From Reluctant Privatization to Municipal Capitalism: an Overview on Ownership, Political Connections and Decentralization

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Abstract

Starting from a few considerations on the phenomenon of municipal capitalism, a trait which characterizes many local governments in Italy and Europe, this paper presents a selective survey of some important topics in regulation. The most relevant contributions on privatization, political connections and accountability are included, together with lessons on decentralization, to show how these elements can be applied in unison to deal with the issues presented in this paper.

JEL classification: D72, H41, H70, L20.
Keywords: regulation, decentralization, reluctant privatization, municipal capitalism.

1 Introduction

Public services, for many decades over the past century, have been provided by governments, especially in the case of utilities. Utilities usually supply products and services through a network infrastructure which connects them to every user; and they are usually vertically integrated monopolistic firms (they produce, supply and distribute services and products to their final costumers).

State-owned enterprises supplied those services monopolistically, exploiting the economies of scope and scale that characterized their provision, and supplying universal access at uniform tariffs which were aimed at redistributing between rich and poor users. These services

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are notably essential for households and firms (examples are gas, electricity and water) for consumption, or as inputs for production. This is one of the main reasons why, for most of the last century, they were under public ownership.

Given that the economic aspect of these industries is closely related to the public welfare (equity issues and public service provision), pricing, quality control, market access, investment levels, and universal service obligations have always been the regulator's areas of main concern. Hence, in order to reach important goals such as affordability and efficiency, these services have been subject to various regulatory rules, which were managed and enforced by regulatory agencies.

It is quite interesting to note that with the privatization process, the European Union started to use its influence on network industries. Its main purpose, together with liberalization, has been to provide a harmonized framework for regulation throughout the European Union. This has implied a shift of competences from the national to the European level, even if Member States still have the task of implementing the sectoral legislation defined by the European Union. The wave of privatization started in the early 1980s in the United Kingdom, and has spread throughout the European Continent within ten years. This trend is due to an attempt of achieving some important objectives like: improving the public sector budget, increasing competition in the involved sectors (and consequently decreasing prices while increasing the quality of services) and generating higher levels of investment. Indeed, the trend over the past twenty years has been to shift from public ownership of companies and the use of regulation, to the use of market mechanisms and incentives to pursue public interest goals. However, it is important to notice that privatization in some cases has not been completed, since governments in many situations still retain important shares in the firms they should have completely privatized, especially at the local level.

This paper attempts to show how the economic inefficiencies that usually characterize the regulatory process interact with several forms of contractual incompleteness which become apparent through diverse actions undertaken by politicians (i.e. limited commitment, non-benevolent behavior). Within this framework, this interaction can change if various vertical levels of government are introduced. Many elements contribute to making a central or a local politician more suitable to dealing with a regulated firm, and certainly, deciding at which level is the best to allocate the regulatory power is fundamental and should be taken with care. These elements should be used to analyse an important phenomenon that characterizes Italy and other European countries. Privatization has just partly or 'reluctantly' been carried out (i.e. governments still retain high shares in the privatized firms), especially at lower levels of government.

The structure of this paper is as follows. Section II provides a description and some data on the phenomena of reluctant privatization and municipal capitalism. Section III addresses ownership structure and its relation with opportunistic behaviors of politicians. Section IV depicts the relations between politicians and firms, and the problems of capture and accountability. Finally, Section V briefly outlines the main contributions in the literature on federalism, and Section VI provides the main conclusions.

2 Municipal capitalism and reluctant privatization

Starting with the UK in the 1980s, countries all over the world began privatizing firms, with the justification of rationalizing and reducing public expenditure, in particular when government finances were under pressure (La Porta et al., 1999), but also for obtaining easier access to capital markets with lower interest payments (thanks to improved credit ratings) given that privatization is seen as a signal of reducing political risk (Perotti and Van Oijen, 2001). Moreover, a change in ownership is associated with a change in property rights, and hence in incentives for the manager and a greater firm's performance (Vickers and Yarrow, 1991). So why do governments, especially at local level, still own shares in these privatized firms?

In Bortolotti and Milella (2006), the data analyzed shows that governments still control (through voting rights and/or golden shares) a large portion of these privatized firms, particularly in strategic sectors characterized by bigger and more valuable companies. Bortolotti and Faccio (2004) show that even if government shares have not changed over time, this phenomenon -that they define as *reluctant privatization*- does not seem to impact a firm's market value or its performance.

Reluctant privatization is the phenomenon that characterizes State-Owned Enterprises (SOEs), involving the transfer of ownership rights but not of control rights. Over the 1996-2000 period considered by Bortolotti and Faccio, the share of privatized firms among OECD countries that have the State as the larger shareholder (i.e. possessing at least 10% of the voting rights) has decreased only from 35% to 30%; and of these firms when the State has a golden share (especially if it is not the larger shareholder) the reduction is even less.

The fact that the government is a large shareholder in these firms decreases the agency costs of managerial control (Jensen and Meckling, 1976), but also the benefits of having private investors. In addition, these firms usually receive special treatment (Stigler, 1971; Shleifer and Vishny, 1994; Boycko et al., 1996). Thus, a privatized firm which is still under government influence is likely to be subject to conflicting incentives from private shareholders and politicians (Boubakri et al., 2008), and could also receive less benefits from a reform; hence it is not clear if the fact that privatization has been reluctant makes these firms more valuable.

One would think that a private (or fully privatized) firm should have a higher market value than one which is reluctant to privatize, because while the first has private shareholders who want to maximize their stakes and so they push for profits and efficiency maximization (Bös, 1992; Vickers and Yarrow, 1988), the second has the State as main shareholder which has also other objectives (Shapiro and Willig, 1990; Bös, 1992; Schmidt, 1996). However, this issue is likely to be affected by potential endogeneity: the government's decision on the size of its share in the firm may depend precisely on the firm's market value. For example, Boubakri et al. (2005) show that, in developing countries, privatized banks are associated with lower efficiency and solvency with respect to public banks. This seems to be in contrast with the findings of La Porta et al. (2002), but it can be taken as a sign that the government doesn't (completely) privatize its most profitable and valuable firms. This last consideration also seems to find confirmation in the empirical analysis by Bortolotti and Faccio. The fact that high stakes are still in government hands does not seem to negatively affect performance and the market evaluation of the (reluctantly) privatized firm[1] with respect to its private counterparts. Quite unexpectedly, fully privatized and disinvested firms are associated with lower market value. These results suggest that more work should be done to empirically support the political perspective.

The political factor, used by Bortolotti and Faccio as an instrument against endogeneity, seems to be very important not only in the share, but also in the timing of privatization. Bortolotti and Pinotti (2007) link this phenomenon to the executive instability caused by political fragmentation, which leaves more bargaining power to groups that would suffer from the distributional consequences of privatization. They find confirmation of these assumptions in their empirical analysis covering the 1977-2002 period, with the additional consideration that a proportional electoral system also seems to play an important role in the delay.

Why is the political factor so important in understanding deviations during privatization? Branco and Mello (1991) and Perotti (1995) analyze sale methods and share prices in privatization in a signaling game between government and investors: the main difference in their models is that in the second case, incentives and profitability are endogenized, but the re-

[1] The measures used to approximate the firm's market value and its performance are respectively the market-to-book ratio and the stock price return.

sults are similar. Perotti noted that the sale of SOE shares to private investors are incredibly gradual and tend to be underpriced. In order to explain this he assumes, in his theoretical model, that even under privatization, a populist government can still try to interfere in the allocation of the firm's value, adopting a redistributive policy (i.e. by distributing a fraction of the firm's 'private' profits). Jones et al. (1999) find empirical support for this model: the higher the portion of initial shares sold, the higher the underpricing required by investors, and this seems to be linked to their concern for ex-post interference.

In Perotti, with limited information on the type of government available to private investors, a partial sale, and underpricing are considered signals of a committed government. The government's 'patience' reflects its commitment, even if the firm's value and the managerial incentives are maximized when a firm is completely sold in the first place (this is what happens with complete information). It is interesting that Boubakri et al. (2009) empirically demonstrate that partial State ownership is associated with a negative effect on profitability; the effect is even lower if the government is right-wing. They argue that this is linked to the perception that a right-wing government is more market-oriented and more committed to privatization dampening the drawbacks of partial privatization.

