCE), closely associated with the work of Williamson (1973; 1979) which argues that firms have two alternatives opportunities for organizing their production structure: they may find convenience in exploiting specialization economies (market structure) or in reducing transaction costs (hierarchical structure).

Williamson suggests that market governance is the most efficient organizational form unless the transactions costs in the market are higher than the transactions costs incurred by operating within the firm. The activities are, therefore, allocated to the most appropriate executor (market vs. hierarchy) and are defined according to "the efficient boundary for which own supply can be shown to be the efficient choice" (Williamson, 1973: 557), meaning that activities are assigned to the one that minimize transaction costs (including among others search and information costs, organization and coordination costs, enforcement costs). Thus, transaction is the basic unit of analysis and alternatives are evaluated with respect to production, bargaining and opportunistic costs where the theoretical objective is an efficient configuration more than a social or political effective action.

However, bounded rationality and operationalization problems limit the rationality to TCE approach for solving strategic dependencies, since it suffers from not adequately exploring other factors, which are intrinsically manifested in the make-or-buy decision (e.g., governance structure, reputation, power and trust present in any inter-organizational relationship) (Ring and Van de Ven,

1992). Moreover, in the case of public funded hospital, make-or-buy decision are particularly challenging, because of the characteristics of the service provided (public, non-rival with high levels of uncertainty), the professionals involved (highly specialize and autonomous), the type of consumer engaged (highly risk averse) and the non-business like governance structure of the sector where institutional changes must be seen as profoundly political process. Thus, an additional aspect when evaluating make-or-buy trade-off in public service organizations is the inclusion of organizational costs or the cost of managing complexity, changing organizational settings and functions which are highly dependent on political influence and past behaviours (path dependency).

In outsourcing decisions become particularly crucial the definition of contractual arrangements, where transactions are managed by contract and not exclusively by hierarchy. Thus, a key development within the public sector is the emergence of formalized system of contracts, structured with an emphasis on legal rules and recourse to litigation as a means of resolving contractual disputes (classical or neoclassical contract law) (Mcneil, 1977). This is true for the INHS, where purchaser-provider relationship is managed under a contractual agreement stating the volume, price, quality of the services to be delivered (usually renegotiated every year) and set the fundamental rules of compliance, following the principle of formal contracting in governing transaction (Ring and van de Ven, 1992), leaving to the market incentives guiding the behaviour of public and private providers. However, since 1997, regions have gradually reinforced "hierarchies" and "institutions" to supplement and correct market incentives (Anessi-Pessina et al., 2004).

In addition, in the second half of 2000s, given the cost-containment pressure on the healthcare system there has been a good deal of concern over the balance between public and private provision. Regions adopted a more stringent role in differentiating fees across classes of providers (i.e., between public and private providers or between teaching and non-teaching hospitals) and introduced provider-specific funding ceilings to contain expenditure and limit incentives for volume increases for specific sets of services (Jommi et al., 2001; Cantù et al., 2010). As a result, Italian regional health systems have gradually included planning and control systems – as supplementary managerial tools to contacting – to predefine the volumes, mix, prices and possibly other features, like waiting times and quality, to be offered by each provider. Over time, these systems have become increasingly top-down, with a more stringent regulatory framework, and focused on the financial dimension of performance due to budget constraints.

The third Essay- "Unattainable cost efficiency. Interpreting public sector outsourcing decisions: evidence from hospital inpatient service", specifically aims at exploring the evolution of contracting-out or outsourcing decisions as a strategy to contain public expenditure in the Italian context. However, while NPM may hold the promise of improved performance, there have already been several examples of less than optimal political and organisational outcomes when its principles manifest themselves in private sector managerial strategies (Ferlie, 1992; Enthoven, 2004; Zullo, 2008; Levin and Tadelis, 2010). This is also the case of outsourcing in the INHS, where real-world constraints (especially organizational costs) hinder such efficient configurations, which remain de facto unattainable.

To approach the effectiveness of outsourcing strategies played by the different regional health systems, the study advances the theory by distinguishing two forms of public outsourcing (i.e., contracting out to a public provider) and private outsourcing (i.e., contracting out to a private

provider), thus, identifying a variety of possible service delivery configurations depending on the nature of the contracted entity, thus challenging the commonly held view of outsourcing as a dichotomous choice. In fact, over time, regional health systems have included some internal market mechanisms of outsourcing of inpatient service provision, but at different degree and with multiple configurations over time even though regions appear to be still predominantly public-service based (i.e., direct provision of hospital services through local health authority-managed hospitals). Some regions have included some level of public outsourcing by contacting a share of hospital beds to public independent hospital, or have introduced private outsourcing by contracting a share of hospital beds owned by private accredited hospitals and for which a reimbursement contract has been signed with the region or with the local health authority (according to the regional institutional setting).

Among the 21 regional health systems, only Lazio, Campania, Molise and Lombardy present a rather high level of private outsourcing, with 30% of total hospitalization supplied by private providers (Ministry of Health, 2012). In this setting, organization such hospitals have been under pressure to adopt many characteristics of a quasi-firm market (Ferlie, 1992). They started determining their own competitive strategy in response to local "market" conditions by attracting business by hiring reputable professionals (i.e., status competition), developing marketing strategies and by reducing costs and raising quality. While other regional systems, especially in the south, greatly limited the extent of competitive forces and the use of tariff systems to fund providers (Cantù and Carbone, 2007).

The essay, using longitudinal data also argues that both public and private outsourcing have similar curvilinear independent effects on cost-containment (with a different magnitude of the quadratic terms) but that combining the two (intermediate configurations) is costly. This contribution also explains the existence and persistence of mixed configurations, or coexistence of both public outsourced inpatient service (e.g., to public managed hospital) and private outsourced service (e.g., to private reimbursed hospital) in the Italian context. This mixed configuration appears more costly, but it is justified on the basis of the specificity of the sector (e.g., the presence of institutional and political scrutiny) and its historical traditions, coupled with change-associated costs and smooth deviations from a *status quo*, and the ambiguous perceived effectiveness of different outsourcing decisions.

Overall, the INHS 1990s reforms reshaped the organization and hierarchy of the healthcare system and reflected a series of incentives so to improve efficiency and responsiveness at the micro-level, while containing costs and ensuring equity at the macro level. While the reforms contained attempts to transform the INHS into a mixed system where decentralization and private initiatives could have put at risk some of the health system's main principles, the overall endeavour to overhaul the system was also genuinely driven by the search to modernize the system in line with other major reforms in Europe. Especially, compared to other sectors of the Italian public administration, at least in the regions with stronger capacities, there has been dynamic both at regional and organizational level with new management roles and systems that have helped to govern the complexity of healthcare (Ongaro, 2009).

METHODS

In my doctoral thesis, I used both qualitative and quantitative methodologies to better understand the complex process of healthcare policy and reforms occurred in the light of NPM tradition in the Italian and European context. Both research methodologies have been widely adopted in public management and policy tradition, where interpretation and explanation of social phenomena are two research traditions that are integrated in the literature. For the purpose of my research question, I am more interested in investigating process level phenomena with a holistic approach rather than organizational models or individual actions. Indeed, I investigate reform trends and their impact by adopting a macro-level or meso-level as defined by the Health Policy and System Research (HPSR) framework 12, which is the general framework of reference used to look at the interactions between policy and systems (Sheik et al., 2011). Specifically, the macro-level refers to the architecture and oversight of systems while the meso-level focuses on the functioning of organizations and systemic interventions (Sheik et al., 2011). In management studies the meso-level relates to studying organization or institution (azienda or istituto) in which individuals act and behave according to a combination of procedural rules (e.g., managerial precepts), institutional structures or cultural norms defined and enclosed in their respective organization (Borgonovi, 2001). Moreover, organization behaviours are partially determined by external rules and, reciprocally, variables at the system level are influenced and shaped by organization behaviours. Essay 1 on financial recovery plans adopts the former, while Essay 2 on responses to the financial crisis and Essay 3 on outsourcing decision look at the meso-level, adopting countries or organizations as level of analysis.

Research questions can also be classified according to their intent, which may broadly be seen to be either: normative/evaluative or descriptive/explanatory (Table 1). In the case of normative research or evaluative research, there is an intrinsic interpretative approach which may involve value judgement and explicitly defines how thing should or ought be (Robson, 2002). This is the case of Essay 1, where the effectiveness of financial recovery plans has been investigated by direct observation of the phenomenon using interviews and focus group of actors involved in the development and implementation of the strategic tool. An interpretative research approach has been favoured to explore and describe meanings and understand members' definition of the situation (Gephart, 1999).

On the other hand, Essay 2 and 3 adopt an empirical or positivistic approach, whether descriptive or explanatory. Compare to the interpretative approach, this implies that now the observer tends to be neutral and states the facts as they are without passing any judgment or making any analysis that may be biased because of personal leanings (unobtrusive approach) (Trochim, 2005). On the first level, descriptive research seek to give an accurate profile of situation or social phenomenon, while the more advanced explanatory research involves explaining patterns relating to the phenomenon being researched, often by illustrating the situation or problem in a form of a causal relationship (Robson, 2002). A descriptive approach is used in the display of primary data collected for Essay 2 about cut-back measures implemented across European healthcare systems to confront the economic crisis. In addition, both Essay 2 and 3 develop an empirical section according to the explanatory tradition with the aim of verifying hypothesis involving valid, reliable and precisely

_

¹² HPSR is a multidisciplinary field through which social scientists seek to support change within health care systems emphasizing the pragmatic nature of the research questions and their instrumentalist perspective (Sheik et al., 2011).

measured variables (Gephart, 1999).

Table 1 Study by level of analysis and intent of question

Study	Level of analysis	Intent of question
Essay 1 – Does financial recovery plan (<i>Piano di Rientro</i>) have shown its intended effect to address the structural causes of regional healthcare deficit?	MACRO	Explorative / Evaluative
Essay 2 – The fiscal crisis in the health sector: patterns of cutback management across Europe?	MESO	Descriptive / Explanatory
Essay 3 – How outsourcing hospital service to public and private providers have an effect on healthcare expenditures?	MESO	Explanatory

In the following paragraphs more in-depth description of the research methodology applied to each of the three essays included in the thesis is provided.

The first study is structured around a qualitative study aiming at understanding the effectiveness of the strategic tool of financial recovery plans (*Piani di Rientro*) introduced to restore regional healthcare deficit in the Italian context. The interpretative research framework allowed the gathering of thick data through analytical observations of informed subjects through semi-structured interviews. Twenty-five semi-structured interviewed were carried out in three regional contexts representing the regions that over time accounted for the highest cumulative deficit (i.e., Lazio, Campania and Sicilia). So, extreme cases were selected with the purpose of highlighting the highest variation in the phenomena under investigation rather than analyse typical or average instances (Denscombe, 2007). The sampling of interviewees was based on subjective selection or purpose sampling which aims at gather multiple observations from different key informants related to the three regional context selected. Specifically, I included both the promoters of such strategic and managerial tool (i.e., policy-makers), and the actual developers and users (i.e., external consultants, financial responsible from the regional health department and medical director from local health authorities). Thus, a heterogeneous group of subjects holding different role, hierarchic position, expertise, responsibilities and perception of the effectiveness of the tool were interviewed.

The unit of analysis is the regional financial recovery plan and the actions undertook by the three selected regions to manage and restore their healthcare deficit. The unit of analysis is represented by the single interview. During the fieldwork, interviews were recorded and intersubjective testability (Singleton and Straits, 2005) was assured by the inclusion of two independent observers each time of information gathering and their coding. Interviews were analysed to discover categories, or more abstract concepts that represented both conditions and consequences of action related to the use of financial recovery plans in the three regional contexts. Moreover, to prepare for the fieldwork and to facilitate and strengthen the value of the direct observations a well-defined list of items among which to evaluate the effectiveness of such financial recovery plans was developed. The list of dimensions and elements exploring the effectiveness of financial recovery plan draws from the design properties of strategic plan literature (Pandit, 2000; Paton, 2004; Walshe et al., 2004; Boyne, 2006) and includes among others endogenous and exogenous determinants that cause performance decline and strategies of (i) replacements (removal of key members of the leadership and management of the organization); (ii) retrenchment (or short-term actions to stabilize the

organization and (iii) repositioning (longer-term actions aiming at re-establishing the strategic direction, vision and overall purpose of the organizations).

Furthermore, to validate these dimensions and elements, official planning and strategic documents were analysed and a focus group to pilot and contextualize the interview's structure was conducted. The focus group involved elven informed people from the Ministry of Health and the National Health Agency, which discussed the eight dimensions and relative items describing the nature and value of financial recovery plans. Discussion on the item list continued until consensus was formed. At the end twenty dimensions were identified and included in the semi-structured interview. Overall, this research methodology is subjective in nature, where findings are richly descriptive and presented as themes/categories but they carry low level of generalizability. Indeed, social philosophers in early 1900s argue that interpretative understanding is based on arbitrary ideal types, which is based on previous knowledge and personal experience (see Alfred Schutz Common-Sense Constructs of the Reality).

The second and third Essay follow the quantitative research tradition, where knowledge proceed through a process of hypothesising fundamentals law and then testing them empirically using measured variables (Singleton and Straits, 2005). The general positivistic approach is based on hypothesis testing to "uncover relationships among variables, in contrast to interpretative research where it is applied to understand important distinctions and patterns in meanings" (Gephart, 1999: 15), thus, showing a preference for measurement oriented methods rather than meaning oriented methods. Moreover, positivist emphases the use of statistical criteria and concept of reliability and validity to evaluate the quality of quantitative findings (Shadish et al., 2002), in contrast to "trustworthiness criteria" and "authenticity criteria" (Gephart, 1999) employed by interpretativist.

In light of the positivistic approach, the second essay presents the results of a European-wide survey lunched in spring 2012 and developed as part of the EU Seventh Framework programme research project Coordinating for Cohesion in the Public Sector of the future (COCOPS, see www.cocops.eu). The survey addresses top public healthcare executive and aims – among other objectives – at gathering their impressions about government health policy responses to cope with decreasing levels of available resources induced by the economic, financial and fiscal crisis. The survey design process relies on the findings from a literature review on categories of approaches to cutback management elaborated in the public administration literature (Levine 1978; Pollitt 2010, Ringa et al., 2013). Specifically, one question directly probe for managers' perception about the extent of use of one of the three basic cutback tactics (i.e., cut-across-the-board, targeted cuts, and productivity or efficiency gains) aimed at realizing savings in the healthcare sector (Pollitt, 2010) and additionally the survey investigates the perception of use of a rich set of cutback tools.

In this case, primary data are generated by administering individual questionnaire to informed respondents across ten European countries¹³ with the aim of to generating a cross-national database upon which analyzes policy and managerial trends¹⁴. This study is designed as comparative study and aims at eliciting equivalent cross-national measurements answering to the need for more quantitative and rigorous comparative research, going beyond single-country and single-

Research, University of Michigan (2010).

 ¹³ The countries included are: Austria, Estonia, France, Germany, Hungary, Italy, Norway, Spain, The Netherlands and the UK.
 14 The survey design follows the standards included in the Guidelines for Best Practice in Cross-Cultural Surveys, Institute for Social

organization approaches (see Derlien, 1992; Fitzpatrick et al., 2011; Pollitt 2011; Raadschelders and Lee, 2011). However, this type of studies face problems when trying to ensure consistency of methods and, therefore, its measures across its member nations (Jowell, 1998)¹⁵.

Specifically, limitation in survey reliability across countries is the main concern when number of countries is high and homogeneity is low (i.e., thought processes, institutional frameworks, underlying values, and language have high variability) (Jowell, 1998). To overcome this threats, one single survey was rigorously and consistently (i.e., following an agreed timeframe) administered by country teams involved. Moreover, questions were carefully translate and backtranslated to ensure equivalent meanings across countries so to assign variation in the data to differences in the distribution of answers rather than to interpretation of questions. Also a conventional pretesting (i.e., a small sample of respondents from the target population is sampled and the survey is administered to them just as intended in the actual study) was included to best identify respondent-task difficulties in each country. In addition, concern over accuracy and honesty of responses is another threats to consider. To mitigate the problem anonymous online questionnaires were sent. The use of an online survey platform (Unipark) was chosen also because it allows higher inclusion and higher response rate, while being a potential cost saving research strategy.

Despite some possible drawbacks in the design and significance of the data, survey methodology displays significant advantages. For example, it is claimed that the it provides higher level of generalizabity of results, since survey allows a wide and inclusive coverage meaning that it is more likely, compared to some other approaches, to get data based in a representative sample (Denscombe, 2007). For example, compared to qualitative studies, the size and composition of the sample in cross-national survey is known from the outset, and shape the overall design of the study, whereas interpretative research tends to adopt an approach to sampling which is based on sequential discovery of instances to be studied and which emphasizes the inclusion of "special instances" more than is generally the case with quantitative research (Denscombe, 2007).

For this study a full census of top-level public healthcare decision makers and civil servants were surveyed in ten European countries, including both Bismark and Beveridge systems. Survey invitations were sent to the top three hierarchical levels of public sector executive working in the Ministry of Health, state and regional level executives, including the general directors, administrative directors and health directors of all public health organizations across the ten countries¹⁶. More than 2,000 names were included in the survey, which counts the entire population of interest for the survey, so no random sampling strategy was applied. In order to prompt contacted persons to take part to the research project and fill out the questionnaire, a personalized email message (in which people were addressed by name and in which the purpose of the survey and the significance of their active involvement was illustrated) was enclosed in the email. Moreover,

_

¹⁵ It is often said that complete evaluation of reform in multiple context are difficult to perform because available evidence might be more extensive in some countries than others or materials available is highly normative or politicized, specific or abstract, concrete or theoretical and making meaningful comparative assessment results complex or impossible (Politt and Bouckaert, 1999). Moreover, few research initiatives have explored in depth the transformation of public administrations as triggered by NPM reform discourses in a systematic comparative form (Van de Walle and Hammerschmid, 2011).

¹⁶ From a theoretical perspective the survey follows pioneering elite studies such as those of Aberbach, Putnam and Rockman (see Putnam 1976, Aberbach et al., 1981, and Aberbach and Rockman, 2006), which lay the foundation for many other both national and cross-national executive surveys (e.g. Mayntz and Derlien, 1988; Christensen and Laegreid, 2007; Bertelli et al., 2007; Tronda,l 2010; Bauer et al., 2009; COBRA survey; UDITE survey).

before the survey launch – in order to more effectively communication to potential respondents in the healthcare sector and boost the response rate –pre-testing and some national call about the project were made (Denscombe, 2007). Total valid answers from 760 respondents across ten countries (30.68% response rate) were received and 624 answers were used to run the multinomial regression analysis (Table 1 from Essay 2 gives full details about sample composition).

In addition, for the purpose of the empirical analysis, individual-level information are complemented with country-level measures gathered from secondary data. Specifically, the essay, empirically identifies the influence of top managers demographic characteristics on patterns towards government cutback management decisions and examines whether those views relate to the basic traits of country healthcare system (i.e., Bismark or Beveridge) and public healthcare resource availability during the period in which the crisis manifested itself.

We use multinomial logistic regression method to predict the probabilities of three uncorrelated categorical outcomes or alternatives: productivity savings (1); efficiency savings (2); and targeted cuts (3), given a set of independent variables. This technique is particularly useful since it allows for a simultaneous examination of multiple independent variables such as the effect of country-level and individual-level variables on the dependent variable (assuming statistical independence of explanatory variables) by fitting maximum likelihood estimation (Long and Freese, 2006). In the analysis, to ease the interpretation of regression coefficient, the estimates are transformed to relative-risk ratios corresponding to the exponential value of the multinomial logit coefficient. By doing this, we obtain the relative-risk ration for a unit change in the predictor variable, where risk is measured as the risk of the outcome relative to the base outcome. Thus, the relative risk ratio of outcome m relative to the referent group is expected to change by a factor of the respective parameter estimate given the variables in the model are held constant.

Moving to a fully explanatory empirical study, the third essay investigates the cost-containment effect of public and private outsourcing decisions in the provision of hospital inpatient service in the Italian context using region-year panel data. Specifically, three hypotheses were tested using a fixed-effects linear panel regression analysis aiming at identifying the impact of public and private outsourcing after excluding regional time-invariant factors (e.g., institutional healthcare models, which are the same for a given cross-sectional unit through time but vary across cross-sectional units). Hypotheses are developed on the base of contracting-out theory that builds on Transaction Cost Economics (TCE) (Williamson, 1973, 1979) and Agency Theory (Warner and Hafetz, 2008) contextualized to non-market setting (Pollitt, Thiel, and Homburg 2007).

In this case evidence of the construct of interest (impact of outsourcing decision on public healthcare expenditure) is tested using already available measure. Precisely, secondary data on regional per-capita public expenditure on health were collected through national health databases publically available. Proxy for public and private outsourcing constructs, measured as the proportion of regional hospital beds managed by public and private independent hospitals, respectively, were gather using national and regional health databases. National database were primarily used to check regional overall measure and to reconcile the regional data on number of providers across time. The sample includes the entire universe of public and accredited Italian healthcare providers from 1997 to 2010 and the mean-year regional value are used to test hypothesis. Thus, the unit of analysis is represented by the 21 Italian regional healthcare systems

totaling 294 region-time observations.

The use of longitudinal data has multiple advantages (Hsiao and Yanan, 2006) such as improving the efficiency of empirical models because of the large number of data points that increase the degree of freedom, limit collinearity among explanatory variables and reduce measurement errors. Moreover, by using information on both the intertemporal dynamics and the individual of the entities being investigates, one is able to control for the effects of missing or unobservable variables, thus provide more accurate predictions for the phenomenon. However, some drawbacks in the application of panel data regression exist. Specifically, in the study parameter heterogeneity issue could affect model results. Indeed, the concept of public outsourcing used is not homogeneous across regional contexts, since public outsourcing differs considerably in the degree of separation (institutional and financial) between hospitals directly managed by local health authorities and public hospital enterprises (AOs). Therefore, the measure is a potentially heterogeneous proxy of public outsourcing and should be treated with care when discussing normative implications.

Essay 1 - The challenge and the future of health care turnaround plans: evidence from the Italian experience

A draft of the essay was presented at the 5th Annual European Public Health Conference, 8-10 November 2012, Malta.

Article published in Health Policy (2012) 106: 3-9.

Authorship: Francesca Ferrè, C. Cuccurullo (Prof. Dept. of Strategy and Accounting, Second University of Naples), and F. Lega (Prof. Dept. of Department of Policy Analysis and Public Management, Bocconi University).