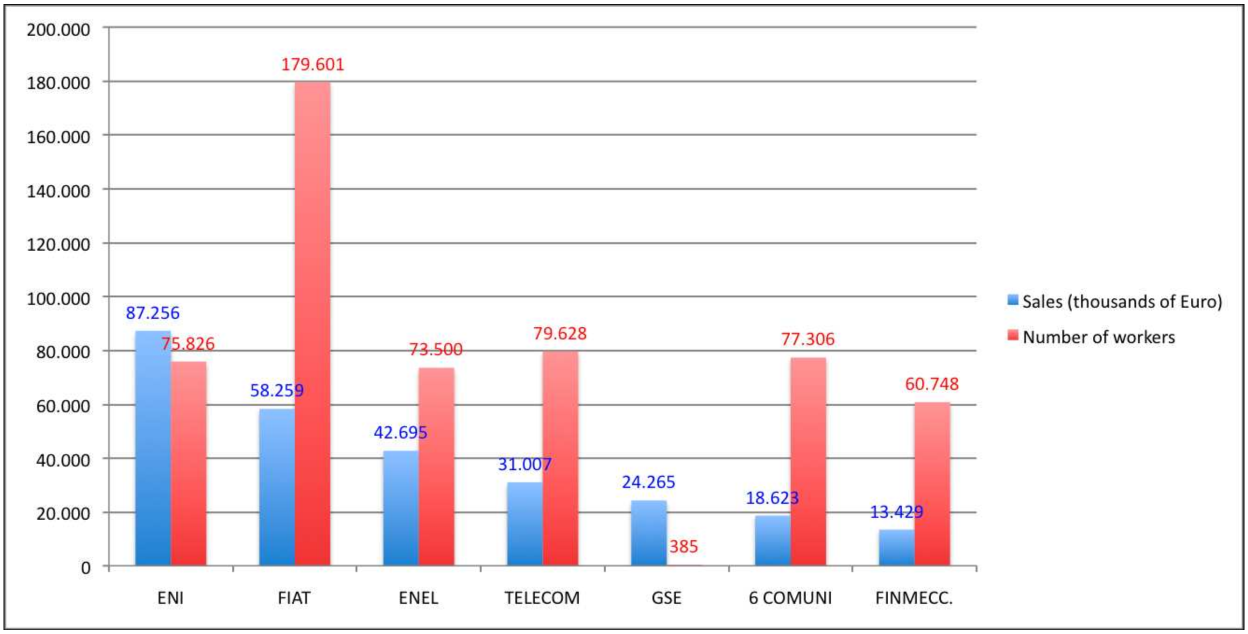
In Biais and Perotti (2002), underpricing is used by conservative parties to allocate a significant share of ownership to the median class to increase political support, making these citizens averse to electing a left-wing politician whose redistributive policies would reduce the value of their investment. This strategic behavior is called 'Machiavellian privatization'.

Nevertheless, in these analyses it is assumed that in the end a firm will be completely privatized. Given that –as we already noted– this is not always the case in reality, some effort should be made to explain the government motivations for halting the privatization process.

It can also be true that the gradualness of the sales is related to the contemporaneous level of risk in the public finances. Selling a portion of shares, especially of large firms, can be a way of increasing revenue (Vickers and Yarrow, 1991; Bortolotti et al., 2003), in particular when budget rules are more stringent (Barucci and Pierobon, 2007), also because the sale of shares can stop when the problem is less pressing, and it can be used again when things worsen.

Finally, it is important to highlight that different levels of government are involved: national government, government agencies, but also local authorities (Bortolotti and Faccio, 2008). Boubakri et al. (2009) show that, over time, government control is mostly relinquished to local institutions which also tend to augment their shares; and this seems to have a positive effect on the firm's performance. This is particularly relevant for Italy at

Fig. 1: The six biggest Italian municipalities compared to the most important industrial groups in Italy.



Source: G. Barbaresco (2009), 'Le società controllate dai maggior comuni Italiani: qualità ed efficienza nella fornitura dei servizi', *Economia e Politica Industriale* (2).

the municipal level where the *comune* (the smallest and most fundamental administrative entity) is the main shareholder in the majority of cases. In one of its latest publications on the topic, Unioncamere reported that in March 2009 the number of firms with the participation of local jurisdictions was around 5,100: 54% were municipal-only participations, while municipal participations together with other local governments was 85% of the total local participations; each *comune* participated on average in 7 firms. In 2007, the six largest *comuni* formed the fourth biggest Italian industrial group based on the number of workers, and the sixth regarding sales (see Figure 1).

The ownership and control of firms by the *comuni* has been defined as 'municipal capitalism' by Bianchi et al. (2009); for some local government entities, the dividends distributed from the participated firms are an important source of income. Firms operating in some sectors (i.e. gas, electricity, water) are highly profitable, allowing local administrators not only to counterbalance the negative results of the firms operating in other (costly) sectors, but also to increase their resources through dividends, and to use them for other purposes. This is a means through which *comuni* can soften their budget constraints, beyond the so-called *Patto di Stabilità Interno*[2]. In some cases, the fact that these firms are so valuable reflects

[2] The main objective of this bunch of fiscal rules is to control the level of debt in local jurisdictions. This can explain why this phenomenon is mainly municipal: when the budget constraint imposed by higher levels

Tab. 1: Financial cash flow (per citizen), quality of service (in scoring points) and firms' governance in 2007.

	Bologna	**Brescia**	**Milano**	**Napoli**	**Roma**	**Torino**
Investments	183	1.443	340	55	142	145
Dividends	33	744	82	1	25	25
Transfers	-226	-94	-388	-410	-217	-357
Losses	0	0	0	-12	0	0
Balance	-10	+2,093	+34	-366	-50	+83
Scoring local public service	71	75	62	38	41	70
N. of administrators						
- appointed by the Mayor (a)	34	28	48	55	54	60
- of whom apical (b)	11	7	16	25	22	18
Mayor's appointment intensity of power ($= \frac{b}{a} * 100$)	32.4	25	33.3	45.5	40.7	30

Source: G. Barbaresco (2009).

the fact that they work in a more favourable setting, perhaps due to the special treatment they receive from their public shareholder, acting also as regulator. Moreover, as noted by Goldstein (2003), the fact that if after privatization, the government has not relinquished control, the menace of takeovers or of market discipline cannot function as it should, and the possibility of introducing competition in the public utilities sector has vanished.

Furthermore, these firms are sometimes used by politicians for objectives which are different from economic ones, since they are a source of power for them. This is reflected by the fact that participation is usually majority-based, so that the public shareholder has control of the firm. Boubakri et al. (2009) show that firms in strategic sectors (i.e. typically subject to regulatory, institutional and political constraints) are only partially privatized; this allows the government to retain some influence on these firms, also by appointing politicians in key positions in the firm. In this regard, it is interesting to look not only at the quantity of dividends each citizen received, but also at the relation between the city's Mayor and the members on the managing committees. These issues are visible in Table 1 looking at the six largest Italian *comuni* represented in Figure 1.

As mentioned above, municipal capitalism can be seen as a solution to (local) budgetary problems. However, the dividend puzzle (Black, 1976) is considered a result to the agency problem between the firm's manager and the shareholders. Minority shareholders prefer to be paid their dividends, since they fear the retained profits could be exploited by the manager

of government is too high, having an alternative source of income outside of the ordinary ones can be a wise move.

for personal use (Jensen, 1986; Gomes, 2000). According to this theory, depending whether it is a matter of pressure or credibility (La Porta et al., 2000), high dividends are paid to protect the minority shareholder. Moreover, this problem is likely to be exacerbated, as in the case at hand, when the governmental shareholder also appoints the firm's managers and/or when ownership and control rights diverge, so that dividends can be used by managers as a signal of their commitment to abstain from expropriation (Faccio et al., 2001).

In general, municipal capitalism gives rise to a twofold issue. The fact that local governments still retain high shares in the firms they should have privatized and still regulate, decreases the transparency of their relation with the firm's manager (since they can distribute rents across players and also have better access to the manager's information); and it also decreases the transparency of their commitment to their political mandate and to their electorate, since the local government's political orientation can change the effect on outcomes, given that its political agenda is aligned/disaligned with its objectives as a shareholder. These problems will be reviewed one at a time in the following Sections. It should be noted that, in spite of the importance of the topic, these elements have still not been put together to show which are the consequences for regulation of public services in this kind of context.

Moreover, empirical studies only treat reluctant privatization at the central level, or mention marginally that it is becoming an increasingly local problem. The studies we mentioned in this Section are summarized in Table 2, from which it is easy to identify the points lacking in the academic debate.

Tab. 2: Studies on reluctant privatization: empirical studies by decentralization level.

Central	*Data and period*	*Methodology*	*Main results regarding privatization*
Bortolotti and Pinotti (2007)	21 OECD countries; 1977-2002	duration analysis	Delays in privatization increase with the number of political parties and in countries with proportional electoral systems.
Bortolotti and Faccio (2004)	141 privatized and 141 matching firms in OECD countries; 1996-2000	random effect model	Governments still own large stakes in firms after privatization, but this seems to have no negative effect on either adjusted market value or stock price performance.
Central & local	*Data and period*	*Methodology*	*Main results regarding privatization*
Boubakri et al. (2005)	209 privatized firms in 25 emerging and 14 industrialized countries; 1980-2001	fixed effect model and IV for endogeneity of ownership	Government ownership diminishes over time in favor of individuals, foreign investors, and especially local authorities; private ownership tends to concentrate over time. Ownership concentration depends on the firm, sectoral characteristics and the method of privatization, but also on the level of institutional development and investor protection.
Boubakri et al. (2009)	245 privatized firms in 27 developing and 14 developed countries; 1980-2002	fixed-effect logit and Tobit regressions	Politically connected firms are located in major cities and operate in regulated sectors. The likelihood of observing political connections in these firms increases (decreases) with government residual (foreign) ownership. Political fractionalization and tenure, together with judicial independence are also important variables. Politically-connected firms exhibit a poor accounting performance compared to their non-connected counterparts.
Local	*Data and period*	*Methodology*	*Main results regarding privatization*
Mediobanca & Fondazione Civicum	Six Italian *comuni*; 2006-2009	case study	Municipalities still retain high shares in privatized firms in strategic sectors; these firms are important for added value, investments, productivity, dividends and received transfers. Importance of the Mayor in the appointment of the manager.
Bianchi et al. (2009)	711 Italian firms; 2005	case study & statistics	Evidence of the importance of municipal capitalism in terms of entity, GDP contribution, employment, sector and geographical location.