Keywords:

Decentralization, Healthcare deficit management, turnaround, Italy

Abstract: Over the last two decades, health policy and governance in Italy have undergone decentralisation at the regional level. The central government was expected to play a guiding role in defining minimum care standards and controlling health expenditures at the regional level in order to keep the entire Italian National Health System (INHS) on track. Although health performance trends have been consistent across regions, public health expenditures have been variable and contributed to a cumulative deficit of 38 billion Euros from 2001 to 2010. To address the deficit, the government called for a resolution introducing a partial bail-out plan and later institutionalised a process to facilitate a turnaround. The upturn started with the development of a formal regional turnaround plan that proposed strategic actions to address the structural determinants of costs. The effectiveness of this tool was widely questioned, and many critics suggested that it was focused more on methods to address short-term issues than on the long-term strategic reconfiguration that is required for regional health systems to ultimately address the structural causes of deficits. We propose an interpretative framework to understand the advantages and disadvantages of turnaround plans, and we apply the findings to the development of policy recommendations for the structure, methods, processes and contexts of the implementation of this tool.

1. From centralisation to devolution: 20 years of positives and negatives in the change of the governance of the Italian NHS

Over the last two decades, the centralised system of health policy in Italy has transitioned to a system characterised by the devolution of control to the regional level. The Reform Law of the early 1990s, which introduced decentralisation 17 in the Italian National Health Service (INHS) 18, stemmed from the common perception that political, fiscal and organisational devolution would make regions more responsible for funding, organising and delivering health services in their own territories. The wide and comprehensive reform process transformed the role of central and regional governments and coincided with the international New Public Management (NPM) movement [4] by introducing managerialism, regionalisation and quasi-market mechanisms [5]. To ensure compatibility and coherence within the overall health care system, the Reform Law stipulated that the central government maintains a guiding role in defining and controlling both the achievement of fundamental health care objectives 19 and the financial sustainability of health care expenditures at the regional level [6][7][8]. In contrast, regions are expected to develop their own regional health plans, set priorities, create strategies to meet local health care needs and expectations, negotiate funding levels with the central government and allocate the budget within their systems. As a result, since 2001, the regions have become more fiscally autonomous²⁰ and more financially responsible²¹, and they have acquired more managerial discretion over the organisation of health care services. As a consequence, the INHS is now composed of twenty-one local health systems, one for each different Italian region. Emilia and Lombardy are often referred to as polar examples of these different systems [10]. The aims of the devolution reform have been two-fold: to increase microeconomic efficiency [11] and to increase the financial responsibility of the regions, thereby

_

¹⁷ The concept of decentralisation is rather ambiguous. In this study, we refer to the classic description presented by Sherwood (1969) [1] and Rondinelli (1981) [2], which proposes four types of decentralisation: deconcentration, delegation, devolution and privatisation. In this work, we consider the form of decentralisation that corresponds to devolution, as this form represents the case of the INHS, where decisional power is transferred to geographic units of local government that lie outside the formal command structure of the central government [3].

¹⁸ Legislative Decrees 502/1992 and 517/1993 involve the initiation of the process of devolving health care powers to the regions and a parallel delegation of managerial autonomy to hospitals and local health authorities. The subsequent Constitutional Law N.3, 18 October 2001, modifies the second part of the Italian Constitution (Title V) by institutionalising the devolution process and providing regions with more power.

¹⁹ Art. 117 of the Constitution – "Determination of the essential levels of services in regards to civil and social rights to be guaranteed in the whole country pertain to the national Parliament and central Government". The Minister of Health maintains the exclusive power of setting the Essential Level of Care, which identify the broad categories of health services (e.g., outpatient, inpatient, rehabilitation) that must be delivered within the INHS funding. Each region has the power to enhance the portfolio of health services delivered in addition to those required by the Essential Levels of Care by taking on the relevant burden with their own resources. This agreement was implemented by Legislative Decree N. 347, 18 September 2001, and later converted into law N. 405, 16 November 2001. This latter piece of legislation addresses "Urgent action for health care expenditure".

²⁰ Decree Law 56/2000. Fiscal federalism abolished the national health fund and introduced taxation yield that was directly attributed to the regions. The change was expected to come about gradually, bearing in mind historical health care spending during the first three-year period. Moreover, the central government set up a national equalisation fund financed by VAT revenue sharing to increase resources to meet the expenditure standards of the regions and to guarantee the provision of the Essential Level of Care across the entire country.

Regions are accountable for covering any future deficit with their own resources. These resources include regional taxes (a business tax IRAP, a surtax on the national personal income tax IRPEF and a vehicle tax) and co-payments for services directly paid by service users to regional governments [9]. These tax rates are determined nationally, but regions have some flexibility to increase or decrease the level according to national thresholds.

stopping the accusations of blame between the regions and the central government regarding resource allocation [7].

During the implementation of the interventions, similar trends in health outcomes were recorded across the regions, although southern regions showed lower efficiency levels in production costs, lower accessibility (longer waiting list and a limited range of specialized services and technologies compared to northern regions) and lower appropriateness of care (incorrect use of procedures, drugs, therapies and care settings) [12] [13] [14]. However, public health expenditures were highly variable across the regions and generated over 38 billion Euros of cumulative deficit between 2001 and 2010, which is equivalent to one-third of national health care expenditures in 2010²². Among the twenty-one regions, Sicily, Campania and Lazio accounted for the highest cumulative deficits (26,274 million Euros), and seven other regions²³ have exceeded the deficit thresholds established for them by the central government²⁴

> (Tables and Figures Table 3)

The regional discrepancies presented in Tables and Figures

Table 3 highlight the policy issues faced by the Italian NHS regarding the financial viability of regional health systems. Indeed, during the implementation phase, some of the regions that already enjoyed substantial autonomy expressed worry that devolution would create financial problems due to the lack of fiscal autonomy and managerial competence in some southern regions [7].

Deficit management should be carried out individually by regions using resources derived from introducing regional prescription charges, generating savings on the acquisition of goods and services, limiting the expenditures on health care providers, reclassifying drugs that are charged to the INHS, imposing mark-ups to the regional tax rates and/or selling properties. However, during the first years of devolution (2001-2005), the central government continued a partial bail-out to finance the past health deficit of the regions²⁵ [10]. Confronting the risk of an escalating deficit, the Italian government called for a resolution in late 2005 and early 2006 that would institutionalise a new process for recovery to reduce the financial instability of the regional health care systems ²⁶ [5]. We should acknowledge that financial imbalance among health organizations is a serious worry that other European health systems have experienced in the past decade. For example, the English NHS faced an overall net deficit of almost £1 billion during 2004-2006 financial years [16] and also in

²⁴ The deficit threshold is calculated using the regional annual healthcare deficit and the pre-existing deficit that regions are not able to manage with their own resources.

²² Relazione Generale della Situazione Economica del Paese –RGSEP 2010, Ministry of Health and Finance.

²³ Piedmont, Liguria, Abruzzo, Molise, Apulia, Calabria and Sardinia.

²⁵ On October 5th, 2006, the Italian government and the regional governments signed a "pact" ("Patto per la Salute"), the main points of which have since been enforced by the Finance Stability Law L. 296, 27 December 2006. The INHS funding for the period 2007-2009 was slightly increased, and extra funds were allocated to cover deficits incurred in 2006. A "special fund" was created for those regions with high deficits (greater than 7% of the funding), which were contingent on each region signing specific agreements with both the MoH and MoEF based on a Budgetary Balance Plan. These plans aimed to contain health expenditures and balance the health accounts by 2010 (an extra 3,000 million euro was also allocated to cover deficits for the years 2001–2005) [15].

²⁶ Financial Stability Law L. 311, 30 December 2004.

this case the government took a series of actions centrally coordinated by the Performance Directorate in order to restore the situation²⁷ [17].

2. The struggle for regional turnarounds: decoupling the recovery plan process

Between 2001 and 2010, ten Italian regions accumulated significant deficits and were expected to design and pursue a turnaround strategy.

The turnaround process was to begin with the development of a formal regional recovery plan (RRP) that would propose strategic actions addressing the structural determinants of the organisational failures and costs of the region [18] [19] [20]²⁸. In general, recovery plans are instruments designed to increase efficiency and reduce deficit problems in the future [10].

RRPs were expected to contribute to the turnaround process by functioning as triggers for change. The plans provided the following: the recognition and explicit acknowledgment of the extent and serious nature of the regional financial and organisational issues as well as retrenchment and stabilisation through the implementation of short-term actions and long-term system reconfiguration (e.g., establishing a new vision, reorganising and developing capacity).

In many Italian regions, the turnaround process was slow and inconsistent because coordination and control between the players involved in the process was tenuous and unsteady. A plurality of actors weakly engaged in the process was called upon to take action and facilitate the recovery strategy of failing regional health systems (Table 1).

Regional health departments were asked to develop RRPs, which were subject to approval by the national Ministry of Health (MoH) and Ministry of Economy and Finance (MoEF). If the departments failed to produce a viable RRP, the regions were commissioned by the central government. Audit firms were asked to recognise and explicitly assess the public debt positions of each failing regional health system, thus activating capacity building initiatives to increase the

_

²⁷ The English NHS have registered almost £1 billion overspending mainly due to over performance caused by a growing perception that sound financial management was less important than delivery. In light of this growing deficit the government combined operational performance and financial management responsibilities within the Department of Health (DoH) to ensure that there could be no trade-off between these two aspects. DoH increased also the frequency and depth of the direct monitoring of deficit organizations and facilitated the involvement of private sector turnaround specialists in the NHS. English NHS between 2005 and 2007 registered change to the financial regime included the introduction of new arrangements for cash loans; the end of the resource accounting and budgeting regime for NHS trusts; and the introduction of a new capital regime for NHS trusts from 2007/08. Also change to the structure of the NHS. Implementation of the Department of Health's Commissioning a Patient-led NHS initiative, led to the number of SHAs reducing from 28 to 10 and the number of PCTs reducing from 303 to 152. In addition the number of ambulance trusts was reduced from 29 to 12.

²⁸An expected turnaround consists of a "collection of concerted or coordinated activities which may include the replacement of key individuals in the organization's management and leadership, immediate attention to major operational problems seeking short-term solutions, and the longer term, but often radical, redesign or re-profiling of the organization and its business" ([19], pg. 201). RRPs should contain a diagnosis of heterogeneous cause-effect relationships between endogenous and exogenous determinants that cause performance decline [21] asset reorganization; human resource management and ICT enhancement; long-term vision development (e.g., repositioning health organisations; defining sustainable productive capacity; and increasing health service efficiency).

The private sector evidence suggests that recovery from failure is associated with strategies of (i) replacement – involving the removal of key members of the leadership and management of the organization; (ii) retrenchment – short-term actions taken to stabilize the organisation, to stem its losses and to deal with the immediate problems which have precipitated its crisis; and (iii) repositioning or renewal involving longer-term actions aimed at re-establishing the strategic direction, vision and overall purpose of the organization and placing it on a longer-term pathway to successful performance [19].

reliability of decentralised systems. Furthermore, the best-performing health regional systems were selected to support and advise troubled regions.

(Table 1)

Although the central government made a concerted effort (backed by the National Health Agency - AGENAS) to establish a system of supervision and monitoring to direct regions during the turnaround phase, the pattern of development for recovery strategies appears rather unsystematic, irregular and lacking in consensus-building initiatives [8].

Enabling the turnaround process in highly institutionalised contexts (i.e., those inclined to tolerate failure) is rather difficult [21]. The central government failed to recognise the specific situations and circumstances of organisational failure within different regions and instead treated regions as homogeneous "black boxes". Indeed each region on the base of central Ministries indications asked for similar RRPs because of required urgent action not counting their real feasibility. In the end, recovery strategy proved to be unmanageable for some regions [19] [22] [23]. This mishandling contributed to significant doubts regarding the effectiveness of recovery plans, which were perceived by most to be focused more on the means to address short-term issues than on the long-term strategic reconfigurations required for regional health systems to solve the structural causes of the deficits. Finally, the RRPs seemed to contain primarily "cosmetic" interventions driven by a lack of recognition of regional differences and compliance with central government expectations. This is also because ex ante control mechanisms on law compliance by the Ministry of Economy and Finance were not jointly accompanied by substantial and depth direct monitoring of deficit organizations by the Ministry of Health.

3. Recovery vs. turnaround: analysis and findings from an investigation of the top three financially distressed regions

Given the general perception of the failure of RRPs to meet their intended purpose, we performed a qualitative analysis to empirically investigate the evidence supporting this perception [24] among the three regional health systems that over time accounted for the highest cumulative deficit: Sicily, Campania and Lazio (cfr. pg.2). We applied a range of field methods aiming at triangulating data, in order to avoid potential bias from a single data source [25][26][27]. Longitudinal qualitative data were collected over a period of eighteen months (April 2009 – June 2010). The primary method of data collection involved semi-structured interviews with the following key informants: (i) the head of the Ministry of Health recovery planning, evaluation and control unit (n=1); (ii) the department heads and staff members from the three regional health departments (n=4); (iii) external consultants from the National Health Agency and the Auditing Firm selected by government (n=8); medical directors from local health authorities and hospitals located in the three regional settings who actively participated to the turnaround meetings at regional and national level (n=12 equally distributed for each case-study). These qualitative interviews, which typically lasted on average 45 minutes, focused on understanding the perceptions of key informants about RRPs effectiveness. In order to assess the potential effectiveness of RRPs and turnaround strategies and processes for the

interviews we developed a list of dimensions and elements exploring RRPs' content, process development and implementation (Table 3). These selected items have been drawn from the design properties of strategic plans literature [27] since healthcare recovery plans resemble a model of failure and turnaround emerged from for-profit organizations [19]. Furthermore, to validate these dimensions and elements we analysed the official planning and strategic documents of each of the three case-study (recovery plan documents, regional health plans and the executive orders by National Government commissioners) and we conducted a focus group at the end of one of the public meeting organized by the Ministry of Health and the National Health Agency about the general aim and framework of RRPs (n=2) we participated²⁹. This last exercise also facilitated to contextualize and form the base for the interviews.

During the semi-structured interviews, interviewees were asked to assign values from one (negative) to five (positive) in a Likert scale (1- inadequate or undefined; 2- insufficient; 3sufficient; 4- satisfactory; 5- optimum) to the list of items. Interviews were audio-recorded and later transferred to paper. In few circumstances in which an interviewee indicated discomfort with being recorded, we took notes during the interview and wrote up a summary of the interview after the session. These summaries were shown to the interviewees, who evaluated their accuracy. Additionally, we tried to engage in informal conversations to interpret and understand how the key informants perceived RRPs and turnaround process, especially in regard to social interaction with other actors.

(Table 2)

The findings from the analysis of the three regional case-studies highlighted many flaws in the depth, robustness and comprehensiveness of the RRPs as well as in the overall credibility of the financial sustainability strategies (Lazio and Campania on average were valued less than 2 or insufficient while Sicily got closer to a sufficient level of efficacy). In the end, the prevailing perceptions about the limited efficacy of the RRPs were confirmed. One salient finding was the correlation between a low-quality RRP and a failure to replace regional government structures; interviewees indicated that financially distressed regions had both the largest and weakest management staffs (in terms of skills and competences) among all Italian regions. Regional officials were not competent to manage the new task of planning short-term, rapid improvement efforts while also developing long-term turnaround strategies.

Unfortunately, regions were largely limited in their capacity to improve their technostructure because the turnover of administrative personnel was blocked by the central government as a punitive action, and strict cost limitations were enforced on management education and training, both of which were necessary to develop the current staff. Regions were allowed to externally recruit top managers, but they continue to struggle with the inadequacy of their key middle

²⁹ The focus group involved 11 informed people representing the three regional context analysed (3 regional officials, 3 managers of health organizations, 2 officials of the National Health Agency and 3 researchers studying management from local universities) and lasted four hours. The members of the focus group had received the list of items in advance and the focus group exercise aimed at discussing and validating such list. The evaluation showed a 90 percent of congruence on the items selected. Incongruence was discussed and reconciled with the recovery plan documents.

management personnel. Furthermore, limitations on management training have spurred the creation of regional in-house training agencies, similar to "royal suppliers" for the Region [28], with the inherent risk that these agencies (sometime represented by local universities) do not have a critical and open perspective on the regional system because they themselves depend on it. These agencies risk quickly becoming servants, bowing to the wills of the regional administration [8].

4. Implications for policy-makers and managers

Several implications for policy makers and managers working in the INHS were developed from the analysis of the effectiveness of recovery plans. Overall, some interesting insights emerged from the mechanisms through which decentralised health care systems can be better managed and recovery plans made more effective. Though, before we present the implications, we need to point out the nature of the contexts. We find in all cases two main features which characterized pluralistic contexts: multiple goals and diffuse power [29]. Clearly, all organizations are pluralistic, but public healthcare system and organizations particularly have a higher pluralistic level. Pluralism and diffuse power are the strongest barriers to make successfully the turnaround [30]. In this perspective, some implications hereafter discussed do not consider context-related issues, but most of them refer to technical aspects that need to be taken in account to increase the chances that the expected changes included in the RRP take place even in pluralistic environments as the ones that characterize the INHS, Italian Regions, LHAs and hospitals.

- 1. The creation of a strong and reliable informational base (refers to D2, D3.3, D5 and D7 in Table 3). Turnaround plans should contain detailed qualitative and quantitative information that is directly available from the organisation or aggregated from external sources. All sources of information should reflect high-quality information, which is defined as consistent, significant and complete.
- 2. Punctual definitions of assumptions and evidence (refers to D3.1 in Table 3). To avoid arbitrariness and/or errors in decisions that could subsequently invalidate the assumptions used as the foundation for the turnaround plans, organisations should invest in continuum planning to explicate their rules and hypotheses. Expert advice is welcomed during this phase.
- 3. Detailed strategic analysis at the regional and local level (refers to D3.2 in Table 3). The turnaround process cannot be conducted as a standardised and predefined action; rather, it is necessary to customise each process according to the specific context and needs. Is fundamental to have trustworthy decision-makers with well-established strategic competencies that are able to uniformly steer local health systems towards turnaround actions.
- 4. Definition of scenarios (refers to D3.4 and D4.1 in Table 3). Recovery plans should contain dynamic scenarios³⁰ rather than merely desired output. The scenarios should represent a variety of possible situations that could act as the grounds for discussion between practitioners and other relevant stakeholders, thereby becoming learning tools.
- 5. Clear indication of the responsibility structure (refers to D4.3 in Table 3). Assumption definition, strategic analysis and scenario design are fundamental steps towards an effective

Three types of evolutionary scenarios are generally considered: (i) base case; (ii) conservative or worst case and (iii) best case.

- turnaround process definition, but actions should follow. Turnaround plans should identify and assign coherent objectives to autonomous subjects who are responsible for executing a specific task and are evaluated through performance measurement systems.
- 6. Definition of action steps and an established timeframe (refers to D1.3 and D4.2 in Table 3). A turnaround strategy consists of a process of change, and the plan should contain clear, incremental action steps described in an iterative manner. Action steps should favour system efficiency and responsiveness and enable readjustment and realignment. In addition, a realistic timeframe for each step should be defined.
- 7. Inclusion of stakeholders (refers to D6.5 and D8 in Table 3). The turnaround process should occur in a pluralistic context, so that the inclusion of more actors in the definition of the actions is binding. However, it is necessary to clarify the scope and roles of each actor and to assign clear, coordinating responsibilities. Moreover, the inclusion of the community should be greater and citizens should be involved in the turnaround definition and implementation process.
- 8. Development of knowledge transfer, culture and tools (refers to D4.4 in Table 3). Health care organisations are currently more complex and interdependent than ever before, requiring the enhancement of change management and institutional relations capabilities at every level. During the turnaround process, knowledge transfer should be considered a key aspect to support, spur and develop learning capacity inside the organisation through the use of learning tools, incentives and communication strategies; moreover, knowledge transfer should be facilitated by external influences³¹. Knowledge transfer could fill the gap of limited management capabilities to deal with the challenges of difficult financial position.
- 9. The level of alignment and degree of discretion between decision makers (refers to D6.1-D6.4 in Table 3). A turnaround plan should be developed jointly by central government and managers of local health organisations. Though turnaround plans can be very detailed, some critical choices regarding the contents of health care delivered cannot be limited to the central level. For instance, the ethical use of medical devices, drugs and examinations can be shaped by guidelines and system initiatives, but daily choices still remain with doctors. In turn, the discretionary zone is still quite significant. Managers must engage and challenge doctors and other professionals on these choices and also advise policy-makers on the focus that turnaround plans should take to tackle such issues. Similarly, managers should also advise the creators of recovery plans to avoid the adoption of choices that ultimately limit access to care through horizontal spending cuts that do not take into account the specific needs of patients and certain minority groups.

5. Conclusion

The nine policy recommendations detailed above address the structure, content, process and context of implementation efforts for effective turnaround strategy. These findings can inform the ongoing international debate on the policies, tools and governance systems (e.g., the mechanism of turnaround plans) that central governments should adopt to lead and control heterogeneous, complex, decentralised heath systems, especially during periods of major economic downturn and crisis.

³¹ Learning organisation [31] [32].

References

- [1] Sherwood F.P. (1969), «Devolution as a problem of organizational strategy», in R.T. Daland (ed.), *Comparative Urban Research*: 60-87, Sage, Beverly Hills.
- [2] Rondinelli D.(1981), «Government Decentralization in Comparative Perspective: Theory and Practice in Developing Countries», *International Review of Administrative Science*, 47(2): 133-145.
- [3] Rondinelli D., Nellis J.R. and Cheema G.S. (1983), *Decentralization in developing countries*. World Bank staff working papers n.581 and Management and development subseries n.8, Washington, DC.
- [4] Hood C. (1991), A public management for all seasons? Public Administration 69(1): 3-19.
- [5] Anessi Pessina E. and Cantù E. (2006), «Whither managerialism in the Italian National Health Service?», *International Journal of Health Planning and Management*, 21: 327-355.
- [6] Fattore G. and Torbica A. (2005), «"The essential levels of care" in Italy: when being explicit it serves the devolution of powers», *European Journal of Health Economics*, Suppl 1 (6): 46-52.
- [7] Saltman R.B., Bankauskaite V. and Vrangbek K. (2007), «Decentralization in Health Care. Strategies and outcomes», European Observatory on Health System and Policies Series, Open University Press. Chapter 2 and Chapter 13.
- [8] Lega F., Sargiacomo M. and Ianni L. (2010), «The rise of governmentality in the Italian National Health System: physiology or pathology of a decentralized and (ongoing) federalist system?», *Health Service Management Research*, 00: 1-9.
- [9] Ferrario C. and Zanardi A. (2011), «Fiscal decentralization in the Italian NHS: What happens to interregional distribution?», *Health Policy*, 100, 1: 124-130.
- [10] Bordigon M. and Turati G. (2009), «Bailing out expectations and public health expenditures», *Journal of Health Economics*, 28: 305-321.
- [11] France G. and Taroni F. (2005), «The evolution of health-policy making in Italy», *Journal of Health Policy and Law*, 39(1-2): 169-187.
- [12] Italian Ministry of Health and WHO (2003) Health facts and policies in Italy in the European context. Rome: Italian Ministry of Health and WHO Regional Office for Europe.
- [13] Rapporto Osservasalute 2010: http://www.osservasalute.it/index.php/rapporto/argomenti/2010/10.
- [14] F. Lega, M. Mauri and A. Prenestini (2010), L'ospedale tra presente e futuro. Analisi, diagnosi e linee di cambiamento per il sistema ospedaliero italiano, Egea, Milano.

- [15] Tediosi F., Gabriele S. and Longo F. (2009), «Governing decentralization in health care under tough budget constraint: What can we learn from the Italian experience?», *Health Policy*, 90: 303-312.
- [16] The King's Fund (2007), «NHS Finance 2006/07. From deficit to a sustainable surplus», August 2007 Briefing [online]. Available at: www.kingsfund.org.uk/document.rm?id=7095
- [17] Department of Health (2006), Financial Turnaround in the NHS: A report from Richard Douglas, Finance Director, Department of Health to the Secretary of State for Health 25th January 2006 [online]. Available at:
- www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_412 7186
- [18] Pandit N.R. (2000), Some recommendations for improved research on corporate turnaround. *Management*, 3 (2): 31-56.
- [19] Walshe K., Harvey G., Hyde P. and Pandit N.R. (2004), «Organizational Failure and Turnaround: Lessons for Public Services from the For-Profit Sector», *Public Money and Management*, 24 (4): 201-208.
- [20] Boyne G.A. (2006), «Strategies for Public Service Turnaround: Lessons from the Private Sector?», *Administration & Society*, 38: 365-388.
- [21] Paton R. and Mordaunt J. (2004), «What's different about public and non-profit turnaround?», Public Money and Management, 24 (4): 209-216.
- [22] Lega F. (2008), «Lights and shades in the managerialization of the Italian National Health Service», *Health Service Management Research*, 21: pp.248-261.
- [23] Cuccurullo C, Ferrè F. and Lega F. (2010), «I Piani di Rientro della spesa sanitaria: un'analisi comparativa», in Cantù E. (a cura di), *Rapporto OASI 2010 sullo stato dell'aziendalizzazione nella sanità italiana*, Egea, Milano.
- [24] Babbie E.R. (2005), The Basics of Social Research. Thomson Wadsworth, Belmont CA.
- [25] Eisenhardt K. M. (1989), «Building theories from case study research», *Academy of Management Review*, 14: 532-550.
- [26] Yin R.K. (2009), Case study research (3rd ed.), Sage Publications.
- [27] Guba E. and Lincoln Y.S. (1994), *Handbook of qualitative research*, Sage Publications Newbury Park, CA.
- [27] Mazzola P. (2003), *Il piano industriale*, Università Bocconi Editore, Milano.
- [28] AGENAS (2010), Competenze e fabbisogni per la formazione manageriale in sanità. Analisi di stato e prospettive sulle figure chiave di top e middle management aziendale, Report finale 2010.

- [29] Denis J.L., Langley A. and Rouleau L. (2007), «Strategizing in pluralistic contexts: rething theoretical frameworks», *Human Relations*, 160:179-215.
- [30] Cohen M.D. and March J.G. (1986), Leadership and ambiguity, HBS Press, Boston, MA.
- [31] Senge O. (1990), The fifth discipline. Doubleday, New York.
- [32] Osborne S.P. and Brown K. (2005), Managing change and innovation in public service organizations. Routledge, New York.

Tables and Figures

Table 3 Deficit spending by region (2010)

Region	Cumulative Deficit 2001-2010 (ml €)	Deficit 2010 (ml €)	Per capita Deficit 2010 (€)	Contribution to the INHS Deficit 2010 (%)
Abruzzo	1,301	19	14	1%
Apulia	1,911	335	82	14%
Calabria	1,009	-18	-9	-1%
Campania	8,521	496	85	21%
Lazio	13,388	1,044	184	45%
Liguria	1,299	89	55	4%
Molise	625	53	167	2%
Piedmont	966	-9	-2	0%
Sardinia	1,732	229	137	10%
Sicily	4,365	62	12	3%
Total Deficit of Regions with				
recovery plan	35,118	2,300	69	99%
Total Deficit of Regions				
without recovery plan	2,982	26	1	1%
Total Deficit INHS	38,100	2,326	38	100%

Source: Adapted from Relazione Generale della Situazione Economica del Paese –RGSEP 2010, Minister of Health and Finance.

Note: Grey shaded values highlight the three regions analyzed.

Table 2 Actors involved in the turnaround strategy and their roles

	Formal role	Active role	
Regional Health Departments and Regional Health Authorities	Development of recovery plan document	Adaption of recovery plan document from central government (MoH and MoEF) proposed scheme	
Ministry of Health (MoH) and Ministry of Finance (MoF)	Formal approval of regional recovery plans; coaching and monitoring activities	Audit and control	
Auditing firms	Debt position recognition; introduction and integration of regional budgets and accounting proceeding of health units	Capacity building; enhancement of action credibility and consequent regional decision makers deresponsabilization	
Best performing health regional systems	Consulting and supporting function	Creation of partnerships	
National Health Agency (AGENAS)	Incentive and collaborative action	Development of procedures and models to overcome regional difficulties; selection of experts to plan and implement turnaround strategies in specific areas; introduction of auditing and managerial tools; communication plan strategy support	

Table 3 Assessment of the effectiveness of recovery plans developed by the Campania, Lazio and Sicily regions, mean values.

Dimension	Element discussed	Likert Scale value by Region		
Difficusion	Element discussed	Campania	Lazio	Sicily
D1 Completeness and coherence	1. Overall detail of the main sections of the recovery plan	4	3	5
	2. Different sections of the recovery plan clearly connected by causal links	3	2	4
	3. Technical compatibility of proposed actions with timeframe and available resources	2	1	2
D2 Information range and depth	Variety and detail of information	2	2	3
	1. Veridicity of initial assumptions and of forecasts	2	2	2
D2 Data maliability	2. Compatibility of the recovery plan with local and regional context dynamics	3	2	3
D3 Data reliability	3. Comparability with recent results or availability of strong motivations to justify relevant gap	2	3	3
	4. Clarity of forecasting data	2	1	2
D4 Feasibility	Capacity of the recovery plan to guide action and act as foundation for future controls	2	2	4
	2. Availability and degree of detail of the action plan	1	2	4
	3. Capacity to define roles and responsibilities at local and regional level	1	1	3
	4. Advance of management culture and tools	2	2	3
D5 Financial sustainability	Ability to indicate cost-containment measures while promoting higher quality of health services	1	2	3
	1. Governance quality	1	1	4
	2. Management capacity and determination	1	1	2
D6 Cooperation features	3. HH.RR. attitude and commitment	1	1	1
Do Cooperation features	4. Working climate	1	1	1
	5. Stakeholders' involvement: patients' associations and suppliers	1	1	1
D7 Intrinsic risks explanation	Detailed definition of risks	1	1	1
D8 Communication to citizens		1	1	1

Essay 2 - The fiscal crisis in the health sector: patterns of cutback management across Europe

The draft of the essay was presented at the European Healthcare Management Conference (EHMA) Annual Conference, 26-28 June 2013, Bocconi University Milano.

Study submitted to Health Policy in September 2014, currently under review.

Authorship: E. Ongaro (Prof. Northumbria University, Coordinator of the COCOPS Project for Italy), Francesca Ferrè and G. Fattore (Prof. Dept of Department of Policy Analysis and Public Management, Bocconi University).

Keywords:

Financial crisis, fiscal crisis, cut back management, Europe

Abstract:

Purpose: The article investigates trends in health sector cutback management strategies occurred during the ongoing financial and fiscal crisis across Europe. Setting: a European-wide survey to top public healthcare managers was conducted in ten countries to understand their perception about public sector policy reactions to the financial and economic crisis. Answers from 760 respondents from the healthcare sector (30.7% response rate) were analysed. Method: A multinomial logistic regression was used to assess the characteristics of respondents, country institutional healthcare models and the trend in public health resource availability during the crisis to the decision to introduce general unselected cuts, targeted cuts or efficiency savings measures. Also data about tools and measures used to cope with the crisis are analysed. Results: differentiated responses to the fiscal crisis that buffeted public finances have been reported both across countries and within countries. Organizational position of respondents is significant in predicting the probability of perceiving approach to savings, also Beveridge-like countries favour the introduction of targeted or priority cuts and, at increasing level of available resources countries strive to maintain sustainability by employing efficiency savings strategies. Finally, countries display a preference for adjusting personnel policies to achieve cost-containment rather than affecting scope of service provided. Conclusion: the article provides thus-far unavailable evidence about the approaches adopted by European countries to cope with the effects of the fiscal crisis; it suggests that health sectors are undergoing important organizational changes.

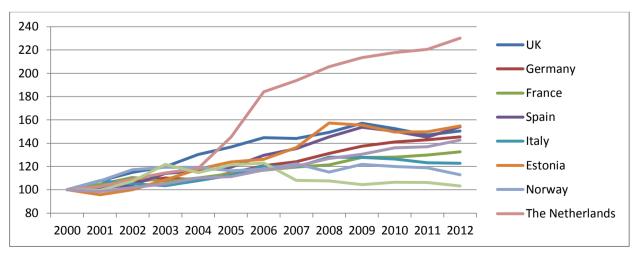
1. Introduction

The paper provides empirical evidence from ten countries in Europe about the pro-cyclical approaches adopted by public managers to tackle the shrinkage of funds buffeting the health care sector, as a consequence of the ongoing financial, economic and fiscal crises [1,2]. Pro-cyclical approaches to the global financial crisis advocate reducing public spending and achieving savings in times of financial constraints, in contrast to counter-cyclical approaches that advocate public spending to boost the economy [3]. Reduction in spending on public healthcare service in order to curb public debt appears to be quite a popular policy among European governments since the outbreak of the crisis, though adopted at different speed and intensity [4-6].

Since 2009, public health spending has slowed markedly or fallen in many European countries, after years of continuous growth. Data from a representative sample of European countries included in the empirical study, namely Austria, Estonia, France, Germany, Hungary, Italy, Norway, Spain, The Netherlands and the UK show that overall public health expenditure trend has experienced a positive growth from 2000 to 2009 with different magnitude across countries, followed by a persistent decline that started earlier in the eastern European countries (Hungary and Estonia) (Figure 1). Specifically, per capita government health spending over the period 2000-2009 is estimated to have grown on average, in real terms, by 3.9% annually. In stark contrast, over the subsequent three years (2009-12), average public health spending yearly increased by just 0.93% as an effect of the economic crisis that buffeted public finances (Figure 2). The extent of the slowdown in public health spending has varied considerably across Europe affecting mainly those in the easternmost part due to severe macroeconomic downturns [6,7]. Estonia, for example, recorded an annual average decrease in per capita public health spending by negative 0.4% between 2009 and 2012, after a yearly growth rate of more than 5% between 2000 and 2009. Also the Netherlands, the UK, Spain and Italy have experienced significant reduction in public spending during "crises-time" compared to the average growth rate before "crises-time" (almost 5 point decrease in the Netherlands and the UK and about 3.5 in Spain and Italy).

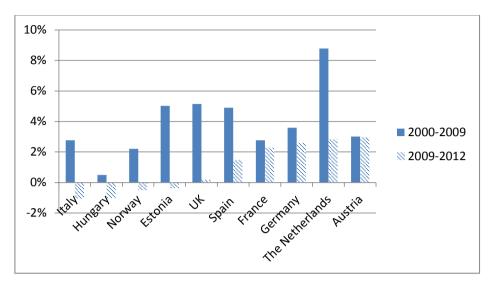
[Figure 1 about here]

Figure 1 Per capita public health expenditure trend 2000-2012 (base year 2000).



Source: [8,9]

Figure 2 Annual average growth rates (%) in per capita public health expenditure, real terms, 2000-2009 and 2009-2012.



Source: [8,9]

Note: Real growth rate are calculated using GDP deflator.

Against the backdrop of a tough reduction in the annual average growth rate in per capita health expenditure, it is significant from both a social scientific and a policy standpoint to gain insights into the ways in which public managers coped with the challenges to the quality and universality of health services across Europe. Accordingly, this contribution provides timely and large-scale empirical evidence on the perceptions of executive public managers in the healthcare sector about the patterns of response adopted by their respective countries to manage cuts and the specific measures employed. More specifically, three basic approaches to cutback management have been identified [10]: proportional cuts across the border (i), the adoption of targeted cost containment policies (ii), or the search for productivity and efficiency gains (iii); moreover, a series of cost reducing measures that can be used often in combination as tools for effecting the chosen cutback management approach have been envisaged (e.g., personnel policies like staff layoffs or pay freezes, cutting existing programmes or postponing new programmes, etc.). The usage of these cutback management approaches and measures for cutting operational expenses across ten representative European countries is analysed by means of primary data gathered from a survey administered to top public healthcare executives. Using regression analysis, the paper empirically identifies the influence of top managers' demographic and organizational characteristics, healthcare institutional arrangements and magnitude of public healthcare expenditure reduction on the patterns of cutback management deployed in response to the extant major fiscal crisis in Europe. The contribution also examines country preferences in the use of specific cost reducing measures and tools employed for coping with the reduction in public funding.

Overall, the article contributes to informing the current debate on the strategic and managerial approaches adopted in public health service delivery to cope with the mounting fiscal crisis in Europe [5]. We first give an overview of the reference literature on cutback management approaches and the ways in which they combine [10], to then provide a description of the empirical

setting (sample and data collection) and present data from the ten European countries. Data are analysed by gauging both individual-level and country-level variables. Discussion and conclusion follow.

2. Cutback management approaches: a framework of reference

Detailed categories of approaches to cutback management in public administration have been elaborated in the literature, notably following up the seminal article by Levine [11], and interest in these approaches has mounted in the current debate about the post-2008 financial, economic and fiscal crises. Traditionally, the literature discusses specific features of public sector responses to recession or austerity times, such as cutback budgeting and termination of programmes, or leadership tactics for managing resources' decline [12]. Interestingly, recent publications show a concern for the longer-term implications of the relationship between cuts and reforms, and discuss underlying issues in managing the new responsibilities of governments [13].

As noticed by Peters et al. [2], crisis may not be "the most felicitous time to begin to think about restructuring government and creating new procedures. That type of restructuring within the public sector is itself disruptive, and attempting to implement institutional change in the midst of a crisis may appear to be a recipe for confusion and failure" [2:p.16]. However, crises may also be triggers of change. This article is concerned with the empirical questions of what governmental approaches have been selected to cope with decreasing levels of available resources and what differences can be detected across Europe.

Among the cutback management strategies usually adopted by public organizations, Pollitt [10] identifies three basic stances or approaches [14,15]: cut-across-the-board, targeted cuts, and productivity or efficiency gains. Across-the-board cuts (or linear cuts) are interpreted as the "traditional" response and refers to cuts in equal amounts or percentages for all institutions, while targeted cuts imply that some institutions and sectors face a larger cut than the others. As suggested by Kickert [4], this distinction resembles the classical dichotomy between incremental decision making and rational-comprehensive decision-making. Finally, achieving productivity or efficiency gains requires deploying a consistent reform strategy, often including a mix of provisions, such as exploiting technological innovation, setting priorities in services provision and user needs, using non-service approaches, building new relationships and creating alliances, and others [12].

Specifically, the first, and in many respects the easiest one, lies in effecting proportional cuts across-the-board (also called "cheese-slicing" [10], "decrementalism" [16-18], and "equal misery" approach [19]), across all areas (i.e., decrementalism). Policies following this approach result in linear reductions of the funding of the health system across its compartments. Such approach may destabilize the health system if it erodes financial protection, equitable access to care and the quality of care provided, possibly increasing healthcare and other costs in the longer term. In addition to introducing the risk of long-term inefficiencies, cuts across-the-board are unlikely to address existing inefficiencies, potentially exacerbating the fiscal constraint [5].

At the opposite side, Pollitt [10] places targeted cuts, that is, cuts driven by political, institutional, and organizational priorities adopted, e.g., to protect poorer people, to concentrate resources on the needy or to prevent adverse effects on employment [6]. The "targeted" or "selective" cuts approach has been conceived of as involving an array of possible tactics, ranging from "strategic

prioritization" to "ad hoc" or even "random" (or garbage can) cuts [18;11;20-22]. As a consequence some organisations and areas of public policy face a larger reduction in outlays than others. When proceeding with selective cuts based on strategic prioritizations, their assessment is crucial and conflicts may arise, since sectors, organizations or subunits within the same organizations face different levels of retrenchment; in the case of healthcare provision, cuts can directly affect patients by selectively redefining contribution schemes, benefits or limiting tax subsidies for out-of-pocket payments. For example, France selectively increased contributions for wealthier people (self-employed people with very high incomes) while Denmark reduced tax subsidies that predominantly benefit wealthier households for out-of-pocket payments [6].

In-between the two approaches, and in a certain sense at another level because this is potentially a "definitive" solution, the literature identifies a third approach that refers to cost containment measures based on productivity and efficiency gains. This response reflects the intention of avoiding the harms of expenditure cuts by reaping the benefits of increased productivity and efficiency. Efficiency gains imply achieving similar outcomes at lower costs (technical efficiency), or better outcomes at similar costs, including increasing the value of the output or the appropriate combination of health programmes to maximize the health of society (allocative efficiency) [5;23]. As already hinted to, this is seen as a potentially definitive solution, because efficiency gains may potentially shift the trade-off and avoid, partly or entirely, the pains of effecting cuts. For instance, some countries strengthened policies to improve prescribing and achieve greater use of generic drugs or improving procurement processes often by centralizing procurement (France, Italy and Spain), but also through tendering and selective contracting (Hungary and the Netherlands) or e-prescribing systems, while a number of countries reported taking steps to intensify the use of Health Technology Assessment in making decisions about coverage (Spain, France, Germany and Norway) [6].

However, this approach may turn out to be unfeasible, and it anyway requires longer time horizons than afforded by the contingencies of the fiscal crisis that has stricken European countries quite hard since the burst of the financial bubble in 2008. We can refer to a combination of the second and third approaches (priority setting plus efficiency gains) as a "strategic response to the fiscal crisis". More in detail, a strategic approach to cutbacks would entail "(i) a multiyear time frame, usually three to five years; (ii) a significant reallocation and reconfiguration of resources; (iii) substantial changes in organizational structure and work force activity; and (iv) a comprehensive as opposed to an ad hoc re-examination of the organization's problems, mission, and structure" ([16], p. 691). All these elements require strong political commitment and organizational leadership.

Evidence suggests that governments use a mix of across-the board and targeted cuts, and at a lower extent productivity or efficiency gains when facing resource constraints [12].

3. Empirical setting and data collection

To gain specific and up to date insights into the cutback management approaches effected in the healthcare sector across Europe during the extant fiscal crisis, the paper uses data from one section of the European-wide survey developed as part of the EU Seventh Framework programme research project "Coordinating for Cohesion in the Public Sector of the future" (COCOPS, see www.cocops.eu) carried out in 2012. The survey included a total of 31 core questions which aimed

at capturing experiences and perceptions of public sector executives on public sector reforms (especially New Public Management - style reforms) and their effects (performance, but also on other factors such as public sector values/identities, coordination or social cohesion). In addition, one section of the survey was dedicated to understanding the impact of the fiscal crisis on public administrations and the responses deployed by public decision-makers. The survey was based on an elite-questionnaire jointly developed by an international research team and translated into different languages. The questionnaire was distributed to public sector executives working in central ministries and two policy sectors - employment and healthcare - in ten European countries, based on a full census strategy. The full census strategy was possible because of the extensive country-level mapping of public administrations developed by project partners and country experts [24]. The countries included were: Austria, Estonia, France, Germany, Hungary, Italy, Norway, Spain, The Netherlands and the UK. The survey was sent electronically and was accessible anonymously on a web platform and in few cases was also forwarded via postal invitation (France, Germany and the UK) to a total of about 19,600 high-ranking public executives.

Executives of the first two top-hierarchical levels in the public bureaucracy - below politically appointed state secretaries - were surveyed in all selected countries (where deemed proper by the country-team, e.g. because of their influence on decision-making process due to the institutional arrangements of the country, the third hierarchical level was also included in the survey). In general, directors, board members and deputies comprise the first level, while executive managers make up the second level. Thus, the population reflects top and medium-high level civil servants in charge of policy-making and implementation rather than delivery of services who are most likely to hold the relevant knowledge regarding reforms and developments with the public sector of their country. Given the expected differences in the national administrations, some variation in the country samples was introduced. The guiding principle in creating the survey sample was to achieve comparability between all of the national samples [24].

4. Results

A total of 760 valid filled-in questionnaires were received from officials working in the healthcare sector. It should be noticed that some countries are over-represented (notably Austria, France and Italy). The overall response rate of 30.68% is high for this type of surveys, particularly given the position at the top of the organisational hierarchy of respondents. Roughly two thirds of the executives included sample were male (62.6%), average age between 46 to 55 years old, and nearly 90% holding a postgraduate degree (master level) (Table 1). The majority of respondents worked at regional or local governmental level public health organization (62.7%), reflecting the institutional configuration of most European health systems, decentralized to the level of Länder, Regions or Autonomous Communities in a number of countries (e.g., Austria, Germany, Italy and Spain). More than half of respondents (54.8%) had more than 20 year seniority within the public sector and another 28.3% reported to be working in the public sector for more than 10 years. Moreover, about 70% had previously had an experience in the private (commercial) sector, while less than half of the respondents on average had any experience working in the non-profit sector.

[Table 1 about here]

Table 4 Sample descriptive statistics.