3 Private versus public ownership and the political connection

Privatization –intended as the transfer of ownership of an enterprise from the public to the private sector– has been implemented in order to: achieve hypothesized gains in efficiency (Shleifer, 1998; La Porta and Lopez-de-Silanes, 1999b); reduce government budget deficits through the cancellation of subsidies (Schmidt, 1990) to public utilities; increase tax revenues in case these firms become profitable (Davis et al., 2000; Barucci and Pierobon, 2007); direct financing of the public debt or deficit (Vickers and Yarrow, 1991); and increased stock market capitalization (Jones et al., 1999; Barucci and Pierobon, 2007). The choice of ownership structure is based on different elements, such as efficiency, equity and rent extraction: this problem has been supported, over the past 30 years, also from broad empirical studies, whose main aspects have been surveyed by Megginson and Netter (2001).

Ownership structure, in the privatization theorem by Sappington and Stiglitz (1987), is said to be neutral; when this is not true, privatization is justified on grounds of efficiency. In reality, this is not what always happens, since sometimes government intervention is necessary, for example in case of industries which require high investments and innovation. As noted by Martimort (2006) public sector intervention can be justified in the presence of a risk averse firm *à la* Leland and Pyle (1977), with liability limits (Sappington, 1983) and problems related to contract implementation. Furthermore, government intervention is less costly in terms of transaction costs (Williamson, 1985), in the case of public ownership, even if this can create the premises for bailouts (Kornai, 1986; Kornai et al., 2003), making privatization a more suitable option (Sappington and Stiglitz, 1987).

The theoretical literature has extensively used the principal-agent theory[3]: the presence of asymmetric information generates inadequate monitoring for the firm's manager, resulting in weak incentives and high discretion for the latter (Vickers and Yarrow, 1988, 1991). Furthermore, even after privatization, the government can still be present as a regulator, with the shareholders in the middle, creating an informational barrier (Shapiro and Willig, 1990) or imposing a multiprincipal problem for the manager (Laffont and Tirole, 1993).

The role of privatization has also been explained by the presence of contract incompleteness[4]: unforeseeable contingencies leave the residual decision rights to the owner, increasing

[3] This framework is used to analyze how a Principal contracts with an agent, when delegating a task to him: incentive problems arise since the agent may access information (on his characteristics or on his actions) that is not available to the principal.

[4] Not all the contingencies that influence the relationship between contractors can be taken into account in the contract (i.e. the problem of unforeseen contingencies), and contract negotiation is costly: the cost of writing a specific article can outweigh its benefits in case of very unlikely events, especially if the evaluation is difficult. Moreover, even if the variables specified in the contract are observable, they cannot be ex-post

his motivations for investment and innovation since he can retain more from what he has implemented (Grossman and Hart, 1986). However, if cost reducing investments can be implemented, they have detrimental effects on quality, acting as a justification for retaining government ownership (Hart et al., 1996).

Thus, the allocation of propriety rights is said not to influence the informational structure, but it is important in case of limited commitment. Contractual incompleteness, with its absence as the basis of the Privatization Theorem, can take various forms.

As noted by Martimort (2006), the assumption of contract completeness at the basis of the privatization theorem is likely to have limited relevance in practice. Martimort shows that implementing the principal-agent approach (focused on asymmetric information and its making delegation costly) together with contract incompleteness, which entails transaction costs, leads to completely different results from those envisioned by Sappington and Stiglitz, also because the State itself can face incentive problems. As summarized in Table 3, introducing different types of contractual incompleteness (lack of commitment from the State, limited State control, but also political economy issues) affect the distribution of information and the trade-off between efficiency and rent extraction, and the different consequences they entail, depending on the ownership structure.

verifiable (i.e. the problem of contract enforcement).

Tab. 4: Ownership structure and contractual incompleteness under asymmetric information.

LIMITS TO COMMITMENT
1. hold-up: the basic hypotesis is that the marginal cost parameter decreases with the manager's unverifiable effort (which can be zero and have no cost, or equal one and entail a cost for the manager). - *public*: the manager, anticipating he will be left zero rent, exerts no effort - *private*: effort is exerted if its cost is less than the expected increase in the rent ⇒ under private ownership the State can better commit to rewarding the manager for his non-verifiable investment **2. soft budget constraints**: it is assumed that, implementing the *ex-ante* non-verifiable but observable investment, the manager can reduce the firm's fixed costs. - *public*: the State cannot avoid to use transfers to cover the firm' fixed costs, so they don't affect the manager's rent and there are no investments - *private*: output (and hence the efficient firm's rent) increases with investments; their impact is partly internalized by the firm ⇒ incentive to invest.
LIMITS TO STATE CONTROL (in case of private ownership, a third party, i.e. private shareholders, is introduced)
1. exogenous governance - *public*: the State has both internal and external control on the firm; and it redeploys the investments towards an alternative use - *private*: shareholders cannot redeploy investments, but now there is a multiprincipal problem (so incentives are lower powered). **2. endogenous governance**: the State is risk-averse (e.g. taxation can have an increasingly distortionary effect). - *public*: there are no outsider financiers, so the State demand for insurance makes it reluctant to distort the output of the inefficient firm - *private*: outside investors can be better diversified, hence more willing to insure the State, and therefore decreasing its burden.
NON BENEVOLENT POLITICIANS
1. excessive weight to industry: government is captured by industry and leaves too much rent to the firm (this is relevant when only ex-post contracting is feasible). - *public*: less distortion for the inefficient type, since now the manager's rent costs are less from the planner point of view - *private*: if the manager's rent is too high, the uninformed shareholders want to close the firm ⇒ this hardens the budget constraints **2. partisan politicians** - *public*: consumers enjoy the firm's rent - *private*: output fluctuates (depending if the government is pro-consumer or pro-shareholder) and the rent is not left to the consumers.

Indeed, the Toulouse School (Baron and Myerson, 1982; Laffont and Tirole, 1993) traditionally viewed the government as a social welfare maximizer, trying to correct market imperfections in an environment characterized by asymmetric information, while the Chicago School (Stigler, 1971; Peltzman, 1976; Becker, 1983) analyzed the distortions in managerial behavior coming from the government's attempt to interfere in the firm's decisions, in a context of complete information.

Hence, while the former case, assumes that the government is a benevolent entity, this is somehow naive. The latter uses a positive approach to the problem but it does not consider the absence of complete information. Without this assumption, the firm could not extract the rent, and, hence, there would be no need to influence politicians.

The pioneering work on the implementation of contractual incompleteness (in particular the partisan planner) in a context of asymmetric information is found in Laffont (1996). Using the classical principal-agent framework in Laffont and Tirole (1986), Laffont shows that with the introduction of an election stage (by dividing the population in two groups) and with incomplete information on the efficiency parameter of the firm, things change: different results arise for regulation, depending on the kind of ownership.

What is important is that, when the type of government changes, the strength of the firm's incentives, and the type of regulation will also change, hence the ownership structure becomes essential.

This framework is likely to be very relevant in studying the problem of municipal capitalism, given its more realistic approach to comparing ownership structures.

Finally, it is important to note that many studies on corruption (Estache, 2004; Rose-Ackermann, 1999) have pointed out that corruption may affect the distribution of potential rents, changing the groups affected and benefited by it, and consequently, the amount of political pressure they apply, reducing the benefits of privatization and changing the response of ownership structures (Martimort and Straub, 2009). Once again, this points out the importance of the approach just mentioned: incentive theory *per se* cannot be useful to depict all the factors affecting the effects on privatization, and more should be studied out on the relation between the government and manager.

4 Politicians and firms

The intervention of a regulator is based on the normative argument of correcting market failures in perspective of the so–called 'positive theory' which views the regulator as an agent who, even if informationally constrained, will try to protect consumers' surplus and maximize social welfare (as in the Toulouse School).

A regulator should use his discretion in order to optimally trade-off rent extraction and incentives to the firm, while trying to let the firm retain some degree of flexibility necessary for dealing with the changes in the environment in which it operates on time (Armstrong and Vickers, 2000). However, leaving too much discretion to the regulator not only increases the regulated firms' risk of regulatory expropriation, leading to an altered behavior of the firm (Spiegel, 1994; Spiegel and Spulber, 1994, 1997), but also to the possibility of capture (Tirole, 1986; Laffont and Tirole, 1991, 1993).

Given that regulators can generate and distribute rents across players, this raises some political economy issues (Dixit et al., 1997; Helpman and Persson, 1998). Indeed, regulators can try to use their power to increase or maintain their political support while, simultaneously, the different interest groups will try to capture them in order to obtain higher rents.

Thus, it is natural to ask what happens to social welfare if the regulator is captured by the firm he should instead regulate: when special interests influence the actions taken by the regulator, this is termed as *regulatory capture*.

The problem of capture was first considered by Stigler (1971), whose work was followed by many extensions provided mainly by the economists of the Chicago school, such as Peltzman (1976) and Becker (1983).

The State, as the supplier of regulation, is seen by Stigler as a ‘potential resource or threat to every industry in the society’, since it can exploit its power to select whomever it desires to redistribute market rents. The players in the model use the political system rationally: the industry provides votes and campaign contributions to influence politicians who are only interested in increasing their power. Since many voters are not affected by regulation, they will take no action to be informed on the matter[5]. Thus, office-oriented politicians must find a coalition of voters with high and long-lasting involved stakes. This entails that lobbies form and act only when high stakes are involved.