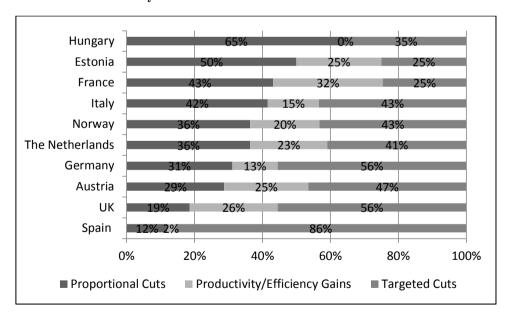
N	Variable -	Descriptive statistics						
IN	variable -	Obs.	Mean	Std. Dev.	Min	Max		
1	Gender	679	0.626	0.484	0.0	1.0		
2	Age	688	3.133	0.861	1.0	5.0		
3	Education Level	670	2.10	0.561	1.0	3.0		
4	Organization Type	746	2.99	1.19	1.0	5.0		
5	Seniority Pub. Sector	675	4.30	0.928	1.0	5.0		
6	Work Experience Private Sector	638	0.713	0.453	0.0	1.0		
7	Work Experience Non- Profit Sector	506	0.476	0.499	0.0	1.0		

4.1 Main approaches used to cutback management

The questionnaire contained a few questions on the fiscal crisis and one is especially relevant for our research, as it is directly probing for managers' perception about the extent of use of the three basic cutback tactics (i.e., cut-across-the-board, targeted cuts, and productivity or efficiency gains) aimed at realizing savings in the healthcare sector [10]. A total of 624 answers were collected for this item and Figure 3 shows response frequencies for all the countries included in the survey.

[Figure 3 about here]

Figure 3 Cutback measures at country level.



Data suggests that both proportional and targeted cuts are the two most common options adopted to cope with the financial crisis, whilst developing policies aimed at attaining efficiency or productivity gains is the least popular approach. The survey reports targeted cuts to be the relatively most frequently employed (41.7%) followed by proportional cuts (37.2%), while only 21.2% of the respondents around Europe perceived productivity and efficiency gains as the general approach to

cutback management. Interestingly, Figure 3 reveals differences across jurisdictions, whereby certain systems display a strict preference for one of the three approaches, such as Hungary towards proportional cuts or Spain inclined to policies of targeted cuts, the majority of countries display a rather high within-country heterogeneity.

Given this noticeable heterogeneity of individual responses, we investigate whether individual-level characteristics influence the likelihood of resorting to one or the other of the cutback approaches. Specifically, we are interested in understanding whether demographic characteristics of respondents, their position within the healthcare system and their work experience influence the probability of selecting one of the possible alternative cutback approaches.

Moreover, we study whether the institutional configuration of the country healthcare system -Bismarck or Beveridge-like model - can help predict the likelihood of selection of one of the three general cutback management approach. By doing this we include the "influence of the past", i.e. how the basic traits of the healthcare system as it has consolidated over the years affect executive choices; the theoretical perspective adopted here is one rooted in historical institutionalism, that puts emphasis on the assumption that institutions, once formed, shape the range of possibilities and have a continuing and largely determinate influence over the choices that will be made at all levels and phases of the policy cycle [25,26]. In general, a National Health System, or Beveridge-like healthcare model, is characterized by a centrally organized system, is funded by general taxation and relies predominantly on public providers, thus healthcare budget is strictly controlled and competes with the other government spending areas for maintaining its share of the public budget. On the other hand, Bismark-like healthcare systems are managed by health insurance funds regulated by the government but financed mainly through payroll deduction and services are provided by a mix of public and private providers. Among the Beveridge systems we include Italy, Norway, Spain and the UK; in the Bismark system countries we acknowledge Germany, France, the Netherlands and Austria, while Hungary and Estonia are categorised as moderate Bismark systems [27]. We include the latter model since both countries at the end of the 1990s have undergone a transition toward the establishment of a National Health Insurance Funds as a public independent legal body, thus re-establishing of overall health care planning at the national level [27].

Finally, preference for certain government responses to the crisis may differ also due to level of available public healthcare resources (whether increasing or decreasing budget). Indeed, Bartle [28] argues that approaches to cuts depend on resource availability, whereby no growth in public spending would lead to the denial of the crisis and delayed responses; moderate decline in public spending would favour decremental approaches (like across-the-board cuts); severe revenue decline would trigger termination of programmes, reduction of services and layoffs. Hence, the magnitude of public healthcare expenditure growth during the crisis (annual change over 2009-2012) is included in the analysis.

To predict the probability of selecting one of the three identified cutback approaches we have run a multinomial logistic regression with three uncorrelated nominal alternatives in the dependent variable: proportional cuts (1); productivity and efficiency savings (2); and targeted cuts (3). Estimates are carried out running multinomial logistic regression on Stata/SE 13.1 software. Cases with missing values on the dependent variable are deleted prior to the analysis. Data are set as paired-choice respondent (i.e., long shape) to analyse the probability of each respondent over the

three alternative outcomes, thus the number of observations is triplicated (624*3=1,872). Table 2 shows the findings. Coefficients are reported as relative-risk ratio, or the exponential value of multinomial logit coefficients, where risk is measured as the risk of the outcome relative to the base outcome [29]. Results have to be interpreted in relation to the third category of the dependent variable (targeted cuts) which serves as our base category.

[Table 2 about here]

Table 2 Regression results: modelling cut back preferences

	Model 1		Mod	del 2	Model 3		
VARIABLES	Eff. savings Vs Target cuts	Prop. cuts Vs Target cuts	Eff. savings Vs Target cuts	Prop. cuts Vs Target cuts	Eff. savings Vs Target cuts	Prop. cuts Vs Target cuts	
Male	1.287	1.117	1.222	1.223	1.180	1.067	
Less than 55 years old	0.901	0.637**	0.901	0.642**	0.911	0.694*	
High Seniority Public Sector	1.166	0.781	1.143	0.820	1.210	0.861	
Decentralized Org. Position	1.557*	1.465**	1.471*	1.631**	1.589**	1.489**	
Bismark model	2.441***	1.867***					
Full Bismark model			2.545***	1.635**			
Moderate Bismark model			1.505	3.457***			
Yearly Public Health					1.180**	0.956	
Expenditure Growth (2009-12)							
Constant	0.199***	0.753	0.216***	0.653	0.290***	1.071	
Log-likelihood chi2 test	29.69		40	.39	21.34		
d.o.f.	1	0	1	2	10		
Pseudo R ²	0.0241		0.0	328	0.0173		

The regression results show that for respondent over 55 years old there is a significant higher probability of selecting across-the-border or proportional cuts rather than targeted one. But when controlling for executive seniority (37.5% correlation with age) the significance disappear, even though efficiency savings are preferred options compared to both proportional and targeted cuts for more senior executives. Looking at respondents' organizational level, there is a consistent significant (p<0.05) higher probability that executives working in decentralized healthcare organizations (either at regional or local level) perceive proportional or linear cuts to be more frequently used rather than targeted or prioritized cost-containment measures compared to their colleagues working in central level organizations. When considering the country healthcare institutional arrangement, Bismark models compared to Beveridge models, display more than double the probability of selecting efficiency gains approach (i.e., trying to do the same with less resources – whereby safeguarding the levels of outcomes acquires priority status) compared to targeted cuts (p<0.001), and also a higher probability of choosing linear cuts rather than targeted one (p<0.001).

When we disaggregate Bismark model countries between full and moderate Bismark one (Model 2), the full Bismark cluster confirms the results of Bismark countries, with a less significant probability of proportional cuts preference (p< 0.05). On the other hand, the choice of introducing linear cuts gains 3.4 higher probability (p<0.001) among moderate Bismark countries (Estonia and Hungary) compared to Beveridge countries. Thus, among the more general Bismark cluster of countries, proportional cuts are driven by moderate Bismark model.

Finally, Model 3 introduces how the annual trend in public healthcare resources (2009-12) influences the probability of selecting one of the three cutback management approaches across countries. It is interesting to notice that at increasing levels of available resources there is almost double the probability that countries introduce efficiency savings strategies compared to targeted cuts (p<0.05), and the direction of proportional cuts compared to targeted cuts is negative. This result suggests that European countries that could rely on an increasing level of public healthcare resource during the crisis tended to introduce some type of cutback management to keep the system efficient and sustainable.

4.2 Measures and tools for public expenditure reduction

The cutback management approaches that we have been examining so far represent the basic stance adopted by European countries for coping with the fiscal crisis. There is another piece of evidence which we deem to be of interest for the reader: the 'concrete' measures or tools specifically employed for coping with the reduction in public funding. Based on available literature review [1] [12], a list of management tools with which public organisations may cope with a reduction in funding have been identified. They are: staff layoffs; pay cuts; hiring freezes; pay freezes; reducing front line; reducing back office; cuts to existing programs; postponing or cancelling new programs. These tools are instruments for cutting operational expenditures (personnel and non-personnel expenditures) or program expenditures (altering scope and depth of programs and their financing) and they may be used in combination (for example, it is possible to both cut existing programs and postpone or cancel new programs).

As discussed above, this is a further dimension of the study we have conducted: tools may refer to different basic approaches to cutback management: for example, cutting existing programs may be used as tools either for effecting cut-across-the-board or for achieving targeted cuts; as another example, reducing the back office may be done either as part of an efficiency-gain approach, to deliver the same outputs with less resources, or as part of a cutting – either linear or targeted – approach.

A specific and distinctive question in the survey assessed how top executives in the public healthcare sector across Europe perceived the use of each of the cutback measures presented. Specifically, responses were given according to the 7 item Likert-scale, being 1= Not at all and 7= To a great extent. Because we are interested in discriminating responses between lower and higher bound in perception of use of the cutback instruments, results are aggregate as follow: 1 to 3 represents low to moderate level while, 5 to 7 represents moderate to high level of implementation, while answers reporting the mean value equal to 4 on the Likert scale have not been included. Evidence is reported in Table 3.

	Staff layoffs		Pay cuts		Reducing front line presence			Downsizing back office functions		Pay freezes		Cuts to existing programmes		Postponing or cancelling new programmes		Hiring freezes	
	Low to moderate (1- 3)	Moderate to high (5-7)	Low to moderate (1- 3)	Moderate to high (5-7)	Not at all (1-3)	To a large extent (5-7)	Not at all (1-3)	To a large extent (5-7)	Low to moderate (1- 3)	Moderate to high (5-7)	Not at all (1-3)	To a large extent (5-7)	Not at all (1-3)	To a large extent (5-7)	Low to moderate (1- 3)	Moderate to high (5-7)	
Italy	96%	4%	77%	8%	57%	27%	43%	38%	41%	50%	41%	40%	35%	46%	30%	63%	
Norway	77%	15%	98%	0%	82%	7%	87%	0%	91%	2%	68%	14%	65%	22%	65%	24%	
Spain	73%	20%	5%	88%	65%	18%	68%	22%	8%	88%	10%	76%	3%	88%	7%	85%	
UK	33%	63%	75%	17%	44%	44%	11%	74%	4%	92%	11%	70%	23%	50%	11%	85%	
Austria	100%	0%	92%	3%	77%	10%	52%	28%	57%	32%	43%	39%	26%	59%	40%	55%	
Estonia	41%	47%	33%	63%	44%	34%	28%	59%	13%	88%	30%	47%	23%	58%	28%	56%	
France	92%	4%	88%	6%	35%	45%	20%	68%	38%	50%	26%	61%	28%	59%	7%	86%	
Germany	98%	0%	81%	10%	62%	17%	40%	40%	68%	21%	31%	49%	41%	52%	28%	60%	
Hungary	3%	87%	53%	27%	54%	25%	17%	63%	71%	23%	23%	65%	13%	77%	3%	94%	
The Netherlands	71%	19%	73%	14%	41%	27%	19%	57%	41%	45%	24%	62%	18%	64%	18%	77%	
Total	82%	14%	76%	16%	55%	27%	39%	45%	45%	46%	33%	51%	30%	56%	24%	69%	

Note to Table 3: Gray shades represent Beveridge health systems. The question posed in the survey is the following: "In response to the fiscal crisis, to what extent has your organization applied the following cutback measures?".

One set of tools for cutting public spending involves intervening on personnel policies by reducing the number of civil servants, or redefining the employment conditions (tenure or pay). Also, limiting turnover (non-replacement of staff) and pay freezes are measures that governments employ to contain expenditures. These options can produce short-term positive impact on expenditure growth because of the high proportion of personnel costs (wages, salaries and other allowances) on overall healthcare expenditures (varying between 60-80% [30]), though they may be detrimental to morale and motivation of the staff.

We observed (Table 3) that only three countries relied on staff layoffs to an important extent: Hungary, UK and Estonia, where respectively 87%, 63% and 47% of respondents reported to have observed a moderate to high introduction of measures for reducing the number of public healthcare employees. Also, cuts on salary are rarely introduced, with the exception of Spain and - once again - Estonia where the government mandated pay cuts at all organizational levels. Pay freezes are instead of more widespread usage, with (again) Estonia, Spain and the UK leading the group, but also other countries (Italy, France, The Netherlands) reporting extensive pay freezes. Reducing frontline presence in healthcare delivery system is a seemingly unpopular response to reduce costs (in no country public executives report in a majority way to have witnessed reductions of the front office), while downsizing back office functions is a much more frequently considered option, especially in the UK (74%), France (68%) and Hungary (63%).

Considering program scope and program innovation, European countries are experiencing a massive postponement of new programs, whereby all countries, with the exception of Norway, report that new programs have been affected to a large extent. The Scandinavian country is the only one among the surveyed countries that did not report any perceived relevant health policy change due to the financial and fiscal crisis- perhaps for the very reason that Norway did not experience any fiscal crisis at all. More mixed is the picture concerning the cuts to existing programs, generally high but with country variation.

4. Discussion

To our knowledge, this is the first Europe-wide survey on public executives that aims at detecting trends in the health sector about the cutback management strategies effected during the fiscal crisis triggered by the burst of the financial bubble in 2008; in addition to providing descriptive evidence, in this article we make an attempt to investigate if and the extent to which the respondents'

characteristics, the healthcare institutional arrangements and trends in available public healthcare resources are predictors of selecting one of the possible alternative cutback approaches. Moreover, we describe what concrete measures and tools countries introduced in the healthcare sector to cope with the crisis.

Evidence reported in this paper reveals that a variety of cut back measures are deployed to confront the fiscal crisis in the public healthcare sector [2]. One key finding of the survey is that managers report that the actual supply of services was cut as an effect of cost-containment policies: this shows that the crisis lowers the capacity of healthcare universal systems to provide protection to citizens and signals that, in addition to the direct effects of the economic downturn on health, there is also an effect attributable to a reduction in the extension of the coverage of citizens' needs. The survey also shows that investments in future programs were reduced.

Again, respondents unveil that the crisis has had a real impact on the health systems. The survey shows that countries have reacted differently to the crisis and also the picture portrayed by this study is one of differential responses across countries in the terms of the cutback management approach adopted and as regards the specific cost-containment tools effected. Some policy tools, howevere, were reported to have been more frequently deployed than others; specifically, reducing back-office activities is a widely employed instrument, perhaps because it looks more popular with the general public, as it may be seen as a way to reduce waste with no damage to users; indeed, the survey reveals that this strategy has been pursued widely. Clearly, given the complex nature of healthcare organizations and the variety of back-office activities needed to offer health services, such a measure may have important draw-backs not easily detectable in the short run, but with salient consequences in the medium-long term. Interventions to reduce front-line services were instead less popular, although in three countries (France, UK and Estonia) more than a third of respondents reported these interventions having been implemented.

The health system administrative tradition - Beveridge-model or Bismarck-model - is to some degree relevant in explaining the approach to cutback management that has been adopted. As observed, managers in the UK, Spain, Italy and to a certain extent Norway favour an approach of targeted cuts according to the priorities (reducing funding for certain areas, while maintaining it for the prioritized ones), while top managers working within Bismarck-based health systems comparatively favour productivity and efficiency savings as response to the challenges posed by the crisis. The weight of the past and the basic configuration of the health system seem to bear some explanatory power in terms of the main stances in coping with a fiscal crisis. In Beveridge systems the benefit basket generally gives scope to delivery organizations to work on priorities and to actively manage demand while in Bismarkian systems levels of care are defined in terms of entitlements of the insured persons [31] and thus give less room to delivery organizations to define priorities. In this respect the role of waiting times in Beveridge system is telling.

At country level, another main finding is that countries during the current crisis, even when operating at increasing levels of public healthcare resources, keep introducing efficiency gains strategies to contain rising costs.

Finally, it has to be noted that the findings of this analysis are subject to limitations. First, we acknowledge a sample unbalance, whereby France, Italy and Austria are over-represented (France

with 167 valid responses, Italy and Austria with more than 100 responses versus an average of 62). This can wield an influence on models internal validity and, thus, results should be interpreted with some caution. Also, when we cluster countries according to their institutional arrangements (Beveridge vs full Bismark vs moderate Bismark) the sample responses are still quite unbalanced (226 vs 335 vs 63 responses respectively). Moreover, item non-response on some variables remains problematic, though we have no evidence of any link with answers to the dependent variable.

An additional limitation is related to the respondents' familiarity with the three cutback approaches and their definition. Specifically, when referring to targeted and proportional cuts, responses might suffer from a relatively unclear differentiation between the two, thus masking the real approach put forward by governments, or be a symptom of the country's mixed cutback approach to the crisis in the health sector. As observed, the survey shows targeted and proportional cuts to be a balanced choice among respondent from Italy, Norway and The Netherlands, in the other cases one approach is markedly preferred against the other (Figure 3). Also, country level variables all treat the country in an aggregate way, thereby potentially overlooking regional (i.e. within-country) differences.

At another and more "foundational" level, a limitation, inherent in this type of research designs, is the exclusive focus on the financial aspects of the impact of the crisis, specifically, on the patterns of responses adopted by the executives to cope with such impact. The dimensions of the outcomes is thus excluded from the scope of the analysis, at least directly; however, perceptions by executives about how the crisis struck the healthcare sector in the country and about the cutback management pattern may indirectly provide an indication of how the healthcare sector is being reshaped.

Having recognised these limitations, evidence provided in this paper has produced empirical knowledge (so far unavailable) which may feed into the debates on the effects of the fiscal crises on the development of the healthcare sector across Europe, and on how public executives are coping with the crises.

5. Conclusion

The article provides an overview of the approaches adopted by top executives in the health sector to cope with the fiscal crisis. Diverse responses have been observed, and both respondent characteristics and country (system) level factors have been identified as predictors of differentiated response patterns.

Beyond these considerations, one element stands out from our study, on which we would like to draw the attention of the reader: cost containment policies adopted have had an impact on the healthcare sector of many countries, and possibly on the actual scope of the universal healthcare coverage, and top managers had to cope with circumstances and make decisions that have impacted on the organisation of services – a state of affairs that cannot simply be placed under the label of the "reduction of waste", as it is quite often claimed in political rhetoric. The crisis is reshaping in a number of respects the healthcare sectors of European countries— and in many regards not for the better, we might add.

Acknowledgement

The research leading to this paper has received funding from the European Union Seventh Framework Programme under grant agreement No. 266887 (Project COCOPS), Socio-economic Sciences & Humanities.

References

- [1] Kickert, W. (2012). "State Responses to the Fiscal Crisis in Britain, Germany and the Netherlands". *Public Management Review* 14(3): 299-309.
- [2] Peters, B. Guy, Pierre J, and Randma-Liiv T. (2011). "Global financial crisis, public administration and governance: Do new problems require new solutions?". *Public Organization Review* 11(1): 13-27.
- [3] Armingeon, K. (2012). "The politics of fiscal responses to the crisis of 2008–2009". *Governance*, 25(4), 543-565.
- [4] Kickert, W., Randma-Liiv T. and Riin S., (2013). "Politics of Fiscal Consolidation in Europe: A Comparative Analysis". Working Paper COCOPS.
- [5] Mladovsky P., Srivastava D., Cylus J., Karanikolos M., Evetovits T., Thomson S. and McKee M. (2012), "Health Systems and the Financial Crisis". *Eurohealth* 18(1).
- [6] Thomson S., Figueras J., Evetovits T., Jowett M., Mladovsky P., Maresso A., Cylus J., Karanikolos M. and Kluge H. (2014). "Economic crisis, health systems and health in Europe: impact and implications for policy". Policy summary 12, World Health Organization on behalf of the European Observatory on Health Systems and Policies.
- [7] Keegan, C., Thomas, S., Normand, C. and Portela, C. (2013). "Measuring recession severity and its impact on healthcare expenditure". International Journal of Health Care Finance and Economics, 13(2):139-55.
- [8] WHO Data 2014, extracted from "Global Health Observatory of the World Health Organization".
 - [9] IMF World Economic Outlook (WEO) Data, Last Updated: October 07, 2014.
- [10] Pollitt, C. (2010). "Cuts and Reforms Public Services as We Move into a New Era." *Society and Economy* 32(1): 17-31.
- [11] Levine, C. H. (1978). "Organizational decline and cutback management." *Public Administration Review*, 38(4): 316-325.
- [12] Ringa R., Savi R. and Randma-Liiv T. (2013). "Literature review on cutback management." COCOPS Research Reports, available at: http://www.cocops.eu/wp-content/uploads/2013/03/COCOPS_Deliverable_7_1.pdf
- [13] Thynne, I. (2011). "Symposium introduction: The global financial crisis, governance and institutional dynamics." *Public Organization Review* 11(1): 1-12.