Peltzman highlights the fact that politicians want to maximize their power (i.e. votes), leading them to face the dilemma of which group to favour, depending on the political gains they receive. Becker places more stress on competition between lobbies to get government favour: hence the more efficient lobby group obtains special treatment from the government. It is true that firms try to lobby politicians, but as pointed out by the Virginia school on public choice[6], also politicians themselves compete to be captured and obtain the related gains.

It is important to note that the economists of the Chicago school have concentrated on the demand side of regulation (i.e. the industry). The Toulouse school treated the problem within the principal-agent framework, under the assumption that the only disturbance in the system is asymmetric information, while politicians are benevolent. In Laffont and Tirole (1993) a benevolent politician (the principal) rewards the regulator if he reveals the information he managed to obtain, and doesn’t give in to the firm’s (the agent’s) attempts of bribing for concealing it. One should be aware that the provision of incentives is not the only means used to influence: providing information can be even more important, since capture is possible precisely because firms have private information that citizens or their political representatives find very difficult to obtain.

Overall, the assumption of a benevolent planner used in the Laffont and Tirole model is unrealistic; but it is the first attempt to include the problem of interest groups –a main

[5] As also noted by the Author, decentralization can in some way moderate this problem. For example, there are more incentives to get information on the local school than on the overall school system.

[6] One of the most famous economists of this school is J. M. Buchanan.

concern for the economists of the Chicago school– in a principal-agent model.

A third way of dealing with the problem of capture is the political economy approach started by the international trade economists (Grossman and Helpman, 1994, 1996; Dixit and Londregan, 1995). In Grossman and Helpman (1994) lobbies use political contribution schedules to influence the incumbent's trade policies. Each contribution level is associated with a different level of protection, while politicians maximize a weighted sum of social welfare and monetary contributions from lobbies. The focus here is on the motivation of lobby formation and on the way these interest groups exert pressure, even though voting, its relation with lobbies, and the outcome of elections are not explicitly modeled.

Given that the purpose of lobbying and campaign contributions is, actually, to influence the outcome of voting, and hence regulatory issues, Faulhaber (2003) extends a voting model to include lobbying. Here, firms can invest in informing rationally ignorant voters to change the median voter toward a price preference similar to theirs. Furthermore, if the firms are owned by voters and their preferences are reflected in the firms' expenditure decisions, voters will take into account their share-owning interest, internalizing lobbying costs and gains. Faulhaber considers competing firms in the same market: however, as shown by Mu (2009), when the existence of lobbying is linked to various levels of benefits that the downstream rival can get from the incumbent's cost-saving investment, the incumbent faces a trade-off between lobbying the regulator to get a higher access price, or risking in investing in cost-saving activities, given the level of spillovers. Finally, the lobbying power is proportional to the incumbent's profits,which are related to investments, exacerbating the dilemma.

As has been highlighted, firms have the incentive to become politically connected, since this can generate many forms of preferential treatment. However, politicians can also desire these connections and, therefore, behave opportunistically.

Thus, the benefits of the relation between politicians and firms are bidirectional: corruption works in both ways; this is why Shleifer and Vishny (1994) conclude that with full corruption, privatization neither creates improvement in the firm's efficiency nor in the problem of transfers to the firm. Indeed, under public ownership, the firm's manager can use bribes to convince the politicians to not exploit the firm in order to follow their political objectives (for example excess employment), and to leave them free to restructure the firm and make it more profit-oriented. Under private ownership, politicians adopt bribes and soft budget constraints[7] to force managers to pursue political objectives. Although one would

[7] The concept of soft budget constraints was first used by J. Kornai (see *The Socialist System: the Political Economy of Communism*, 1992, Clarendon Press, Oxford, pp.140–145) to describe that situation, typical in centrally planned economies, in which economic units expect that their budget deficits would be covered

expect that budget constraints harden after privatization, the model shows that soft budget constraints persist exactly because they are needed by politicians to corrupt managers to seek political objectives. When citizens are not organized, the government is not interested in satisfying the median voter's preferences, but those of organized interest groups (i.e. labor unions) which try to capture politicians so that their interests are weighed with government objectives (i.e. maintaining excessive employment and wages in firms).

Faccio (2006) tries to analyze the determinants and effects of the relation between politicians and firms. A firm is defined as *politically connected*[8]when a politician (i.e. a member of Parliament or a minister) or someone closely related to a party or to a politician is a shareholder of a firm (in the sense that he possesses at least 10% of the voting shares) or is a top officer on the firm's board.

Naturally, larger firms are more often characterised by connections: we can imagine that they have a larger amount of resources at their disposal to bribe politicians, and politicians also have more interest in having connections with larger, more powerful firms. Quite important is the fact that connections with local politicians are more significant.

Results show that connections are related to corruption and to the absence of restrictions on ownership and board membership. Since in many countries, and especially in Europe, the board of a utility is politically appointed, the problem of political connections is likely to be a very important one. As we have seen in Table 1, politically appointed managers are a common feature in Italy. Boubakri et al. (2008) empirically demonstrate that political connections are linked to the presence of residual government ownership; and it is more likely in firms which operate in strategic sectors and are located in major cities, as -again- is the case in Italy. Finally, political connections are also more likely to arise in a politically fractioned environment. This leaves room for many kinds of welfare-damaging behaviors from both politicians and firms.

The problem of capture indicates why it is important that regulators should be experts

by some form of supporting organization: given this, they increase the total amount of their expenditures, going out of their budget constraint. This concept has also been used in the fiscal federalism literature: the presence of intergovernmental transfers, which is essential for a good functioning of a decentralized system, often entails irresponsible behaviour from local governments, which are sure that the central level will bail them out.

However, notice that in this case soft budget constraints do not arise because a benevolent planner faces a commitment problem, but because there are political motivations behind them.

[8] The Author gathered data from 47 countries from all over the world: connected firms are 2.78% of all listed corporations, and 607 connections in 541 firms were found. Among these connections, 60% are with a top officer, while 40% with large shareholders. It is worthwhile noting that 12 countries out of the 47 used in this analysis have none or very few connections, but others (and among these, Italy) have more than 10% of listed corporations which are politically connected.

in their field and also independent. If the regulator comes from the industry itself, he will be more pro-shareholder: weighing industry concerns more, since they are well-known to him. Otherwise, the incentives to favour the firm can come ex-post: the firm can try to capture the regulator offering bribes (Coate and Morris, 1995), campaign contributions (Grossman and Helpman, 2002) or revolving door opportunities[9] (Che, 1995). Finally, regulators could also be influenced by political pressure, in case of government appointed, or suffer from political pressure, if elected (Alesina and Tabellini, 2007).

The problem of accountability of government officials is a main problem in political economy. Even if in Europe regulators are appointed, in the US some States adopt elections; hence, it is important to understand the differences in incentives (and their consequences) on the two appointment rules in order to be able to prescribe the right rule in a given context. This is done both theoretically and empirically by Besley and Coate (2003b) and Guerriero (2008).

In Besley and Coate (2003b), depending whether regulators are elected or appointed by politicians, voters choose the regulatory policy separately or in unison with the level of public good. In the second case, only the stakeholders are primarily concerned with regulation, and bundling the two policies leaves room for regulatory capture. The empirical results seem to confirm the theoretical model's prediction. Since in the US, different States use different appointment rules which sometimes change over time, the Authors had the opportunity to exploit a panel dataset on electricity prices for 48 States over the 1960-1997 period to test if States with elected regulators, which in theory should be more pro-consumer, have lower prices and pass cost increases to prices less than appointed regulators.

Guerriero uses a three-tier model *à la* Laffont and Tirole (1993): one of the main peculiarities of this model is the simultaneous presence of two supervisors (a judge and a regulator) who are subject to different selection rules (appointment versus election) and intrinsic motivations (fairness and revolving door opportunities). The theoretical part of the paper suggests some predictions which are subsequently tested by using a sample of US electricity market data which covers the 1982-1997 period. Guerriero's findings confirm the fact that a reform towards higher powered incentive rules[10] is more likely if supervisors are elected and concerned with fairness, if the information-gathering technology is efficient, if the incumbent has a strong grip on power, and is pro-shareholder.

Constraints on regulatory discretion and power have to be taken into account, since the

[9] That is, future employment in the industry.

[10] From cost of service (i.e. price cap, earnings sharing or rate case moratoria) to performance-based regulation.

hypothesis of a regulator's perfect commitment does not depict reality. The regulator, even if committed to a long-term contract, can find it ex-post advantageous to renegotiate it (Gilbert and Newbery, 1994). Alternatively, the only possible contracts are short-term, since transaction costs make contracting incomplete (Lewis and Sappington, 1990). Bailouts (Kornai, 1986; Kornai et al., 2003), ratchet effects (Weitzman, 1980; Laffont and Tirole, 1993; Freixas et al., 1985) and hold-up problems (for an overview, see Armstrong and Sappington, 2007) are the issues that call for a curb on government power. Regulatory commitment is a subtle topic, which needs balancing regulator flexibility (to respond to a changing environment) and a firm's safeguard against *ex-post* opportunism.