- [14] Dunsire, A. and Hood, C. (1989). *Cutback Management in Public Bureaucracies*. *Popular Theories and Observed Outcomes in Whitehall*. Cambridge: Cambridge University Press.
- [15] Levine, C.H (1980). The New Crisis in the Public Sector. In Charles, H.L. (Ed.) *Managing Fiscal Stress*. Chatham, NJ: Chatham Publishers: 3-13.
- [16] Levine, C.H., Rubin, I. and Wolohojian, G.G. (1981). "Resource Scarcity and the Reform Model. The Management of Retrenchment in Cincinnati and Oakland". *Public Administration Review*, 41(6): 619-628.
- [17] Levine, C.H. (1985). "Police Management in the 1980s. From Decrementalism to Strategic Thinking". *Public Administration Review*, 45: 691-700.
- [18] Bartle, J., (1996). Coping with Cutbacks. City Response to Aid Cuts in New York State. *State and Local Government Review*, 28(1): 38-48.
- [19] Hood, C. and Wright, M. (1981). From Decrementalism to Quantum Cuts? In Hood, C. and Wright, M. (Eds) Big Governments in Hard Times. Oxford: Martin Robertson: 199-227.
- [20] Levine, C.H. (1979). "More on Cutback Management. Hard Questions for Hard Times". *Public Administration Review*, 39(2): 179-183.
- [21] Behn, R.D., (1980). Leadership for Cut-Back Management. The Use of Corporate Strategy. *Public Administration Review*, 40(6): 613-620.
- [22] Hendrick, R. (1989). Top-Down Budgeting, Fiscal Stress and Budgeting Theory. *The American Review of Public Administration*, 19(1): 29-48.
- [23] Palmer, S. and Torgerson, D.J. (1999). "Definitions of efficiency". *British Medical Journal*, 318 (7191): 1136.
- [24] COCOPS Executive Survey on Public Sector Reform in Europe Research Report, available at http://www.cocops.eu/wp-content/uploads/2013/10/COCOPS-WP3-Research-Report.pdf.
- [25] Peters, B. G. (2005). *Institutional Theory in Political Science: The New Institutionalism*, London and New York: Continuum (2nd edition, 1st edition 1999).
- [26] Ongaro, E. (2013). "The administrative reform trajectory of the European Commission in comparative perspective: Historical New Institutionalism in compound systems". *Public Policy and Administration*, 28(4): 346–363.
- [27] See Country Summary Health System Reviews (HiT Series), European Observatory on Health Systems and Policies, available at http://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/hit-summaries.
- [28] Bartle, J.R. (1996). "Coping with cutbacks: City response to aid cuts in New York state". *State & Local Government Review*, 38-48.
- [29] Long, J.S. and Freese, J. (2006). *Regression models for categorical dependent variables using Stata*. Stata press.

- [30] Hernandez, P., Dräger, S., Evans, D.B., Tan-Torres Edeker, T. And Dal Poz, M.R. (2006). "Measuring expenditure for the health workforce: evidence and challenges", *Evidence and Information for Policy*, World Health Organization, Geneva.
- [31] Schreyogg J., Stargardt T., Velasco-Garrido M. and Busse R. (2005). "Defining the "Health Benefit Basket" in nine European countries. European Journal of Health Economics; [Suppl 1] 6: 2-10.

Essay 3 – Unattainable cost efficiency. Interpreting public sector outsourcing decisions: evidence from hospital inpatient service

The draft of the essay was presented at the Inaugural Public Management and Public Administration PhD student conference (Birmingham, 8-9 May 2013), at the Italian Academy of Business Administration (AIDEA, Lecce, 19-21 September 2013) and Academy of Management annual conference, HCM Division Panel Title: Efficiency in Healthcare (session #1893) (Philadelphia, 1-5 August 2014).

Authorship: Patrizio Armeni (CERGAS Bocconi University) and Francesca Ferrè.

Keywords:

Cost-containment, Outsourcing, Health services delivery

Abstract:

Cost-containment strategies influence public service provision, and outsourcing decisions is one possible approach. Using the case of hospital inpatient services, the present study contributes in three important ways. First, it presents a framework that distinguishes two forms of public outsourcing (i.e., contracting out to a public provider) and private outsourcing (i.e., contracting out to a private provider), thus, identifying a variety of possible service delivery configurations and contradicting the commonly held view of outsourcing as a dichotomous choice. Second, it argues that both public and private outsourcing have similar curvilinear independent effects on cost-containment (with a different magnitude of the quadratic terms) but that combining the two (intermediate configurations) is costly. Third, the paper explains the existence and persistence of mixed configurations. The latter form is more costly, but it is justified on the basis of the specificity of the sector (e.g., the presence of institutional and political scrutiny) and its historical traditions, coupled with change-associated costs and smooth deviations from a *status quo*, and the ambiguous perceived effectiveness of different outsourcing decisions. Consequently, public and private outsourcing in principle might appear as effective strategies for improving cost-containment, but real-world constraints hinder such efficient configurations, which remain *de facto* unattainable.

1. INTRODUCTION

Over the last two decades, the necessity of reducing the gap between available financial resources and public expenditures has become one of the most urgent issues in the public sector, and cost containment in the provision of public services is a crucial objective of most policymakers. Therelevance and urgency of the issue have influenced the development of different strategies, policies and managerial tools for controlling input costs while respecting a multi-dimensional constraint on the output (e.g., Buchanan, Cappelleri, and Ohsfeklt 1991, Burke and Goddard 1990, Hodges 1997, Murray, Erridge, and Rimmer 2012)³². Outsourcing service delivery in the public sector is a widely applied and studied policy decision for improving cost efficiency and (simultaneously) maintaining or improving quality (Warner and Hefetz 2008, Snavely and Desai 2010, Awortwi 2012, Zhang and Sun 2012, Pouder and Golembiewski 1996, Nemec, Merickova, and Vitek 2005, Goodsell 2007, Johnston and Seidenstat 2007, Farneti and Young 2008, Mailly 1986, Prager 1994, Chalkley and Malcomson 1998, Levin and Tadelis 2010, Hefetz and Warner 2012, Alonso, Clifton, and Díaz-Fuentes 2013). Outsourcing public service delivery shares most of its theoretical foundations and consequences with general contracting-out theory, which is mainly rooted in Transaction Cost Economics (TCE) (Williamson 1973, 1979) and Agency Theory (e.g., Logan 2000, Warner and Hefetz 2008). However, whereas private companies regularly outsource (total or partial production or delivery) to other private companies or to other private counterparties such as collective organizations or unidentified independent individuals (crowdsourcing), public services delivery includes a further dimension, namely, the public or private nature of the outsourcee. Therefore, outsourcing in the public sector is bi-dimensional. However, the literature on outsourcing in the public sector has generally adopted a one-dimensional approach. This view contributes to explaining why the effects of outsourcing on public spending vary considerably and their direction is often found to be ambiguous or non-linear (Enthoven 2004, Levin and Tadelis 2010, Zullo 2008).

Moreover, observable configurations of public services production/delivery are often in contradiction with the cost-efficient configurations, according to the literature. For example, Zullo (2008) reported that in the U.S. motor bus sector, the average percentage of contracting was 26%, whereas the most efficient configurations were found to be the extreme ones (fully in-house or fully outsourced). The choice of such potentially inefficient configurations is to date understudied.

_

Theoretical and empirical studies have approached the issue starting from different levels of analysis. Without pretending to provide an exhaustive and complete classification, three levels emerge. First, there is a micro (within organizations) level, which includes studies aiming at implementing an organization-level system of management tools. An instance of this class is the research stream on performance management in public organizations. Second, there is a macro (system) level, where the focus is on the financing system, the overall public or private nature of the service (e.g., should healthcare be an exclusively public service?). Third, there is a meso level, where the unit of analysis is the production and delivery of service. Privatization and outsourcing are the typical issues. With respect to research approaches, we can distinguish between positivistic approaches, which look for causal relationships involving policies, strategies and variables of system performance (e.g., Brekke, Holmas, and Straume 2011, Ferrario and Zanardi 2011); interpretive approaches that typically use qualitative methods to advance knowledge regarding either the success or the negative unpredicted outcome of public cost-containment actions (e.g., Bloching, Stock, and Scheel 2008, Ferrè, Cuccurullo, and Lega 2012); and descriptive analyses of public policies, which present critical assessments of public policies and use mixed positive and normative perspectives (e.g., Anessi-Pessina and Cantù 2006, Battaglio Jr and Ledvinka 2009).

We address these two gaps using the case of outsourcing of hospital inpatient services within the Italian National Health Service (INHS). Longitudinal data on outsourcing decisions provide the grounds to explain i) the curvilinear relationship between outsourcing and public expenditures, ii) the choice of potential inefficient configurations (i.e., incremental changes toward potentially efficient equilibria can be costly) and iii) the marginal effectiveness of governing public spending through outsourcing, providing evidence that the greatest part of expenditure variability is determined by other (and particularly managerial) decisions.

Overall, this study contributes to the debate on outsourcing in the public sector in three important ways. First, it defines outsourcing as a bi-dimensional choice. It distinguishes two forms of outsourcing—public outsourcing (i.e., contracting out to a public provider) and private outsourcing (i.e., contracting out to a private provider)—and it considers outsourcing as a continuous rather than a dichotomous option (the degree of outsourcing). Thus, a variety of possible configurations of service delivery emerges combining the nature of the outsourcee and the degree of outsourcing. In addition, by defining public expenditures as a function of two variables (plus controls) instead of one, the present study provides more complex predictions of the independent and combined effects of public and private outsourcing. In doing so, the study explains both certain inconsistencies in the results obtained by the extant literature and explores why public organizations may face ambiguity in choosing and maintaining the optimum levels of public and private outsourcing.

Second, the paper builds on the efficiency argument made by New Public Management (NPM)³³ (Pollitt, Thiel, and Homburg 2007), which argues that both private and public outsourcing have similar curvilinear independent effects on cost-containment but that the combination of the two with intermediate configurations is costly. The main expected advantages of contracting out public services to private providers are related mainly to competition, with the introduction of a performance orientation, the business-like practices in public service provision and the relative absence of political interference. Along the same lines, the main expected advantages of outsourcing to other public organizations are related to economies of specialization, workforce retention, higher public service motivation, the easier development of behavioral norms in transactions (trust, cooperation, honesty and reciprocity) and limited quality shading (Jensen and Stonecash 2005). Although the empirical analysis suggests that mixed configurations of outsourcing are less effective in reducing spending, their presence among public service organizations is justified because of sector specificities (e.g., institutional and political scrutiny) and historical traditions that encourage smooth deviations from a status quo. Indeed, by analyzing the longitudinal data, we use outsourcing of hospital inpatient services as a time-varying decision, and observe the existence and persistence of mixed outsourcing decisions, providing evidence of an apparent inconsistency in the choice of outsourcing configuration.

Third, the paper provides two interpretations, based either on incrementalism or on garbage can theory, for the observed behavior of Italian health service delivery. In the incrementalist interpretation, service providers gradually move toward an efficient configuration, but because change is smooth, their path is long and timing is sometimes inconsistent. According to the garbage can approach, service providers tend to be chaotic and do not identify an ideal pattern over time,

^{2.2}

³³ The NPM efficiency argument for outsourcing and privatization is based on public choice literature and property rights theory.

instead relying on solutions that apparently match the problems in the short run but remain loosely coupled with them.

In conclusion, our findings suggest that public and private outsourcing in principle might appear as effective strategies for improving cost-containment, but real-world constraints hinder change toward such efficient configurations, which remain *de facto* unattainable. This condition raises the possibility that the often-claimed efficiency gains associated with outsourcing are illusory.

The article is structured as follows. First, it maps outsourcing decisions in the theoretical tradition of TCE and characterizes outsourcing in public sector organizations using the NPM paradigm. Against this background, the paper elaborates and proposes three hypotheses on the effects of public and private outsourcing and their interaction. Second, it introduces the empirical setting, the provision of inpatient hospital services in the INHS, and describes the panel fixed-effect regression analysis and its results. Finally, in the discussion section, the paper contrasts the suggestions from the empirical analysis with the existence and persistence of mixed configurations using two main arguments: the smoothness of change (incrementalist theory) and ambiguity associated with time-inconsistency (punctuated equilibria).

2. THE DIFFERENCE BETWEEN CONTRACTING OUT AND PRIVATIZATION: THE FOCUS ON PRIVATE AND PUBLIC OUTSOURCING

Before describing the hypotheses development, we distinguish the concepts of contracting out and privatization to allow a multi-dimensional expansion of the former that should not be confused with the latter. Contracting out in the public sector is often conceptualized as the process through which the production and/or delivery of services are transferred outside the boundaries of the public sector. Public administrations opt for such arrangements in the hopes of reproducing the beneficial mechanisms of markets and quasi-market conditions in the provision of services such as transportation, education and healthcare. However, because the theoretical foundations of contracting out were developed without considering the public sector in particular, the construct has been oversimplified by the failure to distinguish between two different choices: how much of the production and/or delivery should be outsourced to another organization and whether such an entity is public or private. In both cases, however, the final ownership of the service is public. Privatization strictu sensu, instead, represents a further step toward the inclusion of market mechanisms. Privatization implies a transfer from public to private hands of both asset ownership and service ownership. Privatization and contracting out also differ in the term of contract. Privatization is generally an irrevocable sale of a state-owned service³⁴, whereas the arrangements for the provision of contracted-out goods and services do not last forever: the contract will specify a date upon which the arrangement ceases, absent a contract renewal (Jensen and Stonecash 2005). Furthermore, in the case of privatization, the government retains no governance control and no operating risk, although it usually retains regulatory control. By contrast, contracting out enables the government to retain control over the specification of the service, the management of the contract and the evaluation of the service provider's performance.

_

³⁴ Privatized assets can be resold (even back to the government), but this is usually due to financial (or other) problems rather than to contractual obligation.

This paper explores contracting-out decisions in which the public sector maintains the final ownership of the service, distinguishing between public and private outsourcing. Using this approach, we contribute to the debate on the effects of the nature of the outsourcee in contracting-out decisions, extending the mere efficiency argument of the benefits of specialization economies over transaction costs as suggested by TCE (David and Chiang 2009, Guerrero, Mossé, and Rogers 2009).

3. THEORY AND HYPOTHESES

Public outsourcing and Transaction Cost Economics

Outsourcing in the public sector has its theoretical foundations mainly in TCE and NPM (Warner and Hefetz 2008). The former is mainly concerned with the cost-efficient boundary between hierarchy and market, whereas the latter is more multi-faceted and includes several dimensions of performance.

According to TCE, spending can be controlled with make-or-buy decisions: organizations may find convenience in exploiting specialization economies (buy) (Levin and Tadelis 2010) or in reducing transaction costs (make) (Williamson 1973, 1979, 1975, 1985, 1987)³⁵. Williamson argued that markets and bureaucracies are two alternative opportunities for organizing the production structure. In his view, the market is the most efficient organizational form unless the transaction costs in the market are higher than the organizational/production costs incurred by operating within a bureaucracy. The activities are, therefore, allocated to the most appropriate executor and are defined according to the efficient boundary between hierarchy and market. From this perspective, outsourcing in the public sector has often been associated with privatization mostly because the outsourcee was often a private, business-like organization.

This biased perception has been fueled by the NPM literature, in which advocates of outsourcing treat privatization and public sector outsourcing indistinctly. According to Lynn (1998), the diffusion of NPM has left some constructive legacies, in which a prominent role is given to "a stronger emphasis on performance-motivated administration and inclusion in the administrative canon of performance-oriented institutional arrangements, structural forms and managerial doctrines fitted to particular contexts" (Lynn Jr., 1998). Performance is understood as a multidimensional concept (Borgonovi, Fattore, and Longo 2012) that encompasses broad areas for which public administrations have been recognized as accountable, including effectiveness, efficiency, equity, ethics and legality (Xingzhu, David, and Sujata 2008). In the presence of strong downward pressures on the costs of public services, efficiency has become the prominent dimension against which public services providers' performance is measured. In this circumstance, when the services delivered must conform to minimum quality constraints, a decline in spending results in an improvement in efficiency (Boyne 1998). Therefore, in this paper, we use slow-downs and declines in spending as a proxy for improved efficiency. However, in some cases, the nature of the outsource is seen as an important factor influencing the outsourcing decision, particularly when i) the hidden costs of private competition due to inefficient market structures or high prices are manifest and ii) the level of market failures in sectors such as education, healthcare and public

³⁵ The literature on outsourcing is broader than that reviewed in this paper, and consequences other than those on costs have been explored. For example, outsourcing has an impact on organizational capabilities (Agndal and Nordin 2009) and on volume flexibility, speed or product innovation (Dabhilkar et al. 2009).

transportation is considered to be inappropriate for transferring the service to private actors only (Kaboolian 1998). Under such circumstances, some studies have reported that contracting out to other public agencies³⁶ appears to be an alternative option for both the in-house provision of service delivery and privatization (Levin and Tadelis 2010).

Although the nature of the outsourcee might be an influencing factor for choosing the most appropriate configuration of service delivery, the mechanisms activated by public and private outsourcing partly overlap if competition is not included. Indeed, both public and private outsourcing impact the balance between transaction costs (public to public or public to private relationships) and organizational costs (managing complexity, missing specialization opportunities, changing organizational settings and functions). The transaction/organizational cost trade-off is, therefore, the main mechanism that allows for a change in public outsourcing to produce a variation in public expenditures, whereas private outsourcing can exploit the additional mechanism of competition.

Based on this premise, and focusing on public outsourcing, we expect that the direction of its impact on spending varies mainly according to the sum of the transaction costs (and specular benefits of direct control) and the organizational costs (deriving from the management of complexity). The interplay between these two categories of costs may depend upon the *status quo* because both contracts and organizations have fixed institutional costs³⁷. At different levels of outsourcing, the decision to expand or reduce the organizational boundaries may have different impacts on spending due to the different initial configurations, suggesting a non-linear relationship between outsourcing and public spending. For example, in a study focused on motor bus services (Zullo 2008), outsourcing was revealed to have a weak curvilinear association with the total cost, suggesting that the most cost-efficient agencies either fully contract out or entirely provide in-house service. Therefore, we expect intermediate configurations to be the more costly given the importance of the fixed costs of moving from the extreme and the lower capacity to exploit economies of scale. Therefore, we hypothesize an inverted U-shaped relationship between outsourcing and spending.

In the case of inpatient hospital services, we expect that when public outsourcing is set at intermediate levels, there is an opportunity to reduce public expenditures by changing the level of public outsourcing; in other words, an intermediate level of public outsourcing is more costly than extreme configurations.

Hypothesis 1. Ceteris paribus, public outsourcing has an inverted U-shaped relationship with public expenditures.

Private outsourcing and the benefits of competition

When the service is outsourced to private organizations, the outsourcing decision is more complex because it includes both the contracting-out component and the additional consequences of

_

³⁶The diffusion of NPM-style reforms has often produced the disintegration of vertically integrated bureaucracies and the substitution of arm's-length executive agencies.

³⁷ For example, if the *status quo* is a pure market configuration, then the decision to insource back some activities may entail substantial fixed costs for acquiring production factors that may overrun the savings in the transaction costs. Similarly, from a pure bureaucracy configuration, outsourcing-related costs may include relevant transaction costs for beginning to interact with other institutional actors.

involving private providers in the public service production/delivery process. The impact of private outsourcing, therefore, is transmitted to public expenditures through an additional mechanism compared to public outsourcing, namely, the costs and benefits of introducing market-like dynamics (e.g., competition) into the system. Therefore, the arguments that motivated the inverted U-shaped relationship between public outsourcing and public expenditures also hold for private outsourcing. In addition, including private providers in public service production/delivery takes its motivation from the intended benefits of competition as a mediator of efficiency³⁸; in this sense, private outsourcing appeals to citizens' and politicians' preferences for more cost-effective methods of service delivery (Leland and Smirnova 2009). Indeed, Pendleton (1999) found that private outsourcing and exposure to product market competition, when applied to local transportation, have produced efficiency gains through changes in labor management and industrial relations that made them more akin to those of competitive markets (Pendleton, 1999). However, the benefits of private outsourcing are not attained if the amount of outsourced capacity (i.e., the critical mass) is not sufficient to activate competitive mechanisms among private providers. Levin and Tadelis (2010) found that involving private players had a significant impact in improving efficiency only if the conditions exist for a competitive market to emerge (Levin and Tadelis 2010), whereas otherwise, the private ownership of the assets is not necessarily associated per se with higher efficiency. Evidence of such phenomena has also been observed in healthcare service delivery in which private hospitals are not necessarily associated with a higher efficiency level compared to public hospitals (Tiemann, Schrevögg, and Busse 2012)³⁹. Therefore, competition is not granted by the mere presence of private actors in the service delivery system, but it additionally requires that enough space be given to private providers. According to Enthoven (2004), market opportunities should be strengthened enough to deliver efficient public services, i.e., private outsourcing is beneficial only when it is introduced at a significant level, whereas it can increase costs when its role is marginal (Enthoven 2004). Building on this relation, competition reinforces the transaction costs mechanism. Therefore, we hypothesize that private outsourcing exhibits an inverted U-shaped relationship with public expenditures, as in the case of public outsourcing, but we expect the curvilinear relationship to be sharper because the two mechanisms apply simultaneously.

Hypothesis 2a. Ceteris paribus, private outsourcing has an inverted U-shaped relationship with public expenditures.

Hypothesis 2b. Compared to public outsourcing, the curvilinear relationship between private outsourcing and public expenditures is sharper, i.e., the first-order coefficients are similar but the second-order coefficient of private outsourcing is higher in the module.

Public and private outsourcing: a costly mix

-

³⁸On this point, it should be noted that the theoretical motivation for private outsourcing is generally not explicitly mentioned in private contracting-out tendering. Hodges (1997) shows that the promotion of competition is rarely stated as an objective of private outsourcing, and, where it is, it can lead to difficulties in drawing objective audit conclusions (Hodges 1997). Prager (1994) suggests that the contracting out of government services to private actors "will neither reduce government outlays nor increase government efficiency unless the decision makes economic sense. For example, a government authority may decide that downsizing is a political, not financial or economic, imperative, or outsourcing may serve as a threat to weaken the power of an entrenched bureaucracy or labor union" (Prager 1994).

³⁹This evidence is consistent with findings in other domains of public services, such as transportation (Zullo 2008).

The inverted U-shaped relationship between both public and private outsourcing and public expenditures is consistent with the TCE literature. However, because the two have never been studied as simultaneous and distinct choices, no evidence has been produced thus far on the consequences of mixing public and private outsourcing. In particular, no study has investigated the relationship between public expenditures and the two types of outsourcing. When designing and redesigning public services, policymakers have, among other options, the opportunity to decide the degree of outsourcing and the extent to which it can be realized with private actors' involvement (Figure 1). First, policymakers may choose not to outsource service delivery, therefore fully maintaining direct responsibility. Second, they can decide to totally or partially outsource the service either to public providers or to private ones. Finally, they can choose to totally or partially outsource the service to both public and private providers.

Insert figure 1 about here

According to Hypotheses 1 and 2a, each of the two options is effective in containing public expenditures when applied to a sufficient extent that allows benefits to override costs, whereas when they are only marginally introduced, their impact on expenditures may be detrimental. In other words, we argue that the more extreme the option, the more effective it is in reducing public expenditures. However, because we use a continuous and not a dichotomous concept of outsourcing (i.e., we refer to those cases where production and delivery are divisible), mixed configurations are also possible.