Furthermore, the presence of a malevolent politician, when full commitment is not possible, means that he would implement a particular policy if and only if it were ex-post optimal for him. Thus, since electoral promises are not binding, the difference between the candidates is determined by how the outcome of the implemented policies influence politicians. Guerriero (2006) takes into consideration the government commitment problem related to investments, since an investment can increase the ex-ante probability of a firm's efficiency. The planner can be either partisan, and place more importance on the electoral process (in this case it matters if he is pro-shareholder or pro-consumer[11]), or he can be benevolent and add an additional weight to the firm's utility in his objective function to avoid underinvestment.

Robinson and Torvik (2006) use the political approach to show that politicians finance projects, for core supporters[12] only, even if they know they are bad, since they want soft budget constraints to arise through the launch of projects that can be credibly refinanced only by them to increase their probability of reelection.

Thus, soft budget constraints in this case are not the consequence of incomplete information combined with a lack of commitment (as in Martimort, 2006), but due to the combination of lack of commitment and a personal agenda; the policy chosen today is a way to commit to choosing a policy tomorrow[13], and consequently this is a way to create an incumbency bias.

A solution which has been suggested to the problem of commitment is delegating an independent pro-industry regulator who will be less likely to expropriate the firm of its revenues[14].

[11] The pro-shareholder party would put more effort in increasing investments. Therefore, higher powered incentive rules are more likely to be implemented if the political planner is pro-consumer (i.e. puts less weight on the firm's profits).

[12] Entrepreneurs are also voters whom the politicians understand better.

[13] Given that a government's mandate in democracies is limited in time, and a government cannot guarantee that its successors will stick to the promises that it is undertaking.

[14] This solution is parallel to the one envisioned by Rogoff, (1985). He proposed to delegate monetary

Evans et al. (2008) suggest that, when all voters are informed, the best solution is to delegate an independent regulator *à la* Rogoff, and the first best is reached if the regulator is not too pro-industry. However, when this is not the case, they compute the equilibrium in a voting model with lobbying: the uninformed voters[15] are influenced by the intensity and the quality of the electoral campaign, which in turn depends on the amount of the firm's support for each party, creating an incentive for the firm and politician to agree to an implicit contract.

Note that the concept of delegating has been applied in the European Union by imposing upon each Member State an independent regulatory agency for gas and energy. This is why the recent debate (e.g. Guerriero, Besley and Coate) has also concentrated on the best appointment rule and on the regulator's preferences (industry or consumer oriented).

A regulator's discretion should be balanced in order to avoid regulatory capture and commitment problems. Other than Rogoff's independent regulator, a potential solution to this problem could be an appropriate vertical allocation of regulatory competences (Laffont, 2000, ch.9): this is why an increasing interest in federalism has led towards the so-called *regulatory federalism* (Trillas, 2010).

Taking into account of the local nature of municipal capitalism and political connections, the vertical delegation of tasks is expected to influence the regulatory process, given the difference between a central and a local politician in their regulatory relation with the firm. This is a very complicated matter, and the considerable potential of an interaction between decentralization and regulator will be discussed in the next Section.

5 Some lessons from the literature on federalism

Certain types of public goods, defined as *local*, have a less extended consumption area than national ones. For this reason, they should be provided by the lower levels of government which are better able to satisfy the demand of citizens living in their jurisdictions, since they have a better knowledge of their preferences and can provide a combination of services and taxes more coherent with local needs, even if economies of scale in production cannot be exploited. The main problem with this approach, however, is that spillover effects can arise, so that the area benefiting from the local public good often does not coincide with the

policy to an independent conservative central banker (i.e. inflation-averse with respect to the government, who is more willing to stabilize employment than inflation), in order to increase overall welfare.

[15] This assumption was first used by Grossman and Helpman (1996), 'Electoral Competition and Special Interest Politics', *Review of Economic Studies*, vol. 63(2), pp. 265–86, April.

area in which they are produced and provided, but they also benefit the citizens living in the neighbouring districts. This has been formalized in the famous Oates' (1972) *decentralization theorem*[16]. Thus, federalism is mainly concerned with the distribution of tasks and responsibilities to the various levels of government, with the perspective of increasing the lower levels of government's autonomy and efficiency.

Utilities usually supply very important services at the local level which often require a good knowledge of local conditions (Troesken, 1996); in case of investments (i.e. for developing the distribution network) or the choice of tariffs (given the knowledge of costs and demand), but particularly in the case of segments of distribution and supply (Trillas, 2010). Nevertheless, even if a local regulator could best serve the interest of its citizens by providing the combination of tariff and public good level which would better reflect their preferences, excessive or overlapping regulatory policies (Rodden and Wibels, 2002; Alesina and Spoalore, 2003) may arise, and the central government can still try to interfere in the relationship between the local government and the firm (Caillaud et al., 1996). In general, the decision of attributing regulatory powers at the supranational, national or local level depends on many elements.

While local regulators have more information on the firms and citizens in their area (Tommasi and Weinschelbaum, 2007) thanks to which they can better deal with local preferences and firms' monitoring, decentralization can limit the Leviathan's[17] power (Brennan and Buchanan,1980), giving individuals more of an opportunity to organize, since the stakes are higher (as in Stigler, 1971). The fact that decentralization helps restrict information and authority to higher levels of government is also seen as a commitment device, acting as a mechanism for market preservation (Weingast, 1995).

However, regulators are more easily influenced by interest groups and local politicians, even if the negative effects would affect a more restricted group, and it would be easier to 'vote with the feet'[18] at the local than at the central level (Easterbrook, 1983). A good way of dealing with this problem is to assign regulatory responsibilities taking into account the spillover areas. However, the final effect may depend on the specific political conditions

[16] The decentralization theorem "indicates that in the absence of cost-savings from the centralized provision of a [local public] good and of interjurisdictional externalities, the level of welfare will always be at least as high (and typically higher) if Pareto-efficient levels of consumption are provided in each jurisdiction than if any single, uniform level of consumption is maintained across jurisdictions" (p. 54).

[17] The public sector was viewed by these Authors as a single corruptible, and rent-seeking entity -the Leviathan- which had as its sole objective that of expanding itself, and maximizing income.

[18] Tiebout (1956) envisioned a new mechanism for revealing preferences: thanks to their high mobility, citizens could 'vote with their feet' by moving to the jurisdiction with the preferred combination of tax and local public good.

(Bardhan and Mookherjee, 2006) or the industry structure (Marshaw and Rose-Ackernmann, 1984).

Finally, the vertical structure of the industries under consideration complicates the duty of an independent federal regulator *à la* Rogoff, since the areas on which the different segments of industry would insist is likely to be different. It is also noticeable that a harmonized regulatory policy at the European level has led to economies of scales, especially in the case of firms providing their services across the European Union (i.e. the energy giants). This can be another argument for centralization. Nonetheless, it should be highlighted that, even though more efforts are made to create a new and higher level of supernational government (European Union), every European country is facing a decentralization process: this phenomenon can be linked to the attempts to conciliate economies of scale and heterogeneity. Centripetal and centrifugal forces seem to coexist; this phenomenon can be linked to the attempt to ameliorate the public sector. This is why a series of studies shows how these forces contribute to shaping nations and federations (Alesina, Spolaore and Wacziarg, 2000; Alesina, Angeloni and Etro, 2001; Bordignon and Brusco, 2001). From these considerations, it is clear that designing the appropriate regulatory institutions and allocating of vertical and horizontal regulatory competences are important (and very complex) matters.

The first generation of fiscal federalism had a vision of a benevolent government[19], with the task of guaranteeing the maximization of social welfare, using the fiscal instruments (taxes and transfers) at its disposal.

Over the past fifty years, literature on fiscal federalism has been developing towards a second generation, mainly focusing on asymmetric information (Persson and Tabellini, 1996; Bordignon et al., 2001) and political mechanisms (Seabright, 1996; Lockwood, 2002; Besley and Coate, 2003a). In the so-called *federalism frontier* (Inman e Rubinfeld, 1997), starting from the assumption that a higher degree of decentralization implies a higher level of citizens' influence on political decisions, centralization guarantees coordination between localities, and attention is concentrated on the trade-off between political participation and economic efficiency. Considering that the presence of lobbies is an important source of distortion, a relevant question regards the level of government that is most able to fight against the pressures of special interest groups.

Even if Sonin (2003) demonstrates that local politicians in exchange of bribes try to protect firms (from paying taxes, entry of other firms, and bankruptcy proceedings) to increase

[19] This was the result of translating key works in public finance by Arrow (1972), Musgrave (1952) and Samuelson (1954) into a multi-level framework.

their electorate, he only takes into consideration the local level. As shown by Waller et al. (2002), a higher level of government which tries to coordinate bribes (by retaining a fraction) and monitor officials at lower levels would increase overall corruption in the system (even if improved coordination can decrease the level of bribes). However, from both models emerges the necessity of some form of political (as in Stalon and Lock, 1990, for energy and Weiser, 1998, for telecommunications) or enhanced cooperation (Bordignon and Brusco, 2003); in this case, if the federal government is strong enough (i.e. it has enough resources at its disposal and can credibly commit to using them), protectionism should not arise.

In Bardhan and Mookherjee's (2000) probabilistic voting model there is no definitive answer as to which is the best level of government to deal with capture, since many arguments are found in favour of both centralization and decentralization. For example, free-riding among lobby members and higher ignorance of voters at the local level would demand for centralization, while district heterogeneity and electoral competition would push in the opposite direction.

Bordignon et al. (2008) start from the consideration that lobbies usually try to pressure both central and local politicians. The Authors, within a common agency framework, consider the alignment of lobbies' interests in the two districts as important: if they are compatible (conflicting), a decentralized (centralized) solution, which has the beneficial effect of creating a competitive mechanism between lobbies (internalizing negative policy spillovers), is better.

Decentralization can lessen corruption either by interjurisdictional competition or by local elections. Even if one should deal with the theoretical works on the topic, it is important to say that many empirical studies[20] have been made on the effects of decentralization on corruption and government accountability with mixed results: either negative correlations (Fisman and Gatti, 2002) or no significant association (Treisman, 2002).

Thus, the contributions considered seem to provide a few insights into which elements to consider in the presence of lobbies if we want to decide whether it is better to use a decentralized or a centralized solution. In regulation, it is known that an important issue concerns policy distortions due to political pressures from organized interest groups. The mentioned models can help in understanding if there is a role for regulation at the European level given the differences that characterize the European Union's member states.

The first generation of fiscal federalism prescribed decentralization as a way of making politicians more accountable. Tiebout's (1956) 'voting with the feet' mechanism[21] and, more

[20] For an overview of the literature on this topic, see Bardhan and Mookherjee (2005).

[21] The possibility of citizens' interjurisdictional mobility, allows them to choose the locality with the preferred combination of tax and local good. Note that this can impose additional restraints on the central

in general, interjurisdictional competition were thought as good instruments (Qian and Weingast, 1997; Qian and Roland, 1998), even if their effectiveness can decrease depending on the jurisdiction's size (Beato and Laffont, 2002), creating negative effects if heterogeneity is too high (Cai and Treisman, 2004; Treisman, 2007), or beggar-thy-neighbour issues (Worock, 1990).

The second generation shifts its attention to local democracy; as already mentioned, Seabright (1996) shows that decentralization entails better informed decisions and thus guarantees better accountability of government officials.

Seabright (1996) shows that contract incompleteness between citizens and politicians decreases the likelihood of a single locality prevailing in expressing its opinion on the government's performance, and hence on the government's accountability with respect to local preferences, even if centralization offers the possibility of coordinating policies across jurisdictions and internalizing spillovers. Though accountability is important, it has been demonstrated (Tommasi and Weichelbaum, 1999; Blanchard and Shleifer, 2000) that accountability through reelection can decrease depending on the jurisdiction's size. Moreover, a local government can decide to strategically delegate tasks to the center in order to avoid political criticism (Spector, 2007).

Besley and Coate (2003a) consider the traditional trade-off between the heterogeneity of preferences of citizens in different districts and the degree of spillovers. However, in their model strategic delegation or misallocation and uncertainty can arise, depending on whether the legislature is cooperative or not.

Laffont and Pouyet (2003) are among of the first (see also Bardhan and Mookherjee, 2006) who tried to identify the proper level of decentralization for regulatory policy under asymmetric information. In their model, centralization offers standard results (Laffont and Tirole, 1993), while decentralization, given the presence of an informational externality lowers effort. When partisanship is added, as in Laffont (1996), centralization is preferable since competition decreases the discretion of opportunistic politicians.

This approach, seeking to study the consequences of federalism and non-benevolent politicians on regulation, seems to be appropriate in studying the effect municipal capitalism has on regulatory policies. Considering that a local government is a shareholder in a regulated firm, a central regulator should have no (or less) involvement in the firm, and it should make the firms internalize the spillovers which may occur. The local government's role as shareholder could entail more commitment, even if it is accompanied by a partial regaining of the

government's powers.

internal control that privatization was meant to eliminate.

In general, a local government can be more committed to implementing regulatory policies than its central counterpart. In Trillas (2010), the presence of a second task (e.g. lower inflation, favouring local inputs) in the regulator's objective function operates as a commitment device; in this way, higher levels of investments are possible, given the hypothesis of complementarity between the two (e.g. firm's investment in renewable energy when pollution is an issue for local government). Moreover, the fact that regulation has some fixed costs and that centralized regulation implies less conflict of policies makes local regulation more relaxed and less prone to being expropriated by a firm.

6 Concluding Comments

Fiscal federalism, as has been shown can bring important contributions to the study of regulation, especially when it is connected to political mechanisms.

The choice of the optimal vertical allocation of regulatory powers and competencies is a very demanding task, and neither theoretical nor empirical models provide a clear-cut solution. However, it is suggested that local governments can set regulatory policies which better satisfy local characteristics and needs given their greater knowledge of local conditions. Furthermore, their response to solving problems and controversies is likely to be quicker and more effective. Nevertheless, cooperation between the various levels is still needed, because the central level could have distributional concerns, and this would complicate the framework.

The fact that some scholars are becoming interested in looking at not only the best regulatory rule, but also the most appropriate level for its implementation, is very important. This reflects what is happening in single countries and at the federal level (e.g. in the European Union with the subsidiarity principle). A common trend of both fiscal federalism and regulation is the consideration that a government does not always act as a benevolent entity; implementing political mechanisms in models serves the purpose of better representing this assumption. The fact that different degrees of (de)centralization imply different levels of influence by citizens on politicians is very significant also for regulatory policies.

In particular, as stressed throughout this paper, it is very important to consider the relation between politicians and firms, and not to consider asymmetric information of malevolent politicians alone, since capture is possible also thanks to the presence of asymmetric information.

Finally, we have seen that the topic of reluctant privatization has been treated both theoretically and empirically. However, in the theoretical models the focus has been on the strategic role of privatization. Perotti showed that the gradualness of SOEs' privatization is an attempt to gain consensus from a specific part of the population, while the same purpose is reached in Biais and Perotti through the (underpriced) selling of shares. Still, empirical papers have highlighted that the portion of shares in the privatized firms owned by governments have nearly remained unchanged over time, and that the phenomenon is mainly a local one.

It would be interesting to model what municipal capitalism entails not only for the regulated firm, but also for the local government (in terms of budget constraints and of welfare maximization), and compare these results with those from the regulation of a central planner who has no stakes in the regulated firm.

Following the property rights theory, it can be said that ownership allows the public owner to gather more information about the management of the firm; hence municipal capitalism could reduce the asymmetric information problem thanks to a (partial) internal regulation, since the local authority authority has a double role (as owner of the regulated firm and as regulator). However, the presence of local representatives in the enterprise board of directors is likely have different effects, depending on their political orientation.

Given that partial local ownership and regulation are entwined, an empirical model should study the effects of this governance structure on performance, to help understanding if municipal capitalism: is this an effective means of trading-off between performance and regulation, thanks to the reduction of asymmetric information?

Moreover, given the bidirectionality of this process, an empirical analysis investigating both the causes and the (in)variance of the retained stakes: the hardness of local budget constrains could be a cause for implementing this mixed structure of governance, but also the political ideology of the Major could play an important role.

From these considerations, it it clear that much work has still to be done on both the theoretical and empirical sides in order to better understand municipal capitalism.

References

[1] Alesina, A., I. Angeloni, and F. Etro, (2001). 'Institutional Rules for Federations'. *NBER Working Papers* n. 8646.

[2] Alesina, A., and E. Spolaore, (2003). *The Size of Nations*. Cambridge, Mass. London: The MIT Press.

[3] Alesina, A., E. Spolaore, and R. Wacziarg, (2000). 'Economic Integration and Political Disintegration'. *American Economic Review*, 90(5):1276–1296.

[4] Alesina, A., and G. Tabellini, (2007). 'Bureaucrats or Politicians? Part I: A Single Policy Task'. *American Economic Review*, 97(1):169–179.

[5] Armstrong, M., and D. E. M. Sappington, (2007). 'Recent Developments in the Theory of Regulation'. In *Handbook of Industrial Organization*, volume III, pp. 1557–1700, Elsevier.

[6] Armstrong, M., and J. Vickers, (2000). 'Multiproduct Price Regulation under Asymmetric Information'. *Journal of Industrial Economics*, 48(2):137–60.

[7] Arrow, K., (1972). 'The Organisation of Economic Activity: Issues Pertinent to the Choice of Market Versus Non-Market Allocation'. In *Joint Economic Committee, The Analysis and Evaluation of Public Expeditures: The PPB System*, volume I. Washintgton, DC: U.S. GPO.

[8] Bardhan, P., and D. Mookherjee, (2000). 'Capture and Governance at Local and National Levels'. *American Economic Review*, 90(2):135–139.

[9] Bardhan, P., and D. Mookherjee, (2005). 'Decentralization, Corruption And Government Accountability: An Overview'. *Working Papers Series* 23, Boston University - Department of Economics.

[10] Bardhan, P., and D. Mookherjee, (2006). 'Decentralisation and Accountability in Infrastructure Delivery in Developing Countries'. *Economic Journal*, 116(508):101–127.

[11] Baron, D. P., and R. B. Myerson, (1982). 'Regulating a Monopolist with Unknown Costs'. *Econometrica*, 50:911–930.

[12] Barucci, E., and F. Pierobon, (2007). *Le Privatizzazioni in Italia*. Carocci.

[13] Beato, P., and J. J. Laffont, (2002). Editors' introduction. In Beato and Laffont, editors, *Competition Policy in Regulated Industries. Approaches for Emerging Economies.* Interamerican Development Bank.