Typically in the public sector, we observe that based on the organizations' *status quo*, a share of the production/delivery can be directly provided by the public entity that is accountable for the service as a whole. This situation is noticeable in our example, in which service delivery is decentralized to regional healthcare services (RHSs) and local health authorities (LHAs). RHSs are accountable for healthcare services and can decide to directly provide a share of hospital services through LHA-managed hospitals. In doing so, direct provision reduces the space for both public and private outsourcing and, following Hypotheses 1 and 2a, it hinders their effectiveness as cost-containment decisions. Moreover, at any level of public direct delivery, an increase in one form of outsourcing will necessarily reduce the space for the other. Therefore, the higher the level of public outsourcing, the lower the space for private players and the higher the initial transaction and agency costs (Warner and Hefetz 2008) incurred by their inclusion. Similarly, the higher the level of private outsourcing, the lower the space for public outsourcing and, consequently, the lower the benefit obtainable from specialization economies. In other words, the balance between the two outsourcing options is costly because it reduces efficiency gains that could have been realized by appropriately exploiting each alternative individually.

Hypothesis 3. At any level of either public or private outsourcing, an increase in one of them makes the other potentially less effective in reducing public expenditures.

	that summar			

Insert figure 2 about here

4. EMPIRICAL SETTING

Public and private outsourcing in the Italian National Health Service

This paper uses the INHS to empirically test the three hypotheses. The choice of the empirical setting is motivated by three main arguments. First, the INHS represents a favorable setting for studying outsourcing decisions because, in Italy, the healthcare service is decentralized at the regional level and the regions are accountable for health spending and efficiency-improving policies (Anessi-Pessina and Cantù 2006). As a consequence, Regional Health Services (RHS) show a substantial level of variability that is both cross-sectional and over time (cfr. Figure 3). Second, the choice of this setting is particularly convenient because it makes it possible to clearly disentangle public and private outsourcing decisions. Third, the healthcare sector is particularly important for the national economy and public expenditure. Indeed, in 2011, the total public health expenditures in Italy accounted for approximately 7.1% of GDP and 14.7% of total public expenditure (Armeni and Ferré 2013).

Data on regional-level outsourcing decisions

Public outsourcing and private outsourcing are measured as the proportion of regional hospital beds managed by public and private independent hospitals, respectively. The remainder comprises hospital beds directly managed by LHAs. Data refer to the period between 1997 and 2010. The analysis includes 294 region-time observations. Figure 3 graphically depicts the position of RHS in the mix of outsourcing levels over the 14-year period. As expected, at least one RHS is represented in each quadrant of the matrix.

Overall, according to this representation, the RHS appear to be predominantly public service-based with a relatively low presence of internal markets mechanisms, i.e., separating the responsibility of buying healthcare from the provision of services within the boundaries of the public sector (quadrants 1 and 2). Only a small number of RHS (e.g., Calabria and Lazio) displace a rather high level of private outsourcing over time (quadrants 3 and 4). The pattern of change reveals that public or private outsourcing decisions cluster around two main processes: first, a rather unsystematic pattern of the development of public and private outsourcing (see Calabria and Lazio); second, a smoother progression of the uptake of quasi-market mechanisms (see Veneto, Marche, Piemonte and Toscana) until 2006-2007, followed by a gradual rebound in public outsourcing. Overall, ambiguity is evident, and no systematic pattern of outsourcing decisions emerges.

Insert figure 3 about l	nere

5. EMPIRICAL METHODOLOGY

Variables

The dataset is structured on a region-year basis. The dependent variable is the natural logarithm of per capita public health expenditures⁴⁰. The main independent variables introduced are public outsourcing, measured as the proportion of hospital beds managed by public independent hospital (Lo Scalzo et al. 2009), and private outsourcing, measured as the proportion of hospital beds owned by private hospitals and for which a reimbursement contract has been signed with the RHS or with the LHA (according to the regional institutional setting)⁴¹. As control variables, we include the following:

- Total per capita hospital beds available in the region to account for possible scale effects;
- Per capita regional gross domestic product (GDP) because public health expenditures are correlated with local income (Hitiris and Posnett 1992, Gerdtham and Löthgren 2000);
- *Percentage of elderly patients in the region*. Older patients typically require more costly healthcare services compared to the rest of the population (Lubitz et al. 2003), and, therefore, their share should be controlled for. There is also high variability of the elderly population across the RHS, which ranges from 12.9% (Campania 1997) to 28% (Friuli-Venezia Giulia 2005); cfr. Table 2;
- *Per capita public health deficit*, which measures the degree of the financial stability of the RHS. There is a mutual influence between deficit and health expenditure, as regions with higher deficits are also the ones that experience higher pressures on health spending;
- A *dummy* for regions where high deficits have led to the adoption of a *healthcare turnaround plan*. Because turnaround plans are explicitly designed to reach efficiency and stability, we expect their impact on public health expenditures to be negative;
- The number of *months in every year with a left-affiliated regional government* in power. Although the literature has not provided clear-cut results for the direction of the influence of governments' political affiliation (Imbeau, Pétry, and Lamari 2001), we include the control in order to nullify a possible political effect.

The variables' definitions and sources are summarized in Table 1.

Insert table 1 about here

_

Analysis

⁴⁰ We used the logarithmic transformation for interpreting model coefficients as the percentage of impact, which facilitates cross-regional comparisons.

⁴¹ Private hospitals that operate outside public reimbursement are excluded from the analysis for three reasons. First, they represent a marginal phenomenon in Italy; second, their mapping in Italy is still incomplete; third and most important, they are not included in public decisions of outsourcing and privatization unless they agree to the reimbursement scheme, which would allow them to enter our sample.

Data are set as a region-year panel and use fixed-effects panel regression analysis to identify the impact of public and private outsourcing after having excluded regional time-invariant factors (e.g., institutional models of healthcare). The model includes yearly dummies to control for trends and year-specific exceptional phenomena. This approach aims to reduce most of the endogeneity issues by explaining the greatest part of the variability through the controls and leaving the remainder to the independent variables (public and private outsourcing, their squared terms and the interaction between the two). Based on this approach, small increments in the R-squared (within) arising from the inclusion of independent variables are likely, and this would make the R-squared a poor indicator of the statistical appropriateness of richer models. Therefore, we test the gradual inclusion of independent variables using the log-likelihood ratio tests for nested models⁴².

Descriptive statistics and correlations are reported in Table 2.

Insert table 2 about here

6. RESULTS

We estimated five models using linear panel data regression analysis with regional and time-fixed effects (Table 3). In model 1, only the fixed effects for time and region are included. As expected, the variability of per capita health expenditure is mainly explained in terms of regional time-invariant factors and time trends. Only 3% of the variability is unexplained. Model 2 includes all control variables. Even when the increment in the R-squared is modest (+0.5%), the log-likelihood test supports the hypothesis that model 2 is nested in model 1 (p<0.01), and therefore, we accept the inclusion of the control variables. Models 3 and 4 separately include public outsourcing and private outsourcing, respectively, together with their squared terms. Model 2 is nested in both Model 3 and Model 4 (p<0.01). Finally, Model 5 tests all the variables together and, given that the test for nested models rejects the null hypothesis of no-nesting both with respect to Model 3 (p<0.01) and to Model 4 (p<0.05), we refer to this model for testing our hypotheses. It is notable that the regional and time-fixed effects already explain most of the variability, leaving to the independent variables the 3% not explained by the baseline model (see discussion).

Hypothesis testing

Insert table 3 about here

Hypothesis 1 predicted an inverted U-shaped relationship between public outsourcing and public health expenditures. In both Model 3 and Model 5, there is evidence of a curvilinear relationship. The sample provides evidence for both the increasing and the decreasing parts of the parabola (cfr. Figure 4, top, left graph). Hypothesis 1 is, therefore, supported by the model results. Hypothesis 2a predicted a similar relationship for private outsourcing. According to Models 4 and 5 and the within-sample evidence of the parabola in Figure 4 (top, right graph), the results are also consistent

⁴² Likelihood ratio tests compare two models provided that the simpler model is a special case of the more complex model (i.e., "nested").

with Hypothesis 2a. Hypothesis 2b is relative to the second-order coefficients. Models 3, 4 and 5 support a more sharply sloped parabola in the case of private outsourcing. Consequently, Hypothesis 2b is also supported. To test Hypothesis 3, we added the interaction coefficient. Consistent with the hypothesized effect, the coefficient is positive and significant (p<0.05), supporting Hypothesis 3. To investigate the joint effect of public and private outsourcing on per capita public health expenditures, we constructed a three-dimensional surface plot based on Model 5 (see Figure 5). The surface of the plot has the maximum in the background, confirming a sharper curvilinear impact of private outsourcing ⁴³. The scatter plots in Figure 4 and the surface plot in Figure 5 both indicate that increasing either private or public outsourcing is less beneficial when the other is in place.

Insert figure 4 and figure 5 about here

Further results

With respect to our control variables, the per capita hospital beds variable has the expected positive effect on public per capita health expenditures. An increase in the number of available hospital beds tends to lead to an increase in per capita spending. GDP per capita is negatively correlated with public health expenditures, indicating a countercyclical public expenditure policy pattern. The percentage of elderly patients also has the expected positive effect on public per capita expenditures; however, the effect does not seem to be highly significant, implying that public health expenditures are not primarily driven by the consumption/use of services by the elderly. The level of per capita health deficit has a strong significant positive relationship with public expenditures. That is, the greater the magnitude of financial distress in regional health expenditures, the higher the level of per capita health expenditures. Moreover, contrary to the expected positive relationship, the presence of formalized recovery plans produces a non-significant impact on health expenditure levels. Finally, the regional party affiliation has a small but statistically significant relationship with per capita health expenditures. The data show that leftist regional governments are negatively correlated with the level of per capita public health expenditures.

7. DISCUSSION: INCONSISTENCY IN THE OUTSOURCING CONFIGURATION CHOICE

The simulated impact of public and private outsourcing reported in Figure 5 suggests that efficiency-improving decisions may be different depending on the *status quo* of the service configuration. For example, starting from a configuration with no outsourcing (graphically, the left bottom angle of the plane), the most effective decision for reducing expenditure would be to introduce private outsourcing, preferably to a large extent. However, if the *status quo* is characterized by a substantial level of public outsourcing coupled with no private outsourcing (e.g., the top left corner of the plane), activating the latter might increase public expenditures unless the

_

⁴³ To graphically disentangle the effects of private outsourcing, it is possible to observe the curves of the derivatives (the lines on the surface) that are parallel to the private outsourcing axis. Similarly, the curves parallel to the public outsourcing axis summarize the impact of public outsourcing on public expenditure for different levels of private outsourcing.

amount of services outsourced to private providers is sizeable. To see this effect, take for example the curve at the maximum level of public outsourcing, when private outsourcing is zero in the background. Starting from some point in the middle of the plane, i.e., configurations with mixed public and private outsourcing, there is more than one direction in which public expenditure could be decreased. Therefore, different options may appear effective (e.g., increasing both forms of outsourcing, increasing only one, increasing one and reducing the other or decreasing both). However, a high degree of effectiveness would often require substantial deviation from the *status quo*, necessitating deep institutional and organizational change.

The empirical data (Figure 3) reveal that RHSs choose and maintain theoretically inefficient models: mixed configurations with non-zero levels of both public and private outsourcing and small changes over time. This finding is not surprising because the public governance literature recognizes the increasing number of hybrid organizational models that permit the blending of public and private sector resources (Peters and Pierre 1998). From our setting, two alternative explanations can be envisaged. First, regions could choose the mix between public and private outsourcing without knowing what impact on public expenditure is to be expected. Second, reasons other than efficiency could drive outsourcing decisions and the speed of adjustment. The former explanation relies on the fact that regional policies apparently contradict the empirical model-based suggestion that extreme configurations are more efficient. In fact, extreme configurations are not prevalent, and generally, regions tend to balance in-house service delivery, public outsourcing and private outsourcing. However, if they were aware of the model-based suggestions, they would behave accordingly. Indeed, extreme configurations, even if theoretically more efficient, are unlikely to be implemented, unless they are already coincident with the status quo, for two reasons. First, reverting to a full in-house provision would imply the total rejection of NPM and the exclusion of important NHS stakeholders (e.g., private hospitals). Conversely, outsourcing the entire service to private hospitals would require a dramatic institutional and political change. Therefore, we believe that the latter explanation is appropriate and that the highest efficiency, even if theoretically affordable through outsourcing decisions, is an illusion in practice. Comparing the actual dynamics of public and private outsourcing with the statistical evidence reported above requires us to analyze three tendencies that characterize the behavior of RHSs. The first tendency is relative to the choice of a mixed configuration as the status quo. The search for the "middle position" is a common thread in public organizations because the balance between citizens' accountability and engagement and efficiency and market management is realized as a process of accumulated trade-offs (Warner and Hefetz 2008). Italian RHSs generally choose intermediate configurations for inpatient hospital services (in Figure 3, all the displayed regions are far from the axes⁴⁴). The second tendency is the smoothness of change. Policymakers have shown that efficiency-improving decisions on the levels of public or private outsourcing can be identified but only smoothly implemented. The regions reported in Figure 3 generally show a tendency to increase both levels of outsourcing over time, with a slight preference for private outsourcing. Finally, the third tendency reveals that changes in outsourcing levels appear to occur continuously, leaving the organization unable to fully complete the path toward one or the other end of the outsourcing continuum, thus generating non-linear

⁴⁴ Some regions, not reported in Figure 3, show either no private or no public outsourcing. However, none of them, excluding Valle d'Aosta before 2009, has reported a null proportion on both axes.

patterns of evolution (in particular, see the paths of Lazio and Calabria in Figure 3). We explain such evidence in terms of ambiguity and time inconsistency.

The choice of a mixed status quo⁴⁵

NHSs are characterized by the direct provision of services. However, they may decide to outsource the management of certain production or delivery processes to other providers (public, private or public-private mixed entities), thus generating incentives to specialization in each outsourced phase. In recent years, the necessity of reducing production costs has pushed universal healthcare systems to reconsider the possibility of moving organizational boundaries by exploiting specialization economies and inducing competition (by privatization or private outsourcing in our case) under both a rationality constraint 46 and a quality constraint 47. Burke and Goddard (1990), building on TCE, argue for the appropriateness of an intermediate level of outsourcing. In particular, they verified the occurrence of five conditions⁴⁸ that justify the failure of a pure-market configuration of transactions in the British NHS. As these conditions are highly dependent upon the peculiarity of the sector rather than of the country, their conclusions can be fairly generalized to the Italian case⁴⁹ because both NHSs cluster under the Beveridge model (Saltman and Figueras 1997).

The first condition is bounded rationality, an issue that becomes increasingly important with the growth of complexity in activities and technological advancements in healthcare. The second behavioral assumption is opportunism; even if it "has not traditionally been dominant in healthcare [as] there has been an emphasis on ethical behavior and moral commitment" (Burke and Goddard 1990), most actors involved in the resource allocation process reported experiencing opportunistic behaviors. Third, transactions are restricted in frequency because of the limited number of contracting parties. This characteristic is highly desirable in healthcare because strong standardization requirements are necessary to ensure a minimum of quality and equity within the system. However, this benefit comes at the costs of greater bargaining power and discretionality in the final choice⁵⁰. Fourth, complexity and uncertainty are inherent to medical activity and, by extension, to the whole NHS. This situation requires a leading actor who is accountable for the performance of the whole system. Finally, healthcare is also characterized by the significant presence of idiosyncratic investments (staff, education, equipment) that are made in a quasimonopsonistic market, requiring ad hoc governance systems that are different from those of a pure market (Williamson 1979). All of these elements lead to the prediction that the market, even if is

⁴⁵ We refer to the *status quo* as the first observation in our sample, not as an initial choice. In 1997, the first observed year, the NHS was already an established system.

46 That is, the savings from outsourcing are greater than the new transaction costs.

⁴⁷ In Italy, the minimum granted services (LEA, Livelli Essenziali di Assistenza) are defined and listed.

⁴⁸ They refer to the conditions under which the market is likely to be a less efficient allocator of resources. The first two are behavioral conditions: bounded rationality and opportunism. The remaining three relate to (i) a low frequency of transactions, (ii) a high complexity and uncertainty surrounding transactions and (iii) a high degree of enduring idiosyncratic investments.

⁴⁹ Note that Rehnberg's (1990) study of the organization of the Swedish healthcare system concludes that the degrees of asset specificity and of uncertainty are poor predictors of the degree of externalization. Based on TCE, he initially predicted that the production of asset-specific and uncertain services would be internalized, whereas the production of standardized services would be externalized. In fact, an integration pattern was found in which not only asset-specific transactions were internalized but so were the transactions of standardized services offered by a large number of sellers (Rehnberg 1990).

⁵⁰ This is also in light of the uncertainty regarding the demographic, epidemiological and technological patterns and outcomes of care.

partly desirable, is not the most globally efficient organizational form for universal healthcare system models. We can, therefore, explain why intermediate levels of outsourcing are found as the prevalent *status quo*, which may differ across regions depending upon the strength and the manner in which the conditions described above appear and interact together.

The smoothness of change

TCE helps explain why regions choose inefficient initial organizational configurations. However, it cannot fully explain why regions adopt such different initial configurations and, most importantly, why they do not tend to converge quickly on a common configuration but, rather, show considerably smooth patterns of change. Additional rigidities are at play. In the case of public organizations, two important sources of rigidities are institutions and relationships (Lane 2000). Indeed, TCE is often criticized by organizational sociologists because it operates with an undersocialized conception of human actions (Ferlie 2007) and overestimates the role of governance structure and contracting rather than social relationships as the driving forces for decisions. Moreover, TCE ignores the proposition that behaviors are embedded in social relationships (Granovetter 1985), undervaluing the interdependence among social actors. Therefore, any status quo shows more rigidities than do the systems we expect in an under-socialized world. Introducing the social perspective into the analysis allows us to explain the gradual evolutionary pattern of public and private outsourcing decisions by RHSs. At any point in time, the potentially efficient configuration would not be immediately reachable were it to require a dramatic change in both the institutional and relational frameworks. For example, insourcing back certain activities determines the necessity of remodeling the supply structure by building or buying new public hospitals and establishing relationships with additional suppliers. Hence, small changes rather than dramatic ones are likely. This circumstance is also consistent with Lindblom's incrementalist theory of decisions in public management (Lindblom 1959, 1979). The consequences of smooth changes may affect the consistency of outsourcing decisions over time.

Ambiguity and time inconsistency

In case the status quo is placed within the space of mixed configurations, a unique efficiencyimproving strategy may not exist, but many options for the balance between public and private outsourcing could be available. This occurs, for example, when a region is near the maximum point of one of the partial derivatives' curves describing the public outsourcing-expenditure relationship for a given level of private outsourcing. Under such a condition, either an increase or a decrease in public outsourcing, or even a substantial increase in private outsourcing, may induce a decline in public expenditures. Policymakers facing similar situations must cope with a first dimension of ambiguity derived from the presence of multiple and different potentially effective actions. A second dimension of ambiguity is relative to the uncertainty of the effect, which makes the comparison among different alternatives less precise. Finally, even when a more convenient strategy is identifiable, it may carry costs other than the current production/delivery-related ones, such as the costs associated with changing the institutional framework. The above-mentioned points suggest that efficiency-improving decisions are potentially ambiguous (Warner and Hefetz 2008). In addition to ambiguity, smooth patterns of change may be time inconsistent, which means that the objective configuration may change during the process of approaching it. A smooth process generates a repositioning of the status quo at every point in time. Consequently, new efficiencyimproving decisions may emerge that are not necessarily consistent with the process apparently followed up to that point (in Figure 3, both Lazio and Calabria seem to not follow a clear and consistent pattern over time). Time inconsistency may also originate from institutional and political factors. The former may include the costs of downsizing the level of fixed production factors, lack of control, workforce rigidities or the costs of establishing a new set of agreements with other counterparties (Young and Macinati 2012). By contrast, political factors are related to the need to increase the consensus in specific phases of political cycles (Lane 2000).

In conclusion, even though RHSs generally exhibit a baseline trend over time toward efficiency-improving decisions (cfr. Figure 3), their implementation is smooth and often adjusted or changed before the efficiency-improving configuration is reached, generating non-linear patterns of evolution. Any interpretation of these patterns must made in light of the fundamental question regarding the existence of steady states. Are there (sooner or later) reachable efficient configurations? Or, instead, is this instability perpetually moving between waves of opposite decisions, with no long-lasting matching between problems and solutions?

Arguments in support of the first interpretation may be built upon incrementalism (Lindblom 1959, 1979) and by using the concept of punctuated equilibria (True, Jones, and Baumgartner 1999)⁵¹. Adopting this theoretical lens, efficiency is in principle obtainable in the long run, but the path is not short or linear, and the excessive amount of time may be perceived as a signal of impossibility. It is nevertheless possible that, in some cases, a region is unable to make decisions that would require a drastic change in the model, for example, because of institutional and social rigidities. This is the case, for example, in Sicilia. Instead, if punctuated equilibria exist, it is possible that time inconsistency emerges to a greater extent. This is the case, for example, in Lazio, where the high starting level of private outsourcing was followed by a decreasing trend and subsequent small rebound in 2003. Following the regional hospital downsizing policies, the region displaced a decreasing level of both public and private outsourcing coupled in the 2004-2010 period with a noticeable increase in public outsourcing (from 31% to 40%). The second interpretation of this evolution is consistent with the garbage can model (Cohen, March, and Olsen 1972). Indeed, at least two of the typical conditions that favor the emergence of garbage cans are met: in our case, both the technology is unclear (rejecting the incrementalist view, there is no clear rule to reach efficiency) and preferences are problematic to the extent that, beyond the objective of efficiency, quality constraints and other relevant dimensions of performance do not allow for the identification of a univariate objective function. Fluid participation, the third basic property of systems in which a garbage can emerges, is not very applicable at such a macro context, but it is nevertheless observable, extending the analysis to the whole network of stakeholders instead of focusing only on the appointed policymaker. According to this view, no efficiency is obtainable by definition of the dynamics because regional strategies for improving efficiency will be inherently chaotic, highly unpredictable and ineffective in the long run.

⁵¹ Punctuated equilibria in social theory is a method of understanding change in complex social systems, particularly how policy changes and the development of conflicts seem to progress in extended periods of stasis, punctuated by sudden shifts with radical change.

8. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study provides new theoretical and empirical contributions to the literature on public sector outsourcing, informing the debate on the relevance of the nature of the outsourcee and on the consequences of disentangling public and private forms of outsourcing. The quantitative analysis has some limitations. First, in the case of the INHS, public outsourcing is not conceptually homogeneous across regions. In particular, quasi-market systems differ considerably in the degree of separation (institutional and financial) between hospitals directly managed by LHAs and public hospital enterprises. Therefore, our measure is a potentially heterogeneous proxy of public outsourcing and should be treated with care when discussing normative implications. This limitation does not, however, impair the analysis provided, given that the focus of this paper is not the identification of an optimal decision but, rather, the interpretation of public choices that apparently deviate from theoretically efficiency-improving consistent decision making. Second, there are possible concerns regarding the generalizability of our results. In our study, we used the Italian hospital inpatient service sector, which exhibits substantial peculiarities with respect to both the content (type of service provided: collective public service) and the country (type of healthcare system). Clearly, a replication of our findings in other comparable contexts of high public-private collaborations, such as public transportation and waste management, is needed to establish their external validity.

Notwithstanding some limitations, hospital inpatient service can be considered a relevant case because of the possibility of clearly distinguishing the two forms of outsourcing given the different institutional identity of the two options. Moreover, the choice of studying the healthcare setting is justified by the substantial burden that public healthcare expenditures have on total government expenditures (15% on average in European countries and 21% in the U.S. in 2010 (Armeni and Ferré 2013)) and their increase over time, which has led governments to implement tighter cost-containment measures. Finally, our analysis has shown that the greatest part of the variability in public expenditures does not derive from outsourcing decisions, which contribute marginally to cost-containment (Alonso, Clifton, and Díaz-Fuentes 2013).

This evidence carries an important consequence for policymakers, emphasizing the management-based view of cost-containment policy decisions. However, even if marginal, the impact of outsourcing in its two forms is statistically significant and is an available option for exercising managerial discretion at the regional level. Indeed, the heterogeneous pictures of outsourcing decisions and their evolution over time suggest that decision-makers at the regional level are characterized by different levels of dynamic managerial capabilities while being confronted with similar challenges posed by the external environment (Adner and Helfat 2003).

We suggest that further research should take two approaches. First, it should take a theoretical approach that addresses the ultimate nature of the apparently inconsistent behaviors of public organizations' outsourcing strategy (chaotic or incremental). Second, from a practice-oriented perspective, the quantification of the impact of outsourcing decisions in different public services could help policymakers recognize and appreciate the magnitude of the potential effects of public and private outsourcing. As a consequence, policymakers would have a tool for better informing the balance between managerial and structural change instead of simply relying on the paradigm of market or quasi-market configurations.

9. CONCLUSION

Our analysis extends the study of public sector cost-containment decisions in quasi-market contexts by showing that i) both public and private outsourcing levels can be considered efficiency-improving decisions; ii) the mechanisms explaining improvements only partly overlap, and thus these two choices can be considered separate; iii) regions or public administrations generally adopt different intermediate configurations; iv) the modification of decisions regarding the levels of public and private outsourcing, there are embedded preexisting social structures that make change smooth; and v) efficiency-improving patterns of decisions may be ambiguous and time inconsistent.

Acknowledgement

This work was supported by CERGAS-Bocconi's Observatory on Italian Health-Care Management (OASI).

References

- Adner, Ron, and Constance E. Helfat. 2003. "CORPORATE EFFECTS AND DYNAMIC MANAGERIAL CAPABILITIES." *Strategic Management Journal* no. 24 (10):1011-1025.
- Agndal, Henrik, and Fredrik Nordin. 2009. "Consequences of outsourcing for organizational capabilities: Some experiences from best practice." *Benchmarking: An International Journal* no. 16 (3):316-334.
- Alonso, Jose M, Judith Clifton, and Daniel Díaz-Fuentes. 2013. "Did new public management matter? An empirical analysis of the outsourcing and decentralization effects on public sector size." *Public Management Review* (ahead-of-print):1-18.
- Anessi-Pessina, E., and E. Cantù. 2006. "Whither managerialism in the Italian National Health Service?" *The International journal of health planning and management* no. 21 (4):327-355.
- Armeni, Patrizio, and Francesca Ferré. 2013. "La Spesa Sanitaria: Composizione ed Evoluzione." In *RAPPORTO OASI 2013*, edited by CERGAS. Milan: Egea.
- Awortwi, Nicholas. 2012. "Contracting Out Local Government Services to Private Agents: An Analysis of Contract Design and Service Delivery Performance in Ghana." *International Journal of Public Administration* no. 35 (13):886-900. doi: 10.1080/01900692.2012.686033.
- Battaglio Jr, R. Paul, and Christine B. Ledvinka. 2009. "Privatizing Human Resources in the Public Sector." *Review of Public Personnel Administration* no. 29 (3):293-307.
- Bloching, Björn, Harald F Stock, and Jochen Scheel. 2008. "Hospital marketing should focus on physicians: Lessons from Germany." *Journal of Medical Marketing: Device, Diagnostic and Pharmaceutical Marketing* no. 8 (4):303-310.
- Borgonovi, Elio, Giovanni Fattore, and Francesco Longo. 2012. *Management delle Amministrazioni Pubbliche*. Vol. 2. Milano: Egea.
- Boyne, George A. 1998. "Bureaucratic Theory Meets Reality: Public Choice and Service Contracting in U.S. Local Government. (cover story)." *Public administration review* no. 58 (6):474-484.
- Brekke, Kurt R, Tor Helge Holmas, and Odd Rune Straume. 2011. "Reference pricing, competition, and pharmaceutical expenditures: Theory and evidence from a natural experiment." *Journal of Public Economics* no. 95 (7):624-638.
- Buchanan, R. J., J. C. Cappelleri, and R. L. Ohsfeklt. 1991. "The Social Environment and Medicaid Expenditures: Factors Influencing the Level of State Medicaid Spending." *Public administration review* no. 51 (1):67-73.
- Burke, Chris, and Andrew Goddard. 1990. "Internal Markets the Road to Inefficiency?" *Public Administration* no. 68 (3):389-396.
- Chalkley, Martin, and James Malcomson. 1998. "Contracting for Health Services with Unmonitored Quality." *Economic Journal* no. 108 (449):1093-1110.
- Cohen, Michael D., James G. March, and Johan P. Olsen. 1972. "A Garbage Can Model of Organizational Choice." *Administrative Science Quarterly* no. 17 (1):1-25.
- Dabhilkar, Mandar, Lars Bengtsson, Robin von Haartman, and Pär Åhlström. 2009. "Supplier selection or collaboration? Determining factors of performance improvement when outsourcing manufacturing." *Journal of Purchasing & Supply Management* no. 15 (3):143-153. doi: 10.1016/j.pursup.2009.05.005.
- David, Guy, and Arthur J. Chiang. 2009. "The determinants of public versus private provision of Emergency Medical Services." *International Journal of Industrial Organization* no. 27 (2):312-319. doi: 10.1016/j.ijindorg.2008.10.001.
- Enthoven, Alain C. 2004. "Market Forces And Efficient Health Care Systems." *Health affairs* no. 23 (2):25-27.
- Farneti, Federica, and David W. Young. 2008. "A contingency approach to managing outsourcing risk in municipalities." *Public Management Review* no. 10 (1):89-99. doi: 10.1080/14719030701763211.

- Ferlie, E. 2007. "The creation and evolution of quasi markets in the public sector: a problem for strategic management." *Strategic Management Journal* no. 13 (S2):79-97.
- Ferrario, Caterina, and Alberto Zanardi. 2011. "Fiscal decentralization in the Italian NHS: What happens to interregional redistribution?" *Health Policy* no. 100 (1):71-80. doi: 10.1016/j.healthpol.2010.08.016.
- Ferrè, Francesca, Corrado Cuccurullo, and Federico Lega. 2012. "The challenge and the future of health care turnaround plans: Evidence from the Italian experience." *Health Policy* no. 106 (1):3-9. doi: 10.1016/j.healthpol.2012.03.007.
- Gerdtham, Ulf-G, and Mickael Löthgren. 2000. "On stationarity and cointegration of international health expenditure and GDP." *Journal of Health Economics* no. 19 (4):461-475.
- Goodsell, Charles T. 2007. "Six normative principles for the contracting-out debate." *Administration & Society* no. 38 (6):669-688. doi: 10.1177/0095399706293147.
- Granovetter, M. 1985. "Economic action and social structure: the problem of embeddedness." *American journal of sociology*:481-510.
- Guerrero, Isabelle, Philippe R. Mossé, and Vaughan Rogers. 2009. "Hospital investment policy in France: Pathways to efficiency and the efficiency of the pathways." *Health Policy* no. 93 (1):35-40. doi: 10.1016/j.healthpol.2009.05.013.
- Hefetz, Amir, and Mildred E. Warner. 2012. "Contracting or Public Delivery? The Importance of Service, Market, and Management Characteristics." *Journal of Public Administration Research & Theory* no. 22 (2):289-317.
- Hitiris, Theo, and John Posnett. 1992. "The determinants and effects of health expenditure in developed countries." *Journal of health economics* no. 11 (2):173-181.
- Hodges, Ron. 1997. "Competition and Efficiency after Privatization: The Role of the NAO." *Public Money & Management* no. 17 (1):35-42.
- Imbeau, Louis M, François Pétry, and Moktar Lamari. 2001. "Left-right party ideology and government policies: A meta-analysis." *European Journal of Political Research* no. 40 (1):1-29.
- Jensen, Paul H., and Robin E. Stonecash. 2005. "Incentives and the efficiency of public-sector contracts." *Journal of Economic surveys* no. 19 (5):378-787.
- Johnston, Van R., and Paul Seidenstat. 2007. "Contracting Out Government Services: Privatization at the Millenium." *International Journal of Public Administration* no. 30 (3):231-247. doi: 10.1080/01900690601117713.
- Kaboolian, Linda. 1998. "The new public management: Challenging the boundaries of the management vs. administration debate." *Public Administration Review*:189-193.
- Lane, Jan-Erik. 2000. The public sector: concepts, models and approaches: Sage.
- Leland, Suzanne, and Olga Smirnova. 2009. "Reassessing Privatization Strategies 25 Years Later: Revisiting Perry and Babitsky's Comparative Performance Study of Urban Bus Transit Services." *Public Administration Review* no. 69 (5):855-867. doi: 10.1111/j.1540-6210.2009.02035.x.
- Levin, Jonathan, and Steven Tadelis. 2010. "Contracting for Government Services: Theory and Evidence from U.S. Cities." *Journal of Industrial Economics* no. 58 (3):507-541. doi: 10.1111/j.1467-6451.2010.00430.x.
- Lindblom, Charles E. 1959. "The Science of "Muddling Through"." *Public Adm.Rev.* no. 19 (2):79-88.
- Lindblom, Charles E. 1979. "Still Muddling, Not Yet through." *Public administration review* no. 39 (6):517.
- Lo Scalzo, A, A Donatini, L Orzella, A Cicchetti, S Profili, and A Maresso. 2009. "Health care systems in transition: Italy." *Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies*.
- Logan, Mary S. 2000. "Using agency theory to design successful outsourcing relationships." *International Journal of Logistics Management, The* no. 11 (2):21-32.

- Lubitz, James, Liming Cai, Ellen Kramarow, and Harold Lentzner. 2003. "Health, life expectancy, and health care spending among the elderly." *New England Journal of Medicine* no. 349 (11):1048-1055.
- Mailly, R. 1986. "The Impact of Contracting Out in the NHS." Employee Relations no. 8 (1):10-16.
- Murray, J. G., Andrew Erridge, and Neil Rimmer. 2012. "International lessons on austerity strategy." *International Journal of Public Sector Management* no. 25 (4):248-259. doi: 10.1108/09513551211244089.
- Nemec, Juraj, Beata Merickova, and Leos Vitek. 2005. "Contracting-out at local government level." *Public Management Review* no. 7 (4):637-647. doi: 10.1080/14719030500362900.
- Peters, B Guy, and John Pierre. 1998. "Governance without government? Rethinking public administration." *Journal of public administration research and theory* no. 8 (2):223-243.
- Pollitt, Ch, S van Thiel, and Vincentius Martinus Franciscus Homburg. 2007. "New public management in Europe." *Management Online Review*:1-6.
- Pouder, Richard W., and Robert T. Golembiewski. 1996. "Privatizing services in local government: an empirical assessment of efficiency and institutional explanations." *Public Administration Quarterly* no. 20 (1):103-127.
- Prager, Jonas. 1994. "Contracting out government services: Lessons from the private sector." *Public Administration Review* no. 54 (2):176.
- Rehnberg, Clas. 1990. "The organisation of public health care." *University of Linkoping, Linkoping*. Saltman, Richard B, and Josep Figueras. 1997. *European health care reform: analysis of current strategies*: World Health Organization, Regional Office for Europe.
- Snavely, Keith, and Uday Desai. 2010. "Competitive Sourcing in the Federal Civil Service." *American Review of Public Administration* no. 40 (1):83-99.
- Tiemann, Oliver, Jonas Schreyögg, and Reinhard Busse. 2012. "Hospital ownership and efficiency: A review of studies with particular focus on Germany." *Health Policy* no. 104 (2):163-171. doi: 10.1016/j.healthpol.2011.11.010.
- True, James L, Bryan D Jones, and Frank R Baumgartner. 1999. "Punctuated-equilibrium theory: Explaining stability and change in American policymaking." *Theories of the policy process*:97-115.
- Warner, Mildred E., and Amir Hefetz. 2008. "Managing Markets for Public Service: The Role of Mixed Public-Private Delivery of City Services." *Public Administration Review* no. 68 (1):155-166. doi: 10.1111/j.1540-6210.2007.00845.x.
- Williamson, Oliver E. 1973. "Markets and Hierarchies: Some Elementary Considerations." *American Economic Review* no. 63 (2):316-325.
- Williamson, Oliver E. 1975. "Markets and hierarchies." New York:26-30.
- Williamson, Oliver E. 1979. "Transaction-Cost Economics: the Governance of Contractual Relations." *Journal of Law & Economics* no. 22 (2):233-261.
- Williamson, Oliver E. 1985. The economic intstitutions of capitalism: Simon and Schuster.
- Williamson, Oliver E. 1987. "Transaction cost economics: The comparative contracting perspective." *Journal of economic behavior & organization* no. 8 (4):617-625.
- Xingzhu, Liu, R. Hotchkiss David, and Bose Sujata. 2008. "The effectiveness of contracting-out primary health care services in developing countries: a review of the evidence." *Health Policy & Planning* no. 23 (1):1-1.
- Young, Suzanne, and Manuela S Macinati. 2012. "Health Outsourcing/Backsourcing: Case studies in the Australian and Italian health sector." *Public Management Review* no. 14 (6):771-794.
- Zhang, Mengzhong, and Jian Sun. 2012. "Outsourcing in Municipal Governments." *Public Performance & Management Review* no. 35 (4):696-726.
- Zullo, Roland. 2008. "Transit Contracting Reexamined: Determinants of Cost Efficiency and Resource Allocation." *Journal of Public Administration Research & Theory* no. 18 (3):495-515.

Tables and Figures

Figure 1: Models of privatizing and outsourcing

	Low private outsourcing	High private outsourcing		
Low public outsourcing	Public production / delivery	Private outsourcing		
High public outsourcing	Public outsourcing	Mixed Public - Private outsourcing		

Figure 2: Theoretical model

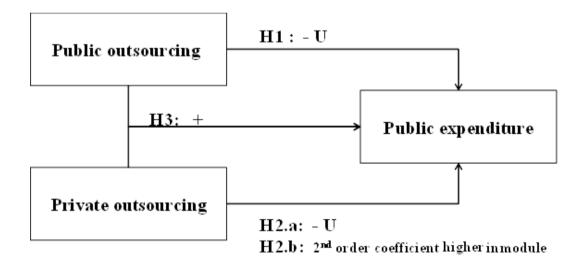
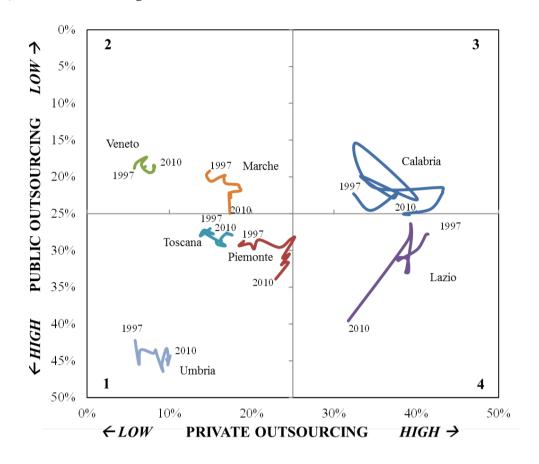


Figure 3: Public and private outsourcing of inpatient hospital service delivery over 14 years (1997-2010) in some Italian regions



Note:

- The complement to 100% of the sum of public outsourcing is the portion of inpatient service delivery held by LHA hospitals;
- The intersection of axes is arbitrary and has only descriptive value;
- Yearly observations have been connected with a smooth line to facilitate the identification of regions;
- In this figure, we do not report years; we only indicate the starting and ending year of the analysis. Even if we lose the direction of change, we are interested in mapping the overall range of regional variation of the outsourcing mix.
- Some regions are not reported for readability reasons (scale and overlapping position).

Figure 4: Scatter charts of observed relationships among public outsourcing, private outsourcing, their interaction and public health expenditures

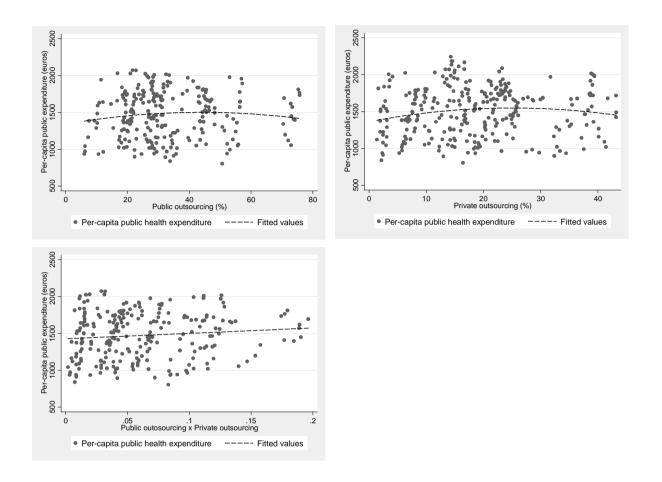
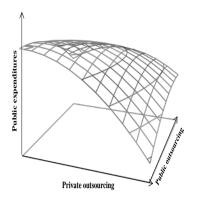


Figure 5: Surface plot of public expenditures with private and public outsourcing



Note: the analysis has only descriptive value and must be considered a complement of the regression analysis. In particular, in these graphs, the impact of the control variables is not eliminated. The simulation was carried out using the estimated coefficients for 2010 and Piemonte (the reference region), allowing both independent variables to range between 0 and 50%. The simulation does not take into account the control variables, and, therefore, the scale on the left axis is not reported.

Table 1: Variables, measures and sources

Variable	Measure	Source		
Per capita healthcare expenditure (ln)	In of per capita public healthcare expenditure	Reports of the Osservatorio sull'Aziendalizzazione della Sanità in Italia (OASI) (various years)		
Public outsourcing (%)	Share of hospital beds managed by public independent hospital enterprises (aziende ospedaliere)	Ministry of Health and OASI observatory		
Private outsourcing (%)	Share of hospital beds managed by private hospitals but reimbursed by the region (privati accreditati)	Ministry of Health and OASI observatory		
Total per capita hospital beds (x 1000 inhabitants)	Sum of hospital beds directly managed by LHAs, hospital beds managed by public hospital enterprises and hospital beds managed by private hospitals but reimbursed by the region, divided by the regional population in thousands	Ministry of Health and OASI observatory		
Per-capita GDP (x 1000 euros)	Total regional annual income per capita measured in thousands of euros	Italian Institute of Statistics (ISTAT)		
% of elderly residents (>65 yo)	% of population with more than 65 years	ISTAT		
Per-capita public health deficit (x 1000 euros)	Per capita regional public health deficit measured in thousands of euros	OASI reports (various years)		
Turnaround plan	1 if region i has an active turnaround plan at time j	OASI reports (various years)		
Left government	Number of months in the year with a left-affiliated regional government	Ministry of internal affairs		
Observations	294			
Number of Regions	21			

Table 2: Descriptive statistics and correlation matrix

N	N Variable		Descriptive statistics			Correlations							
		Mean	Std. Dev.	Min	Max	1	2	3	4	5	6	7	8
1	Per capita public health expenditure	1,508.5	327.8	803.3	2,243.3								
2	Public outsourcing (%)	26.7%	19.0%	0.0%	75.8%	-0.13*							
3	Private outsourcing (%)	17.9%	10.9%	0.0%	43.2%	0.05	0.08						
4	Total per capita hospital beds	4.1	0.8	2.9	6.9	-0.50*	-0.25*	0.02					
5	Per capita GDP (x 1000 euros)	22.4	6.5	10.1	36.4	0.69*	-0.05	-0.12*	-0.17*				
6	% of elderly residents (>65 yo)	19.8	3.0	12.9	28.0	0.36*	0.20*	-0.34*	-0.18*	0.42*			
7	Per-capita public health deficit (x 1 000 euros)	46.9	83.5	-74.5	644.1	0.33*	-0.13*	0.22*	-0.05	-0.01	-0.04		
8	Left government	7.1	5.7	0.0	12.0	0.11	-0.23*	-0.11	-0.05	0.11	0.11	-0.02	
9	Turnaround plan	0.1	0.3	0.0	1.0	0.34*	-0.02	0.25*	-0.24*	-0.05*	0.02	0.29*	-0.13*

^{*} p < 0.05

Table 3: Estimation results

	Deper	ndent variable: Lr	of per capita pu	ıblic health exper	nditures
VARIABLES	(1)	(2)	(3)	(4)	(5)
Public outsourcing (%)			0.373**		0.313*
Public outsourcing (%) – squared			-0.428**		-0.477**
Private outsourcing (%)				0.285*	0.279*
Private outsourcing (%) – squared				-0.671*	-0.840*
Pub. outs. x Priv. outs.					0.605*
Total per capita hospital beds		0.023**	0.019**	0.020**	0.017**
Per capita GDP (x 1000 euros)		-0.009**	-0.009**	-0.010**	-0.010**
% of elderly residents (> 65 yo)		0.007*	0.007*	0.007*	0.006^{\dagger}
Per-capita public health deficit (x 1000 euros)		0.282**	0.293**	0.284**	0.283**
Left government		-0.002**	-0.001*	-0.002**	-0.001*
Turnaround plan		-0.009	$\text{-}0.015^{\dagger}$	-0.009	$\text{-}0.016^{\dagger}$
Yearly dummies	YES	YES	YES	YES	YES
Constant	6.915**	6.822**	6.782**	6.837**	6.817**
Observations Number of regions	294 21	294 21	294 21	294 21	294 21
R-squared (within)	0.970	0.975	0.980	0.980	0.983 15.05**
Log-likelihood chi2 test for nested _ models (d.o.f.)		146.32**	11.11**	15.05**	(vs. Model 3) 8.91* (vs. Model 4)
		(6)	(2)	(2)	(3)

 $[\]begin{array}{ccc} ^{\dagger} & p < 0.10 \\ * & p < 0.05 \\ * * p < 0.01 \end{array}$

GENERAL CONCLUSIONS

The conclusions of this thesis are a reflection of the findings discussed above.