[14] Becker, G. S., (1983). 'A Theory of Competition among Pressure Groups for Political Influence'. *The Quarterly Journal of Economics*, 98(3):371–400.

[15] Besley, T., and S. Coate, (2003a). 'Centralized versus Decentralized Provision of Local Public Goods: a Political Economy Approach'. *Journal of Public Economics*, 87(12):2611–2637.

[16] Besley, T., and S. Coate, (2003b). 'Elected versus Appointed Regulators: Theory and Evidence'. *Journal of the European Economic Association*, 1(5):1176–1206.

[17] Biais, B., and E. Perotti, (2002). 'Machiavellian Privatization'. *American Economic Review*, 92(1):240–258.

[18] Bianchi, P., B. Bortolotti, L. Pellizzola, and C. Scarpa, (2009). *Comuni S.p.A - Il capitalismo municipale in Italia*. Il Mulino.

[19] Black, F., (1976). 'The Dividend Puzzle'. *Journal of Portfolio Management*, 2:1–22.

[20] Blanchard, O., and A. Shleifer, (2000). 'Federalism with or without Polical Centralization, China versus Russia'. *MIT Working Paper*, 1-15.

[21] Bordignon, M., and S. Brusco, (2006). 'On Enhanced Cooperation'. *Journal of Public Economics*, 90(10-11):2063–2090.

[22] Bordignon, M., L. Colombo, and U. Galmarini, (2008). 'Fiscal Federalism and Lobbying'. *Journal of Public Economics*, 92(12):2288–2301.

[23] Bordignon, M., P. Manasse, and G. Tabellini, (2001). 'Optimal Regional Redistribution under Asymmetric Information'. *American Economic Review*, 91(3):709–723.

[24] Bortolotti, B., and M. Faccio, (2004). 'Government Control of Privatized Firms'. *FEEM Working Papers*, no. 130.

[25] Bortolotti, B., and M. Faccio, (2008). 'Government Control of Privatized Firms', *Review of Financial Studies*, 1:1-33.

[26] Bortolotti, B., M. Fantini, and D. Siniscalco, (2003). 'Privatisation around the World: Evidence from Panel Data'. *Journal of Public Economics*, 88:305–332.

[27] Bortolotti, B., and V. Milella, (2006). 'Privatization in Western Europe Stylized Facts, Outcomes, and Open Issues', *Working Papers* 2006.124, Fondazione Eni Enrico Mattei.

[28] Bortolotti, B., and P. Pinotti, (2008). 'Delayed Privatization'. *Public Choice*, 136(3):331–351.

[29] Bös, D., (1992). *Privatization: a Theoretical Treatment*. Oxford: Clarendon Press.

[30] Boubakri, N., J. Cosset, and O. Guedhami, (2005). 'Post-Privatization Corporate Governance: the Role of Ownership Structure in Investor Protection'. *Journal of Financial Economics*, 76(2):369–399.

[31] Boubakri, N., J. Cosset, and O. Guedhami, (2009). 'From State to Private Ownership: Issues from Strategic Industries'. *Journal of Banking and Finance*, 33(2):367–379.

[32] Boubakri, N., J. Cosset, and W. Saffar, (2008). 'Political Connections of Newly Privatized Firms'. *Journal of Corporate Finance*, 14(5):654–673.

[33] Boycko, M., A. Shleifer, and R. W. Vishny, (1996). 'A Theory of Privatisation'. *Economic Journal*, 106(435):309–19.

[34] Branco, F., and A. Mello, (1991). 'A Theory of Partial Sales and Underpricing in Privatization'. *MIT Working Paper*.

[35] Brennan, B., and J. Buchanan, (1980). 'Open Economy, Federalism and Taxing Authority'. In *The power to tax: Analytical Foundations of a Fiscal Constitution*. Cambridge University Press, pp. 168–186.

[36] Cai, H., and D. Treisman, (2004). 'State Corroding Federalism'. *Journal of Public Economics*, 88:819–843.

[37] Caillaud, B., B. Jullien, and P. Picard, (1996). 'National vs European Incentive Policies: Bargaining, Information and Coordination'. *European Economic Review*, 40(1):91–111.

[38] CEEP, (2010). *Mapping the Public Services*. Technical report.

[39] Che, Y., (1995). 'Revolving Doors and the Optimal Tolerance for Agency Collusion'. *RAND Journal of Economics*, 26(3):378–397.

[40] Coate, S., and S. Morris, (1995). 'On the Form of Transfers in Special Interests'. *Journal of Political Economy*, 103(6):1210–1235.

[41] Davis, F., O. Rossowski, T. Richardson, and S. Barnett, (2000). 'Fiscal and Macroeconomic Impact of Privatization'. *IMF Occasional Paper n. 194*.

[42] Dixit, A. K., G. Grossman, and E. Helpman, (1997). 'Common Agency and Coordination: General Theory and Application to Tax Policy'. *CEPR Discussion Papers* n.1436.

[43] Dixit, A. K., and J. Londregan, (1994). 'Redistributive Politics and Economic Efficiency'. *CEPR Discussion Papers* n.1056.

[44] Easterbrook, F. H., (1983). 'Antitrust and the Economics of Federalism'. *Journal of Law & Economics*, 26(1):23–50.

[45] Estache, A., (2004). 'Emerging Infrastructure Policy Issues in Developing Countries - a Survey of the Recent Economic Literature'. T*he World Bank Policy Research Working Paper Series* n.3442.

[46] Evans, J., P. Levine, and F. Trillas, (2008). 'Lobbies, Delegation and the Underinvestment Problem in Regulation'. *International Journal of Industrial Organization*, 26:17–40.

[47] Faccio, M., (2006). 'Politically Connected Firms'. *American Economic Review*, 96(1):369–386.

[48] Faccio, M., L. H. P. Lang, and L. Young, (2001). 'Dividends and Expropriation'. *American Economic Review*, 91(1):54–78.

[49] Freixas, X., R. Guesnerie, and J. Tirole, (1985). 'Planning under Incomplete Information and the Ratchet Effect', *Review of Economic Studies*, 52(2):173-191.

[50] Faulhaber, G. R., (2003). *Lobby, Voting, and the Political Economy of Price Regulation.* Unpublished.

[51] Fisman, R., and R. Gatti, (2002). 'Decentralization and Corruption: Evidence across Countries'. *Journal of Public Economics*, 83:325–345.

[52] Gilbert, R. J., and D. M. Newbery, (1994). 'The Dynamic Efficiency of Regulatory Constitutions'. *RAND Journal of Economics*, 25(4):538–554.

[53] Goldstein, A., (2003). 'Privatization in Italy 1993-2002: Goals, Institutions, Outcomes, and Outstanding Issues'. *CESifo Working Paper Series* n. 912.

[54] Gomes, A., (2000). 'Going Public without Governance: Managerial Reputation Effects'. *Journal of Finance*, 55(2):615–646.

[55] Grossman, G. M., and E. Helpman, (1994). 'Protection for Sale'. *American Economic Review*, 84(4):833–850.

[56] Grossman, G. M., and E. Helpman, (1996). 'Electoral Competition and Special Interest Politics'. *Review of Economic Studies*, 63(2):265–86.

[57] Grossman, G. M., and E. Helpman, (2002). *Special Interest Politics*, volume 1. The MIT Press.

[58] Grossman, S. J., and O. D. Hart, (1986). 'The Costs and Benefits of Ownership: a Theory of Vertical and Lateral Integration'. *The Journal of Political Economy*, 94(4):691–719.

[59] Guerriero, C., (2008). 'The Political Economy of Incentive Regulation: Theory and Evidence from U.S. States'. *FEEM Working Papers*, no. 34.

[60] Hart, O. D., A. Shleifer, and R. W. Vishny, (1996). 'The Proper Scope of Government: Theory and an Application to Prisons'. *NBER Working Papers* n. 5744.

[61] Helpman, E., and T. Persson, (1998). 'Lobbying and Legislative Bargaining'. *NBER Working Papers* n.6589.

[62] Inman, R. P., and D. L. Rubinfeld, (1997). 'Rethinking Federalism'. *Journal of Economic Perspectives*, 11(4):43–64.

[63] Jensen, M. C., (1986). 'Agency Cost of Free Cash Flow, Corporate Finance and Takeovers'. *American Economic Review*, 76(2):323–329.

[64] Jensen, M. C., and W. H. Meckling, (1976). 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure'. *Journal of Financial Economics*, 3:305–360.

[65] Jones, S. L., W. L. Megginson, R. C. Nash, and J. M. Netter, (1999). 'Share Issue Privatizations as Financial Means to Political and Economic Ends'. *Journal of Financial Economics*, 53(2):217–253.

[66] Kornai, J., (1986). *The soft budget constraint*. Kyklos, 39(1):3–30.

[67] Kornai, J., (1992). *The Socialist System: the Political Economy of Communism*. Clarendon Press, Oxford.

[68] Kornai, J., E. Maskin, and G. Roland, (2003). 'Understanding the Soft Budget Constraint'. *Journal of Economic Literature*, 41(4):1095–1136.

[69] La Porta, R., F. Lopez-De-Silanes, A. Shleifer, and R. W. Vishny, (2000). 'Agency Problems and Dividend Policies around the World'. *Journal of Finance*, 55(1):1–33.

[70] La Porta, R., and F. Lopez-De-Silanes, (1999). 'The Benefits Of Privatization: Evidence From Mexico'. *The Quarterly Journal of Economics*, 114(4):1193–1242.

[71] La Porta, R., F. Lopez-De-Silanes, and A. Shleifer, (1999). 'Corporate Ownership Around the World'. *Journal of Finance*, 54(2):471–517.

[72] La Porta, R., F. Lopez-De-Silanes, and A. Shleifer, (2002). 'Government Ownership of Banks'. *Journal of Finance*, 57(1):265–301.

[73] Laffont, J. J., (1996). 'Industrial Policy and Politics'. *International Journal of Industrial Organization*, 14(1):1–27.

[74] Laffont, J. J., (2000). *Incentives and Political Economy.* Oxford: Clarendon Press.

[75] Laffont, J. J., and J. Pouyet, (2004). 'The Subsidiarity Bias in Regulation'. *Journal of Public Economics*, 88(1):255–283.

[76] Laffont, J. J., and J. Tirole, (1986). 'Using Cost Observation to Regulate Firms'. Journal of Political Economy, 94:614–641.

[77] Laffont, J. J., and J. Tirole, (1993). *A Theory of Incentives in Procurement and Regulation.* Cambridge, Mass. London: The MIT Press.

[78] Laffont, J. J., and J. Tirole, (1991). 'Privatization and Incentives'. *Journal of Law, Economics & Organization*, 7, Special Issue: [Papers from the Conference on the New Science of Organization].

[79] Leland, H. E., and D. H. Pyle, (1977). 'Informational Asymmetries, Financial Structure, and Financial Intermediation'. *Journal of Finance*, 32(2):371–87.

[80] Lewis, T. R., and D. E. M. Sappington, (1990). 'Sequential Regulatory Oversight'. *Journal of Regulatory Economics*, 2(4):327–48.

[81] Lockwood, B., (2002). 'Distributive Politics and the Costs of Centralization'. *Review of Economic Studies*, 69:313–337.

[82] Lülfesmann, C., (2007). 'On the Virtues of Privatization when Government is Benevolent'. *Journal of Economic Behavior & Organization*, 64(1):17–34.

[83] Marshaw, J. L., and S. Rose-Ackermann, (1984). 'Federalism and Regulation'. In *The Reagan Regulatory Strategy*. The Urban Institute Press.

[84] Martimort, D., (2006). 'An Agency Perspective on the Costs and Benefits of Privatization'. *Journal of Regulatory Economics*, 30(1):5–44.

[85] Martimort, D., and S. Straub, (2009). 'Infrastructure Privatization and Changes in Corruption Patterns: The Roots of Public Discontent'. *Journal of Development Economics*, 90(1):69–84.

[86] Megginson, W., and J. M. Netter, (2001). 'From State to Market: A Survey of Empirical Studies on Privatization'. *Journal of Economic Literature*, 39:321–389.

[87] Mu, H., (2009). *Politics, Regulation and Investment in the Telecommunications Industry*. Unpublished.

[88] Musgrave, R., (1959). *Theory of Public Finance*. Tokio, Mac-Graw Hill.

[89] Oates, W. E., (1972). *Fiscal Federalism*. Harcourt Brace Jovanovich, Inc., New York.

[90] Peltzman, S., (1976). 'Toward a More General Theory of Regulation'. *Journal of Law & Economics*, 19(2):211–40.

[91] Perotti, E., (1995). 'Credible Privatization'. *American Economic Review*, 85(4):847–859.

[92] Perotti, E., and P. Van Oijen, (2001). 'Privatization, Political Risk and Stock Market Development in Emerging Economies'. *Journal of International Money and Finance*, 20(1):43–69.

[93] Persson, T., and G. Tabellini, (1996). 'Federal Fiscal Constitutions: Risk Sharing and Moral Hazard'. *Econometrica*, 64(3):623–646.

[94] Qian, Y., and G. Roland, (1998). 'Federalism and the Soft Budget Constraint'. *American Economic Review*, 88(5):1143–1162.

[95] Qian, Y., and B. R. Weingast, (1997). 'Federalism as a Commitment to Preserving Market Incentives'. *Journal of Economic Perspectives*, 11(4):83–92.

[96] Robinson, J., and R. Torvik, (2006). ‘A Political Economy Theory of the Soft Budget Constraint’. *NBER Working Papers* n.12133.

[97] Rodden, J., and E. Wibels, (2002). ‘Beyond the Fiction of Federalism - Macroeconomic Management in Multitiered Systems’. *World Politics*, 54:494–531.

[98] Rogoff, K., (1985). ‘The Optimal Degree of Commitment to an Intermediate Monetary Target’. *The Quarterly Journal of Economics*, 100(4):1169–89.

[99] Rose-Ackermann, S., (1999). ‘Political Corruption and Democracy’. *Connecticut Journal of International Law*, 14:362–378.

[100] Samuelson, P. A., (1954). ‘The Pure Theory of Public Expenditure’. *Review of Economics and Statistics*, 36:387–389.

[101] Sappington, D. E. M., (1983). ‘Limited Liability Contracts between Principal and Agent’. *Journal of Economic Theory*, 29(1):1–21.

[102] Sappington, D. E. M., and J. E. Stiglitz, (1987). ‘Privatization, Information and Incentives’. *Journal of Policy Analysis and Management*, 6:567–582.

[103] Schmidt, K. M., (1996). ‘The Costs and Benefits of Privatization: An Incomplete Contracts Approach’. *Journal of Law, Economics & Organization*, 12(1):1–24.

[104] Seabright, P., (1996). ‘Accountability and Decentralization in Government: an Incomplete Contracts Model’. *European Economic Review*, 40:61–89.

[105] Shapiro, C., and R. D. Willig, (1990). ‘On the Antitrust Treatment of Production Joint Ventures’. *Journal of Economic Perspectives*, 4(3):113–30.

[106] Shleifer, A., (1998). ‘State versus Private Ownership’. *Journal of Economic Perspectives,* 12(4):133–150.

[107] Shleifer, A., and R. W. Vishny, (1994). ‘Politicians and Firms’. *The Quarterly Journal of Economics*, 109(4):995–1025.

[108] Sonin, K., (2010). ‘Provincial Protectionism’. *Journal of Comparative Economics*, 38(2):111–122.

[109] Spector, D., (2007). *State Aids: Economic Analysis and Practice in the EU*. In IESE Conference on the 50th Anniversary of the Treaty of Rome.

[110] Spiegel, Y., (1994). The Capital Structure and Investment of Regulated Firms under Alternative Regulatory Regimes'. *Journal of Regularory Economics*, 6(3):297–320.

[111] Spiegel, Y., and D. F. Spulber, (1994). 'The Capital Structure of Regulated Firms'. *RAND Journal of Economics*, 25(3):424–440.

[112] Spiegel, Y., and D. F. Spulber, (1997). 'Capital Structure with Countervailing Incentives'. *RAND Journal of Economics*, 28(1):1–24.

[113] Stalon, C. G., and R. H. J. H. Lock, (1990). 'State-Federal Relations in the Economic Regulation of Energy'. *Yale Journal of Regulation*, 7:427–497.

[114] Stigler, G. J., (1971). 'The Theory of Economic Regulation'. *Bell Journal of Economics*, 2(1):3–21.

[115] Tiebout, C., (1956). 'A Pure Theory of Local Expenditures'. *Journal of Political Economy*, 64:416–424.

[116] Tirole, J., (1986). 'Hierarchies and Bureaucracies: On the Role of Collusion in Organizations'. *Journal of Law, Economics and Organization*, 2(2):181-214.

[117] Tommasi, M., and F. Weinschelbaum, (2007). 'Centralization vs. Decentralization: A Principal-Agent Analysis'. *Journal of Public Economic Theory*, 9(2):369–389.

[118] Treisman, D., (2002). 'Decentralization and the Quality of Government'. *UCLA Working Paper*.

[119] Treisman, D., (2007). *The Architecture of Government. Rethinking Political Decentralization*. Cambridge University Press.

[120] Trillas, F., (2010). 'Electricity and Telecoms Reforms in the EU: Insights from the Economics of Federalism'. *Utilities Policy*, 18(2).

[121] Troesken, W., (1996). *Why Regulate Utilities? The New Institutional Economics and the Chicago Gas Industry*. The University of Michigan Press.

[122] Vickers, J., and G. Yarrow, (1988). *Privatization: An Economic Analysis*, volume 1. The MIT Press.

[123] Vickers, J., and G. Yarrow, (1991). 'Economics Perspectives on Privatization'. *Journal of Economic Perspectives*, 5(2):111–132.

[124] Waller, C. J., T. Verdier, and R. Gardner, (2002). 'Corruption: Top Down or Bottom Up? '. *Economic Inquiry*, 40(4):688–703.

[125] Weingast, B. R., (1995). 'The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development'. *Journal of Law and Economic Organization*, 11:1–31.

[126] Weiser, P. J., (1998). 'Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act'. *New York University Law Review*, 76:1692–1767.

[127] Weitzman, M. L., (1980). 'The "Ratchet Principle" and Performance Incentives'. *Bell Journal of Economics*, 11(1):302–308.

[128] Williamson, O., (1985). *The Economic Institutions of Capitalism*. Free Press.

[129] Woroch, G., (1990). *Are Two Regulators Better than One? Economics of Dual Regulation in Telecommunications*. Mimeo.