From the discussion of the three essays, it is clear that the major external influences on public sector organizational changes remain business managerialism, although a different vintage from the original NPM-influences. The core NPM envisaged an entrepreneurial, market-oriented society, with a light presence of government on top. Specifically, the northern European variant foresaw a citizens' state with extensive participation facilitated by a modernized system of public law that would guarantee right and duties, while proponents of the central European variant favoured a professional state, modern, efficient and flexible, yet stull uniquely identified with the "higher purposes" of the general interest (Torres, 2004; Pollit and Bouckeart, 2011). However, the precision of the NPM model is questionable. Indeed, intentional reform paths promoting public sector change have developed unsystematically across public administrations, often living uncompleted scenarios (e.g., decentralization and federalism in the INHS). Literature suggests that frequently, the patterns of reform are very rough and approximate, for both political and organizational reasons (Ongaro, 2009; Pollitt and Bouckeart, 2011).

Politically, governments change and may hold different visions of the future, so that, following elections, certain types of reform are de-emphasized and other types given greater salience, or because of contingent political demand or pressures represented by external socio-economic forces. Indeed, trouble for governments may alter the trajectory of reform. For example, in my dissertation the economic, financial and fiscal crisis started in 2008 heightened the need for economies and cuts, and altered the balance of most European countries with regard to their reform priorities, bringing to the fore the trade-off between short-term and long-term goals (Pandey, 2010).

Organizational factors may also intrude to spoil the possibility of a reform patters. Procedural rules, institutional structures, or cultural norms at organization and system level shape the direction and intensity of reform implementation. However, there are frequently implementation difficulties, and these can persuade governments to change instruments or to soften the reform. For example, during the marketization of public healthcare service delivery in Italy the rhetoric of competition was the main driver while the presence of private providers was not homogeneous across the regions and regulation was scant. Thus, an unbalanced and unstructured system emerged and central government soon retreated from the general marketization and moved back towards closely managed providers in an effort to avoid inconsistent patterns of health-care service provision.

Apart from the theoretical and methodological difficulties of studying and analysing unsystematic and unpredictable path of reform change in the public sector, the three essays highlight some crosscutting themes about NPM-style reform in the healthcare sector that followed decentralization and competition frameworks.

First, is the phenomenon of integration, de-integration and re-integration in public sector practice. Re-integration particularly appears as the ultimate opportunity to put back together many elements that NPM separated out into discrete corporate hierarchies, offloading onto local or decentralized civil servants (and citizens) the burden of organizing and delivery public services into usable packages. Re-integration approaches, as the literature suggests, are not simple reruns of the old

centralization phases of centralizations/decentralization cycles, rather they represent an antithetical response to the NPM thesis (Dunlevy et al., 2006). Indeed, re-establishing central processes has been important to reaffirm the role of the state as the main facilitator of solutions, to save duplicated multiple hierarchies (e.g., in public procurement processes), also to help launching large-country initiatives or government-wide programs (e.g., patient medical records) and, more importantly, to preserve the idea of a public service with a distinctive status, culture and conditions moving away from the radical marketizers and anti-state minimizers (Pollitt and Bouckeart, 2011).

As presented in the first and last essay, the rollback of decentralization has been achieved in the Italian healthcare sector via re-assimilation of budgetary and expenditure control competencies and responsibilities into cohesive central departments (at regional and national level) (Essay 1), and reimposition of cooperative structure on healthcare service delivery that were previously encouraged to be competitive (Essay 3). Specifically, in the case of the INHS, the system was designed to be a very integrated system, with virtually all services under the control of Local Health Authorities (ASLs). Along the reform trends of the 1990s the INHS was partly de-integrated, mainly by making hospitals independent of ASLs with a moderate attempt to promote a quasi-market, to better recognize the role of private providers and because the idea of the purchaser-provider split inspired Italian policy making. Currently, however, most regional policies seem to have returned to integration, namely through the re-attribution of some hospitals to ASLs, the concentration of purchasing activities in regional or supra-organizational entities and the enlargement of the size of ASLs⁵². In addition, in the last ten years most regional authorities have strengthened control over their providers and have increased their grip over provider organizations, which in turn, have lost most of their organizational autonomy. Also, this trend towards re-integration has gained fuel probably due to the general conditions of austerity and the search for savings.

Indeed, a second emerging reform subtheme across European public administrations is the aggressive squeezing of costs. This is true almost across all public sectors and countries. In the last five years European healthcare systems have been targeted by a number of policies aimed at containing or even reducing health expenditure without reducing the provision of health services to patients. To a certain extent, these policies have been effective as expenditure are now under strict control but due to the long period of cost cutbacks there are signals that the economic crisis has worsened some health outcome indicators and increased demand for a variety of services (e.g., waiting times are on the rise and continuity of care and intermediate care for chronic diseases). Thus, the current largest challenge facing health systems is to achieve budgetary goals without reducing the provision of health services to patients and assure homogeneity of level and quality of service provision across healthcare providers. Specifically, a critical challenge for the Italian healthcare system includes ensuring equity across regions, where gaps in service provision and health system performance persist as well as ensuring the quality of professionals managing healthcare facilities, promoting group practice and other integrated care organizational models in primary care, and ensuring that the concentration of organizational control by regions of health care providers does not stifle innovation.

⁵² The re-integration of healthcare service is also due to the search for better combined care pathways that can overcome barriers deriving from the involvement of different organizations in treating the same case. It is clear that patients increasingly need a variety of providers working in a co-ordinated way and that such co-ordination is essential to ensure quality of care as well as cost containment.

Annex 1 Historical background and recent reforms in Italy's health care system.

1861-1920	Autonomous mutual aid associations are established for artisans and workers; the Catholic Church
1001 1/20	and charitable institutions establish several health care providers; provincial and municipal networks
	provide social assistance to the needy and disabled.
1898	Insurance for occupational accidents become compulsory for the first time.
1904, 1917	Insurance becomes compulsory in industry and agriculture, respectively.
1923	The right to hospital care for the needy, indigent population is guaranteed for the first time.
1925	A national body in charge of insurance for the employees of local authorities is created (INADEL).
1926	A small number of centres for cancer diagnostic testing are created.
1927	Provincial authorities for tuberculosis treatment are created, and tuberculosis insurance becomes compulsory.
1926-1929	Health care provisions for workers become mandatory for the government to approve collective labor force agreements.
1942	A national body is created to guarantee social insurance and health care for public employees (ENPAS).
1943	A national body for private employees' health care insurance is created (INAM).
1958	An independent Ministry of Health is created.
1968	Public institutions providing hospital care are established as autonomous entities (Law 132/1968).
1974-1975	Responsibility for hospital management is transferred to the regions (Laws 386/1974 and 382/1975).
1978	A national health service (SSN) is established by Law 833. Health insurance funds are abolished (First reform of Italian health care).
1992-1993	Second reform of the SSN (Legislative Decrees 502/1992 and 517/1993). Devolution of health care to regions begins; managerial autonomy granted to local health authorities (ASLs) and hospitals (AOs); elements of an internal market are introduced.
1994	First National Health Plan (1994–1996). The plan defines national health targets and establishes that a uniform core benefit package ('essential levels of assistance, LEAs) should be guaranteed to all citizens.
1997	Further steps towards federalism: Law 51/1997 devolves some key political powers to the regions; Law 446/1997 initiates the process of fiscal federalism.
1998	Second National Health Plan (1998–2000).
1999	Third reform of the SSN (Decree 229/1999). Further development of devolution; strengthening of cooperation and regulation to partially reorient the internal market; establishment of tools to define the core benefit package; regulation of the introduction of clinical guidelines for quality in health care.
2000	Decree 56/2000 replaces (in theory) the National Health Fund with a National Solidarity Fund; plan for fiscal federalism to be operative in 2013.
2001	Constitutional Law No. 3 modifies the second part of the Italian Constitution (Title V), giving regions with more powers.
	Law 405/2001 introduces new regional governance tools and stronger responsibility in the control of

	health care expenditure.
2003	Third National Health Plan (2003–2005).
2005	Memorandum of understanding between the state and the regions reforms the health care financing system and introduces new mandatory financial rules.
2006	Fourth National Health Plan (2006–2008). In June the newly formed Centre-left government outlines the policy programme <i>A New Deal for Health</i> . National Budget Law 2007 introduces financial turnaround (recovery) for regions with deficits
2009	Law 42/2009 provides the framework for fiscal federalism. In the following years, a series of decrees define the distribution of local taxes to the tiers of government and the criteria for central equalization and redistribution of funds.
2012	A spending review of the national budget includes cuts to health spending and a reduction of hospital beds per inhabitant.
2012	Decree 158 ("Balduzzi Law") modernizes the SSN on several levels: continuity of care; selection by merit of general directors and head physicians; simplifications for homeopathic and innovative pharmaceuticals; rationalized pharmaceutical and capital spending.

REFERENCES

Anessi Pessina E. and Cantù E. (2006), Whither managerialism in the Italian National Health Service?, *International Journal of Health Planning and Management*, 21: 327-355.

Anessi Pessina E., Cantu E., Jommi C. (2004), Phasing Out Market Mechanisms in the Italian National Health Service, *Public Money & Management*, 24;5:309-316.

Armeni P. and Ferré F. (2013), La spesa sanitaria: composizione ed evoluzione, in E. Cantù, (a cura di), *L'aziendalizzazione della sanità in Italia: Rapporto OASI 2013*, Milano, EGEA.

Armingeon, K. (2012), The politics of fiscal responses to the crisis of 2008–2009", *Governance*, 25(4): 543-565.

Bartle J., (1996), Coping with Cutbacks. City Response to Aid Cuts in New York State, *State and Local Government Review*, 28(1): 38-48.

Bennett C. and Ferlie E. (1996), Contracting in theory and in practice: some evidence from the NHS, *Public Administration* 74(1): 49-66.

Blatter J. and Haverland M. (2012), *Two or three approaches to explanatory case study research*, Paper presented at the Annual Meeting of the American Political Science Association, New Orleans, August 30-September 2012. Panel 8-10 "Quantitative Qualitative Research".

Borgonovi E. (2001), Principi e sistemi aziendali per le amministrazioni pubbliche, EGEA, Milano.

Cantù E., Ferré F. and Sicilia M. (2010), Regioni e aziende sanitarie private accreditate: quali meccanismi di governo?, in Anessi Pessina E. e Cantù E. (Eds), *L'aziendalizzazione della sanità in Italia. Rapporto OASI 2010*, Milano, EGEA.

Denscombe M. (2007), *The good research guide for small-scale social research projects*, Third Edition, Open University Press, McGraw Hill.

Diamond J. and Liddle J. (2012), *Emerging and Potential Trends in Public Management: An Age of Austerity*, Vol. 1, Emerald Group Publishing.

Dunleavy P. (1997), The globalization of public services production: Can government be "best in world"? *Public Policy and Administration* 9 (2): 16-46.

Dunleavy P., Margetts H., Bastow S. and Tinkler J. (2006), New public management is dead—long live digital-era governance, *Journal of public administration research and theory* 16 (3): 467-494.

Enthoven A.C. (2004), Market Forces And Efficient Health Care Systems, *Health affairs*, 23 (2):25-27.

Fattore G. (1999) Clarifying the scope of Italian NHS coverage. Is it feasible? Is it desirable? *Health Policy*, 50:123–142.

Fattore G. and Torbica A. (2006), Inpatient reimbursement system in Italy: How do tariffs related to costs? *Health Care Management Science*, 9: 251-258.

Ferlie E. (1992), The Creation and Evolution of Quasi Markets in the Public Sector: A Problem for Strategic Management, *Strategic Management Journal*, 13, Special Issue: Fundamental Themes in Strategy Process Research: 79-97.

Ferlie E. et al (1996), The New Public Management in Action, Oxford: Oxford University Press.

Ferlie E., FitzGerald L., McGivern G., Dopson S. and Bennett C. (2011), Public Policy Networks and 'Wicked Problems': A Nascent Solution?, *Public Administration*, 89(2), pp307-324.

Ferrera M. (1995), The rise and fall of democratic universalism. Health care reform in Italy. *Journal of Health Politics, Policy and Law*, 20(2): 275-302.

France G. and Taroni F. (2005), The evolution of health policy-making in Italy, *Journal of Health Politics, Policy and Law*, 30(1-2): 169-188.

Gephart R. (1999), Paradigms and Research Methods, *Academy of Management, Research Method Forum*, Vol.4 (1) Basic Books.

Gilson L. (2003), Trust and health care as a social institution, *Social Science and Medicine*, 56: 1452–1468.

Hammerschmid G., Stimac V. and Van de Walle S. (2013), Internal and External Use of Performance Information in Public Organizations: Results from an international survey, *Public Money and Management*, 33(4): 261-268.

Hood C. (1991), A public management for all seasons?, *Public Administration*, 69(1): 3-19.

Hood C. (1998), *The art of the state: Culture, rhetoric, and public management*. Oxford University Press.

Hood C. and Peters G. (2004). The middle aging of new public management: into the age of paradox?, *Journal of Public Administration Research and Theory*, 14(3), 267-282.

Hsaio C. and Yanan W. (2006), Panel data analysis – advantages and challenges, *WISE Working Paper Series* WISEP0602, Xiamen University, China.

Jensen P.H. and Stonecash R.E. (2005), Incentives and the efficiency of public-sector contracts, *Journal of Economic surveys*, 19(5): 378-787.

Jommi C., Cantù E. and Anessi-Pessina E. (2001), New funding arrangements in the Italian National Health Service, *International Journal Health Planning Management*, 16(4): 347-68.

Jowell R (1998), How comparative is comparative research?, *The American Behavioral Scientist*, 42(2): 168-177.

Kickert W. (1997), Public management in the United States and Europe, in Kickert W. ed., *Public Management and Administrative Reform in Western Europe*, Edward Elgar, UK.

Levine C.H. (1978). Organizational decline and cutback management, *Public Administration Review*, 38(4): 316-325.

Levin J. and Tadelis S. (2010), Contracting for Government Services: Theory and Evidence from U.S. Cities, *Journal of Industrial Economics*, 58 (3):507-541.

Long, J. S., & Freese, J. (2006). Regression models for categorical dependent variables using Stata. Stata press.

Mapelli V. (1999), Il sistema sanitario italiano. icon, 39(051), 256011.

Macneil I.R. (1977), Contracts: adjustment of long-term economic relations under classical, neoclassical, and relational contract law. Nw. UL Rev., 72, 854.

Mladovsky P., Srivastava D., Cylus J., Karanikolos M., Evetovits T., Thomson S. and McKee M. (2012), Health Systems and the Financial Crisis. *Eurohealth* Vol. 18, No. 1.

OECD (1997), *Managing across levels of government*, Paris. Available at http://www.oecd.org/governance/budgeting/1902308.pdf

OECD (2013), Health at a Glance 2013: OECD Indicators, OECD Publishing. Available at http://www.oecd.org/health/health-systems/health-at-a-glance.htm

Ongaro E. (2009), *Public management reform and modernization: trajectories of administrative change in Italy, France, Greece, Portugal and Spain*. Edward Elgar Publishing.

Painter M. (2001), Policy capacity and the effects of new public management, in T. Christensen and P. Laegreid eds, *New public management. The transformation of ideas and practice*, Ashgate, Hampshire. England and Burlington, USA: 209-229.

Pammer W.J. (1990), Managing fiscal strain in major American cities: Understanding retrenchment in the public sector. New York: Greenwood Press.

Pandey S. (2010), Cutback management and the paradox of publicness, *Public Administration Review*, 70(4): 564-571.

Pollitt C. (2010). Cuts and Reforms – Public Services as We Move into a New Era, *Society and Economy* 32(1): 17-31.

Pollitt C. and Bouckaert G. (2011), *Public Management Reform: A comparative analysis-new public management, governance, and the Neo-Weberian state*. Oxford University Press.

Pollitt C., van Thiel S. and Homburg V. (2007), New Public Management in Europe, *Management Online Review*, ESCP-EAP European School of Management.

Raudla R., Savi R. and Randma-Liiv T. (2013), Literature review on cutback management, COCOPS Research Reports, available at: http://www.cocops.eu/wp-content/uploads/2013/03/COCOPS_Deliverable_7_1.pdf

Ring P.S. and Van De Ven A.H. (1992), Structuring Cooperative Relationships between Organizations, *Strategic Management Journal*, 13(7): 483-498.

Robson C. (2002), Real world research: a resource for social scientists and practitioner-researchers, 2nd ed., Oxford, Blackwell Publishing.

Rondinelli D. (1981), Government Decentralization in Comparative Perspective: Theory and Practice in Developing Countries, *International Review of Administrative Science*, 47(2): 133-145.

Saltman R.B, and Figueras J. (1997), *European health care reform: analysis of current strategies*: World Health Organization, Regional Office for Europe.

Shadish W.R., Cook T.D. and Campbell D.T. (2002), *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Boston: Houghton-Mifflin.

Sheikh K., Gilson L., Agyepong I.A., Hanson K., Sengooba F. (2011), Building the Field of Health Policy and Systems Research: Framing the Questions, *PLoS Med* 8(8): e1001073.

Sherwood F.P. (1969), Devolution as a problem of organizational strategy, in R.T. Daland (ed.), *Comparative Urban Research*: 60-87, Sage, Beverly Hills.

Singleton R.A. and Straits C.B. (2005), *Approaches to Social Research*, Chapter 2 The Nature of Science. Oxford University Press.

Survey Research Center (2010), *Guidelines for Best Practice in Cross-Cultural Surveys*. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan, available at http://ccsg.isr.umich.edu/pdf/FullGuidelines1301.pdf

Taroni F. (1996), *DR/ROD e sistemi di pagamento degli ospedali*. Roma. Il Pensiero Scientifico Editore.

Thomson S., Figueras J., Evetovits T., Jowett M., Mladovsky P., Maresso A., Cylus J., Karanikolos M. and Hans Kluge (2014), Economic crisis, health systems and health in Europe: impact and implications for policy, *Policy Summer N.12 WHO Regional Office for Europe and European Observatory on Health Systems and Policies*.

Torres L. (2004) Trajectories in public administration reforms in European Continental countries, *Australian Journal of Public Administration*, 63(3): 99-112.

Trochim W. M. K. (2005), Research Methods: The Concise Knowledge. Atomicdog publishing.

Van de Walle S. and Jilke S. (2012), Savings in public services after the crisis: a multilevel analysis of public preferences in the EU27, COCOPS Working Paper No. 8 July 2012, available at http://www.cocops.eu/wp-content/uploads/2012/08/COCOPS_workingpaper_No8.pdf.

Vininga A.R. and Globermanb S. (1999), "Contracting-out health care services: a conceptual framework", *Health Policy*, 46(2), 77-96.

Williamson O.E. (1973), Markets and Hierarchies: Some Elementary Considerations." *American Economic Review*, 63 (2): 316-325.

Williamson O.E. (1975), Markets and hierarchies, New York: 26-30.

Zullo R. (2008), Transit Contracting Reexamined: Determinants of Cost Efficiency and Resource Allocation, *Journal of Public Administration Research & Theory*, 18 (3):495-515.

LIST OF ACADEMIC PUBLICATIONS January 2012- December 2014

International Peer-Reviewed Journal Articles							
TITLE	AUTHORS	JOURNAL					
The challenge and the future of health care turnaround plans: evidence from the Italian experience	Ongaro E., Ferré Francesca and Fattore G.	Health Policy: <i>under review</i> Impact Factor: 1.725					
A critical review of economics evaluation studies of interventions promoting healthier diets	Fattore G., <u>Ferré Francesca</u> , Meregaglia M., Fattore E. and Agostoni C.	Nutrition Reviews (2014) 72(11): 691–706 Impact Factor: 5.541					
Generating Appropriate Clinical Data for Value Assessment of Medical Devices: What Role Does Regulation Play	Tarricone R., Torbica A., Ferrè Francesca and Drummond M.	Expert Review of Pharmacoeconomics and Outcomes Research (2014) 14(5): 707-718 Impact Factor: 1.870					
Cost-effectiveness of a programme of screening and brief interventions for alchool in primary care in Italy	Angus C., Scafato E., Ghirini S., Torbica A., Ferrè Francesca, Struzzo P., Purshouse R. and Brennan A.	BMC Family Practices (2014) 15-26. Impact Factor: 1.74					
The challenge and the future of health care turnaround plans: evidence from the Italian experience	Ferrè Francesca, Cuccurullo C. and Lega F.	Health Policy (2012) 106: 3-9 Impact Factor: 1.725					
The financial crisis in Italy: implications for the healthcare sector	De Belvis A.G., Ferrè Francesca, Specchia M.L., Valerio L., Fattore G. and Ricciardi W.	Health Policy (2012) 106:10-16 Impact Factor: 1.725					
National Peer-Reviewed Journal Articles							
Lo screening e l'intervento breve in medicina generale: un modello di analisi economica sui bevitori a rischio	P.Struzzo, C. Angus, E. Scafato, S. Ghirini, A. Torbica, <u>Francesca Ferrè</u> , F. Scafuri, R. Purshouse and A. Brennan	Politiche Sanitarie (2014) 15 (2): 77-83					
La presa in carico dei pazienti cronici: il disegno dei CReG lombardi e i possibili scenari di governance	F. Longo, C. Carbone, Ferrè Francesca and A. Ricci	Mecosan (2013) 86: 25-44					
La mobilità dei pazienti nei conti economici delle aziende sanitarie pubbliche	Anessi Pessina E., <u>Ferré</u> <u>Francesca</u> and Sicilia M.	Monitor (2012) 29 (Suppl 9): 45-55					
Book and Book chapters							
Italy: Health system review	Ferrè Francesca, De Belvis A.G., Valerio L., Longhi S., Lazzari A., Fattore G., Ricciardi W. and Maresso A.	Health Systems in Transition, 2014, 16(4):1–168.					